FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB APPRO	DVAL						
	OMB Number:	3235-0287						
	Estimated average burden							
l	hours per response:	0.5						

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

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* Mathers Edward T						2. Issuer Name and Ticker or Trading Symbol Mirna Therapeutics, Inc. [MIRN]									ationship o c all applic Directo	able)	g Pers	on(s) to Issi	
(Last) (First) (Middle) C/O MIRNA THERAPEUTICS						3. Date of Earliest Transaction (Month/Day/Year) 06/29/2016									Officer below)	(give title		Other (s below)	pecify
3711 SOUTH MOPAC EXPRESSWAY, STE 100						4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable					
(Street)	Т Т2	TX 78746			-									Line) X	•				
(City)	(Si	(State) (Zip)																	
		Tab	le I - Non	-Deriv	/ativ	e Se	curities	s Ac	quired, D	isp	osed o	f, or Be	nefici	ially	Owned				
Date				2. Trans Date (Month/		ear) i	2A. Deemed Execution Date, if any (Month/Day/Year		Transaction Disposed O Code (Instr. 5)		ties Acquired (A) d Of (D) (Instr. 3, 4				s ally ollowing	Form	: Direct Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
									Code	<i>,</i>	Amount	(A) oi (D)	Pric	e	Transact (Instr. 3 a	tion(s)			(IIISU. 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 D if any (Month/Day/	Date,	4. Transa Code (i 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable Expiration Date (Month/Day/Year)			7. Title and Am of Securities Underlying Derivative Secu (Instr. 3 and 4)		D	3. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	lly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	V	(A)	(D)	Date Exercisable		opiration ate	Title	Amou or Numb of Share	er					
Stock Option (Right to Buy)	\$4.74	06/29/2016			A		10,000		(1)	06	6/29/2026	Common Stock	10,00	00	\$0.00	10,000)	D	

Explanation of Responses:

1. The option vests and become exercisable in full on the earlier of (A) June 29, 2017 or (B) immediately prior to the next annual meeting of the Issuer's stockholders, subject to the Reporting Person continuing to provide services to the Issuer through such vesting date.

> /s/ Jon Irvin, Attorney-in-Fact for Edward Mathers

09/06/2016

** 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.

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.