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(b).

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL									
OMB Number:	3235-0287								
Estimated average burden									
hours nor roomanas:	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* FRYKMAN EDWARD W					2. Issuer Name and Ticker or Trading Symbol ARROWHEAD RESEARCH CORP [ ARWR ]										c all applic Directo	able)	ng Person(s) to Issu 10% Ow Other (si		ner
(Last) (First) (Middle) 201 SOUTH LAKE AVENUE SUITE 703					3. Date of Earliest Transaction (Month/Day/Year) 07/17/2009										below)			below)	
(Street) PASADENA CA 91101				4. If Amendment, Date of Original Filed (Month/Day/Year)									ine)	,					
(City)	(S	tate)	(Zip)																
Date				2. Transac	2A. Deemed Execution Da			emed tion Date	te, 3. Transaction Code (Instr.		4. Securit	if, or Be	ed (A) o	or 5. Amo 4 and Securi Benefi		nt of s illy ollowing	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)
								Code	V	Amount	(A) o (D)	(A) or (D) Pric		Transaction(s) (Instr. 3 and 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 Da if any (Month/Day/\)	Co	insaction de (Instr.		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisa Expiration Date (Month/Day/Year			7. Title and Amo of Securities Underlying Derivative Secu (Instr. 3 and 4)		D S	8. Price of Derivative Security (Instr. 5)	9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4)	ly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Co	de V		(A)	(D)	Date Exercisabl		xpiration ate	Title	Amou or Numb of Share	er					
Stock Option <sup>(1)</sup>	\$2.52	07/17/2009		J				50,000	05/25/2000	5 0	5/25/2016	Common Stock	50,00	00	\$175,000	175,00	0	D	
Stock Option <sup>(1)</sup>	\$5.02	07/17/2009		J				10,000	02/23/200	7 0:	2/23/2016	Common Stock	10,00	00	\$0	165,00	0	D	
Stock Option <sup>(1)</sup>	\$5.24	07/17/2009		J				25,000	05/26/200	7 0:	5/26/2016	Common Stock	25,00	00	\$0	140,00	0	D	
Stock Option <sup>(1)</sup>	\$3.93	07/17/2009		J				20,000	02/22/2008	3 0:	2/22/2017	Common Stock	20,00	00	\$0	120,00	0	D	
Stock Option <sup>(1)</sup>	\$2.55	07/17/2009		J				20,000	03/13/2009	9 0:	3/13/2018	Common Stock	20,00	00	\$0	100,00	0	D	

## **Explanation of Responses:**

1. Voluntary termination of out-of-the-money options to allow for sufficient available shares for issuance in a financing transaction.

Edward W. Frykman

08/17/2009

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  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.