| SEC Form 4 |  |
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## FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL             |     |  |  |  |  |  |  |  |  |
|--------------------------|-----|--|--|--|--|--|--|--|--|
| OMB Number: 3235-0287    |     |  |  |  |  |  |  |  |  |
| Estimated average burden |     |  |  |  |  |  |  |  |  |
| hours per response:      | 0.5 |  |  |  |  |  |  |  |  |

| 1. Name and Addre | <u>Charles</u> |          | 2. Issuer Name and Ticker or Trading Symbol ARROWHEAD RESEARCH CORP [ ARWR ] | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br>X Director 10% Owner<br>Officer (give title Other (specify<br>below) below) |
|-------------------|----------------|----------|--|---|
| (Last)            | (First)        | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year)                             | below)  |
| 201 SOUTH LA      | AKE AVENUE     |          | 07/17/2009   |   |
| SUITE 703         |                |          |  |   |
| ,                 |                |          | 4. If Amendment, Date of Original Filed (Month/Day/Year)                     | 6. Individual or Joint/Group Filing (Check Applicable   |
| (Street)          |                |          |  | Line)   |
| PASADENA          | СА             | 91101    |  | X Form filed by One Reporting Person  |
| -<br>-            |                |          |  | Form filed by More than One Reporting<br>Person   |
| (City)            | (State)        | (Zip)    |  |   |

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

| 1. Title of Security (Instr. 3) | 2. Transaction<br>Date<br>(Month/Day/Year) 2A. De<br>Execu<br>if any<br>(Month |  | Transaction<br>Code (Instr. |   | 4. Securities Acquired (A) or<br>Disposed Of (D) (Instr. 3, 4 and<br>5) |               |       | 5. Amount of<br>Securities<br>Beneficially<br>Owned Following<br>Reported | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4) | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership |  |  |
|---------------------------------|--|--|-----------------------------|---|---|---------------|-------|---|---|---|--|--|
|                                 |  |  | Code                        | v | Amount  | (A) or<br>(D) | Price | Transaction(s)<br>(Instr. 3 and 4)  |   | (Instr. 4)  |  |  |

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

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Transa<br>Code (<br>8) |   | of<br>Deri<br>Sec<br>Acq<br>(A) (<br>Disp<br>of (I | umber<br>vative<br>urities<br>uired<br>or<br>oosed<br>D) (Instr.<br>and 5) | 6. Date Exerc<br>Expiration D<br>(Month/Day/) | ate                | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|---|---|--|---|------------------------------|---|--|--|---|--------------------|---|--|---|--|--|--|
|   |   |  |   | Code                         | v | (A)  | (D)  | Date<br>Exercisable                           | Expiration<br>Date | Title   | Amount<br>or<br>Number<br>of<br>Shares |   |  |  |  |
| Stock<br>Option <sup>(1)</sup>                      | \$2.52  | 07/17/2009                                 |   | J <sup>(1)</sup>             |   |  | 50,000   | 05/25/2006                                    | 05/25/2015         | Common<br>Stock   | 50,000                                 | \$0   | 125,000  | D  |  |
| Stock<br>Option <sup>(1)</sup>                      | \$5.02  | 07/17/2009                                 |   | J                            |   |  | 10,000   | 02/23/2007                                    | 02/23/2016         | Common<br>Stock   | 10,000                                 | \$0   | 115,000  | D  |  |
| Stock<br>Option <sup>(1)</sup>                      | \$5.24  | 07/17/2009                                 |   | J                            |   |  | 25,000   | 05/26/2007                                    | 05/25/2016         | Common<br>Stock   | 25,000                                 | \$0   | 90,000   | D  |  |
| Stock<br>Optoin <sup>(1)</sup>                      | \$3.93  | 07/17/2009                                 |   | J                            |   |  | 20,000   | 02/22/2008                                    | 02/22/2017         | Common<br>Stock   | 20,000                                 | \$0   | 70,000   | D  |  |
| Stock<br>Option <sup>(1)</sup>                      | \$2.55  | 07/17/2009                                 |   | J                            |   |  | 20,000   | 03/13/2009                                    | 03/13/2008         | Common<br>Stock   | 20,000                                 | \$0   | 50,000   | D  |  |

**Explanation of Responses:** 

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

Charles McKenney

08/17/2009

Date

\*\* Signature of Reporting Person

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

 $\ast$  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.