UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-A/A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(B) OR 12(G) OF THE SECURITIES EXCHANGE ACT OF 1934

Arrowhead Research Corporation

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

1118 East Green Street, Pasadena, CA (Address of Principal Executive Offices)

46-0408024 (I.R.S. Employer Identification No.)

> 91106 (Zip Code)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box. \Box

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box. \boxtimes

Securities Act registration statement file number to which this form relates: 333-113065

Securities to be registered pursuant to Section 12(g) of the Act:

Title of Each Class to be so Registered

Name of Each Exchange on which Each Class is to be Registered

Warrants to Purchase Common Stock

NasdaqSmall Cap Market

This Form 8-A/A amends the Form 8-A filed by Arrowhead Research Corporation (the "Company") on February 23, 2004, registering Warrants to purchase Common Stock of the Company pursuant to Section 12(g) of the Securities and Exchange Act of 1934, as amended. This Form 8-A/A is filed solely for the purpose of filing the form of Warrant as Exhibit 4.1.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: October 12, 2004

ARROWHEAD RESEARCH CORPORATION

By: /s/ Joseph T. Kingsley

Joseph T. Kingsley, Chief Financial Officer

NEITHER THIS WARRANT, NOR THE COMMON STOCK ISSUABLE UPON THE EXERCISE HEREOF, HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED, HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO AN EXEMPTION TO SUCH ACT.

No- Void after June 30, 2013

WARRANT TO PURCHASE SHARES

OF

THE COMMON STOCK

Of

ARROWHEAD RESEARCH CORPORATION,

A Delaware corporation

This certifies that, for value received, the Holder identified as such on the signature page hereof (together with its successors and assigns) is entitled to subscribe for and purchase, on the terms hereof, shares of the Common Stock, \$0.001 par value (the "Common Stock") of Arrowhead Research Corporation, a Delaware corporation (the "Company"), subject to adjustment as provided herein.

This Warrant is subject to the following terms and conditions:

- 1. Exercise of Warrant. The terms and conditions upon which this Warrant may be exercised, and the shares of Common Stock subject hereto may be purchased, are as follows:
- 1.1 <u>Term</u>. Subject to the terms hereof, this Warrant may be exercised at any time after the date hereof, or from time to time, in whole or in part; provided, however, that in no event may this Warrant be exercised later than 5:00 p.m. (Pacific Time) on June 30, 2013, on which date this Warrant will expire (the "Expiration Date").
 - 1.2 Number of Shares. This Warrant may be exercised to purchase up to an aggregate of _______ shares of Common Stock.
- 1.3 Exercise Price. The exercise price per share for all shares of Common Stock to be issued upon exercise of this Warrant shall be \$1.50, subject to adjustment as provided herein.
- 1.4 Method of Exercise. The exercise of the purchase rights evidenced by this Warrant shall be effected by (a) the surrender of the Warrant, together with a duly executed copy of the form of Subscription Notice attached hereto as Schedule 1, to the Company at its principal offices and (b) the delivery of the exercise price by check or bank draft payable to the Company's order or by wire transfer to the Company's account for the number of shares for which the purchase rights hereunder are being exercised or any other form of consideration approved by the Company's Board of Directors (the "Board"). Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company as provided herein or at such later date as may be specified in the executed form of subscription, and at such time the person or persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such exercise as provided herein shall be deemed to have become the holder or holders of record thereof.

- 2. <u>Adjustments to Exercise Price</u>. The number and kind of shares of Common Stock (or any shares of stock or other securities which may be) issuable upon the exercise of this Warrant and the exercise price hereunder shall be subject to adjustment from time to time upon the happening of certain events, as follows:
- 2.1 <u>Dividends, Distributions, Stock Splits or Combinations</u>. If the Company shall at any time or from time to time after the date hereof make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock, then and in each such event the exercise price hereunder then in effect shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the exercise price hereunder then in effect by a fraction: (a) the numerator of which shall be the total number of shares of Common Stock (assuming the conversion of all outstanding securities of the Company that are convertible into Common Stock and the exercise of all options to purchase Common Stock or securities that are convertible into Common Stock) issued and outstanding immediately prior to the time of issuance or the close of business on such record date; and (b) the denominator of which shall be the total number of shares of Common Stock (assuming the conversion of all outstanding securities of the Company that are convertible into Common Stock and the exercise of all options to purchase Common Stock or securities that are convertible into Common Stock) issued and outstanding immediately after the time of issuance or the close of business on such record date. If the Company shall at any time subdivide the outstanding shares of Common Stock, or if the Company shall at any time combine the outstanding shares of Common Stock, then the exercise price hereunder immediately shall be decreased proportionally (in the case of a subdivision) or increased proportionally (in the case of a combination). Any such adjustment shall become effective at the close of business on the date the subdivision or combination becomes effective.
- 2.2 <u>Reclassification or Reorganization</u>. If the Common Stock issuable upon the exercise of this Warrant shall be changed into the same or different number of shares of any class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares or stock dividend provided for in Section 2.1 above, or a reorganization, merger, consolidation or sale of assets provided for in Section 2.3 below), then and in each such event the Holder shall be entitled to receive upon the exercise of this Warrant the kind and amount of shares of stock and other securities and property receivable upon such reorganization, reclassification or other change, to which a holder of the number of shares of Common Stock issuable upon the exercise of this Warrant would have received if this Warrant had been exercised immediately prior to such reorganization, reclassification or other change, all subject to further adjustment as provided herein.
- 2.3 <u>Merger, Consolidation or Sale of Assets</u>. If at any time or from time to time there shall be a capital reorganization of the Common Stock (other than a subdivision, combination, reclassification or exchange of shares provided for elsewhere in this Section 2) or a merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all of the Company's assets and properties to any other person or entity, then as a part of such reorganization, merger, consolidation or sale, provision shall be made so that the Holder shall thereafter be entitled to receive upon the exercise of this Warrant, the number of shares of stock or other securities or property of the Company, or of the successor corporation resulting from such reorganization, merger, consolidation or sale, to which a holder of the number of shares of Common Stock (or any shares of stock or other securities which may be) issuable upon the exercise of this Warrant would have received if this Warrant had been exercised immediately prior to such reorganization, merger, consolidation or sale.
- 2.4 Notice of Adjustments and Record Dates. The Company shall promptly notify the Holder in writing of each adjustment or readjustment of the exercise price hereunder and the number of shares of Common Stock (or any shares of stock or other securities which may be) issuable upon the exercise of this Warrant. Such notice shall state the adjustment or readjustment and show in reasonable detail the facts on which that adjustment or readjustment is based. In the event of any taking by the Company of a record of the holders of Common Stock for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, the Company shall notify the Holder in writing of such record date at least twenty (20) days prior to the date specified therein.
- 2.5 No Impairment. The Company shall not avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but shall at all times in good faith assist in the carrying out of all the provisions of this Warrant. Without limiting the generality of the foregoing, the Company (a) shall at all times reserve and keep available a number of its authorized shares of Common Stock, free from all preemptive rights therein, which shall be sufficient to permit the exercise of this Warrant and (b) shall take all such action as may be necessary or appropriate in order that all shares of Common Stock as may be issued pursuant to the exercise of this Warrant shall, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof.

- 3. Redemption of Warrants. This Warrant is subject to redemption by the Company, in whole but not in part, at a redemption price of \$0.001, at any time after issuance and prior to the Expiration Date, on not less than 30 days' prior written notice to the Holder, provided that a public trading market for the Company's Common Stock then exists and that the daily trading price per share of Common Stock has been at least \$3.00 for a period of at least 20 consecutive trading days ending within 15 days prior to the date upon which the notice of redemption is given. The Holder shall have the right to exercise the Warrant, in whole or in part, before the date specified in the redemption notice. Upon expiration of such period, all rights of the Holder shall terminate, other than the rights to receive the redemption price, without interest, and the right to receive the redemption price shall itself expire on the Expiration Date.
- 4. Replacement of Warrants. On receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense shall execute and deliver to the Holder, in lieu thereof, a new Warrant of like tenor.
- 5. <u>Investment Intent.</u> Unless a current registration statement under the Securities Act of 1933, as amended, shall be in effect with respect to the securities to be issued upon exercise of this Warrant, the Holder, by accepting this Warrant, covenants and agrees that, at the time of exercise hereof, and at the time of any proposed transfer of any securities acquired upon exercise hereof, the Holder shall deliver to the Company a written statement that the securities acquired by the Holder upon exercise hereof are for the own account of the Holder for investment and are not acquired with a view to, or for sale in connection with, any distribution thereof (or any portion thereof) and with no present intention (at any such time) of offering or distributing such securities (or any portion thereof).
- 6. No Rights or Liability as a Stockholder. This Warrant does not entitle the Holder hereof to any voting rights or other rights as a stockholder of the Company. No provisions hereof, in the absence of affirmative action by the Holder to purchase Common Stock, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder as a stockholder of the Company.

7 Miscellaneous

- 7.1 <u>Titles and Subtitles</u>. The titles and subtitles used in this Warrant are for convenience only and are not to be considered in construing or interpreting this Warrant.
- 7.2 <u>Notices</u>. Any notice required or permitted under this Warrant shall be given in writing to the respective addresses of the Holder and the Company set forth on the signature page hereof, or to such other address as either party shall designate in a written notice given to the other as provided herein.
- 7.3 <u>Attorneys' Fees</u>. If any action at law or in equity is necessary to enforce or interpret the terms of this Warrant, the prevailing party shall be entitled to reasonable attorneys' fees, costs and disbursements in addition to any other relief to which such party may be entitled.

7.5 <u>Severability</u>. If one or more provisions of this Warrant are held to be unenforceable under applicable law, such provision shall be excluded from this Warrant and the balance of the Warrant shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms. 7.6 Governing Law. This Warrant shall be governed by and construed and enforced in accordance with the laws of the State of California, without giving effect to its conflicts of laws principles. 7.7 Counterparts. This Warrant may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Date: _ "The Company" ARROWHEAD RESEARCH, CORPORATION 1118 East Green Street Pasadena, CA 91106 By: [Company Officer] "Holder" ACKNOWLEDGED AND AGREED: (Signature) (Print Name) Address:

7.4 Amendments and Waivers. Any term of this Warrant may be amended and the observance of any term of this Warrant may be waived (either

generally or in a particular instance and either retroactively or prospectively), as provided in the Purchase Agreement.

SCHEDULE 1

SUBSCRIPTION NOTICE

Arrowhead Research Corporation.

(To be signed only on exercise of Warrant for cash)

The undersigned, the holder of the Warrant attached hereto, hereby irrevocably elects to exercise the purchase rights represented by such Warrant for, and to purchase thereunder, _______ shares of the Common Stock of Arrowhead Research Corporation, a Delaware corporation, and herewith makes payment of \$______ therefor, and requests that the certificates for such shares be issued in the name of, and delivered to _______, whose address is ______.

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

(Print Name)

(Address)

Schedule 1-1