

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ARROWHEAD RESEARCH CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

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

1118 East Green Street
Pasadena, California 91106
(626) 792-5549
(Address of Principal Executive Offices) (Zip Code)

2004 EQUITY INCENTIVE PLAN
(Full Title of the Plan)

R. Bruce Stewart, President
ARROWHEAD RESEARCH CORPORATION
1118 East Green Street
Pasadena, California 91106
(626) 792-5549
(Name and Address of Agent For Service)

(Telephone Number, Including Area Code, of Agent For Service)

With a copy to:
Rachael A. Simonoff, Esq.
GUTH | CHRISTOPHER, LLP
10866 Wilshire Boulevard, Suite 1250
Los Angeles, California 90024
(310) 234-6920

CALCULATION OF REGISTRATION FEE

Title Of Securities To Be Registered	Amount To Be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price	Amount Of Registration Fee
Common Stock, \$.001 par value	3,000,000	\$ 3.92	\$ 11,760,000	\$ 1,384.16

- (1) Plus such additional number of shares as may be required pursuant to the terms of the 2004 Equity Incentive Plan in the event of a stock dividend, stock split, recapitalization or other similar change in the Common Stock.
- (2) The Proposed Maximum Offering Price per Share was estimated pursuant to Rule 457(c), calculated on the basis of the average of the high and low share price of the Registrant's Common Stock on the NASDAQ SmallCap on April 11, 2005.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.*

Item 2. Registrant Information and Employee Plan Annual Information.*

* Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this registration statement in accordance with Rule 428 under the Securities Act and the Note to Part I of Form S-8.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed by us with the SEC are incorporated herein by reference:

(a) The Company's Annual Report on Form 10-KSB for the fiscal year ended September 30, 2004, filed on December 16, 2004, which is our latest annual report filed pursuant to Section 13(a) of the Securities Act, that contains audited financial statements for our latest fiscal year for which such statements have been filed;

(b) The Company's reports filed pursuant to Section 13(a) or 15(d) of the Securities and Exchange Act of 1934, as amended (the "Exchange Act") since the date of the fiscal year covered by our latest annual report; and

(c) The description of the Common Stock contained in the Company's Information Statement on Schedule 14-C, filed on December 22, 2000.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of filing of such documents.

Any statement contained in a document deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Not Applicable.

Item 6. Indemnification of Directors and Officers.

The Company's Certificate of Incorporation provides for the elimination of personal monetary liability of directors to the fullest extent permissible under Delaware law. Delaware law does not permit the elimination or limitation of director monetary liability for: (i) breaches of the director's duty of loyalty to the corporation or its

stockholders; (ii) acts or omissions not in good faith or involving intentional misconduct or knowing violations of law; (iii) the payment of unlawful dividends or unlawful stock repurchases or redemptions, or (iv) transactions in which the director received an improper personal benefit.

Section 145 of the Delaware General Corporation Law permits a Delaware corporation to indemnify, on certain terms and conditions, any person who was or is a party, or is threatened to be made a party, to any threatened pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action. The Certificate of Incorporation and Bylaws of the Company require the Company to indemnify the Company's directors and officers to the fullest extent permitted under Delaware law.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "**Securities Act**") may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 7. Exemption from Registration Claimed.

Not Applicable.

Item 8. Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
4.1	2004 Equity Incentive Plan (1)
5.1	Legal Opinion of Guth Christopher LLP
23.1	Consent of Guth Christopher LLP (included in Exhibit 5.1)
23.2	Consent of Rose, Snyder & Jacobs
23.3	Consent of Kevin Breard, CPA, an accountancy corporation

(1) Incorporated by reference from Annex A to the Preliminary Schedule 14C filed by the Registrant on December 16, 2004.

Item 9. Undertakings.

(a) Rule 415 Offering. The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement;
 - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such

information in the Registration Statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) Filings Incorporating Subsequent Exchange Act Documents by Reference. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Request for Acceleration of Effective Date or Filing of Registration Statement on Form S-8. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Pasadena, State of California, on April 14, 2005.

ARROWHEAD RESEARCH CORPORATION

By: /s/ R. Bruce Stewart

R. Bruce Stewart, President

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Office(s)</u>	<u>Date</u>
<u>/s/ R. Bruce Stewart</u> R. Bruce Stewart	President (principal executive) and Director	April 14, 2005
<u>/s/ Joseph T. Kingsley</u> Joseph T. Kingsley	Chief Financial Officer and Secretary	April 14, 2005
<u>/s/ Edward W. Frykman</u> Edward W. Frykman	Director	April 14, 2005
<u>/s/ LeRoy T. Rahn</u> LeRoy T. Rahn	Director	April 14, 2005
<u>/s/ Charles P. McKenney</u> Charles P. McKenney	Director	April 14, 2005

GUTH | CHRISTOPHER LLP
10866 WILSHIRE BOULEVARD, SUITE 1250
LOS ANGELES, CALIFORNIA 90024-4357

April 14, 2005

Arrowhead Research Corporation
1118 East Green Street
Pasadena, California 91106

Re: 2004 Equity Incentive Plan and Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Arrowhead Research Corporation, a Delaware corporation (the “**Company**”), in connection with its Registration Statement on Form S-8 (the “**Registration Statement**”) filed with the Securities and Exchange Commission with respect to the registration of 3,000,000 shares (“Shares”) of the Company’s common stock, \$.001 par value, issuable pursuant to the 2004 Equity Incentive Plan.

As such counsel, we have examined such records, documents, certificates and other instruments as in our judgment are necessary or appropriate in order to enable us to render this opinion. Based on the foregoing and our examination of such questions of law as we deem necessary, we are of the opinion that the Shares, when sold and issued in accordance with (i) the 2004 Equity Incentive Plan and (ii) the Registration Statement, will be validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement. Except as set forth in this paragraph, this opinion is furnished solely for your benefit and may not be relied upon by, nor copies delivered to, any other person or entity without our prior written consent.

Sincerely,

/s/ Guth | Christopher LLP

Guth | Christopher LLP

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated November 5, 2004 (except for note 10 as to which the date is December 9, 2004) which expresses an unqualified opinion and is incorporated by reference in the Annual Report on Form 10-KSB of Arrowhead Research Corporation for the year ended September 30, 2004.

/s/ ROSE, SNYDER & JACOBS

Rose, Snyder & Jacobs
A Corporation of Certified Public Accountants
Encino, California
April 14, 2005

CONSENT OF INDEPENDENT ACCOUNTANTS

I consent to the incorporation by reference in this Registration Statement on Form S-8 of the report of Arrowhead Research Corporation of my report dated December 23, 2003, which is incorporated by reference in the Annual Report on Form 10-KSB of Arrowhead Research Corporation for the year ended September 30, 2004.

/s/ Kevin Breard, CPA
KEVIN BREARD, CPA, AN ACCOUNTANCY CORPORATION

Northridge, California
April 11, 2005