UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): December 14, 2010

Arrowhead Research Corporation

(Exact name of registrant as specified in its charter)

0-21898

(Commission File Number)

Delaware

(State or other jurisdiction of incorporation)

46-0408024 (IRS Employer Identification No.)

201 South Lake Avenue, Suite 703, Pasadena, CA 91101 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code (626) 304-3400

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

D Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)

D Pre-commencement communications pursuant to Rule 13e-4 (c) under the Exchange Act (17 CFR 240.13e-4(c)

Item 1.01. Entry into a Material Definitive Agreement.

On December 14, 2010, Arrowhead entered into an agreement with the Board of Regents of the University of Texas whereby it obtained an exclusive world-wide license on certain anti-obesity technology developed by Drs. Wadih Arap and Renata Pasqualini at the MD Anderson Cancer Center. The agreement requires a one-time fee of \$2 million, and annual maintenance fees, initially in the amount of \$50,000, rising to a maximum annual fee of \$100,000 after five years. Milestone payments and royalties may also be due under certain situations.

The foregoing is intended only as a summary of the terms of the Agreements and is qualified in its entirety by the text of the Agreements, copies of which the Company intends to file with its Quarterly Report on Form 10-Q for the quarter ending December 31, 2010.

SIGNATURES

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

Date: December 20, 2010

ARROWHEAD RESEARCH CORPORATION

By: /s/ Kenneth Myszkowski

Kenneth Myszkowski Chief Financial Officer