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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): October 14, 2008

**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)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4 (c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 8.01. Other Events.**

On October 14, 2008, Arrowhead Research Corporation (the "Company") issued a new release in which the Chief Executive Officer of the Company updated stockholders on the Company's strategy and briefly described the Company's majority owned subsidiaries and minority investments. The release is planned to be the first of several weekly updates. A copy of the news release is attached as Exhibit 99.1 to this Form 8-K.

**Item 9.01. Financial Statements and Exhibits.**

(c) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	News Release dated October 14, 2008

**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: October 20, 2008

ARROWHEAD RESEARCH CORPORATION

By: /s/ Paul C. McDonnell

Paul C. McDonnell

Chief Financial Officer

**PRESS RELEASE**

October 14, 2008

7:00 am

Contact: Virginia Dadey  
Telephone: 212-541-3707  
vdadey@arrowres.com

**ARROWHEAD CEO UPDATES STOCKHOLDERS**

Pasadena, California—Arrowhead Research Corporation (NASDAQ: ARWR) announced today that the Company's CEO has provided an update letter to stockholders:

Dear Arrowhead Stockholders,

In order to provide an update on Arrowhead's operational and strategic initiatives, I plan to release seven weekly newsletters. This first edition focuses on Arrowhead's overall strategy and provides a broad overview of its subsidiaries. Every week over the next six weeks, Arrowhead will release a focused newsletter on each of its four majority-owned subsidiaries: Unidym Inc., Calando Pharmaceuticals Inc., Agonn Systems Corporation and Tego Biosciences Corporation. This and future newsletters will also review developments at Nanotope Inc. and Leonardo Biosystems, Inc., both entities in which Arrowhead currently holds a minority interest. We intend to increase our equity position in these two companies over time to achieve majority ownership.

Arrowhead Research Corporation is a publicly traded nanotechnology holding company striving to bring new products to market via its subsidiaries in the healthcare, electronics, and clean energy industries. Arrowhead was established in 2003 to address the opportunities presented by two intersecting forces: an explosion of basic nanotechnology research; and a market that we believed lacked an efficient mechanism to build and operate companies commercializing this science. We saw this as a big opportunity and sought to fill that role. Five years later, we have a set of market-leading subsidiaries with, we believe, significant *near term* monetization opportunities. For instance, we believe we have an attractive near-term acquisition target in Calando and a potential late 2009 IPO candidate, if an IPO market window opens, or acquisition target in Unidym.

Given the uncertainty in the capital markets, Arrowhead is conserving cash. Our resources are allocated across our current subsidiaries to help provide the necessary runways to potential liquidity events. We plan to pursue new initiatives only as capital resources allow. Calando and Unidym are our two biggest consumers of capital, and, as such, we intend to raise outside capital directly into these subsidiaries to increase their capital resources, while effectively stretching Arrowhead's current capital for use in our other subsidiaries.

Arrowhead has created a scalable platform on which to build highly specialized subsidiaries with an eye to maximizing capital efficiency and accelerating the rate of product development. Our subsidiaries are built around university-derived technologies and by acquisition of existing companies. We believe the combination of these strategies is advantageous and unique for a single institution and that Arrowhead provides unique advantages to stockholders.

Arrowhead is highly active in the operation of its subsidiaries, providing initial management, operational support, business development and financing. We believe that centralizing key management responsibilities at the parent enables the overall enterprise to operate in an efficient manner and provides our subsidiaries with significant competitive advantages. For instance, our subsidiaries draw on a team of senior professionals that a single independent company may have a difficult time recruiting and retaining. In 2008, Arrowhead added key talent that has enabled us to more fully consolidate responsibilities at the level of the parent. As we acquire additional equity in Nanotope and Leonardo, we expect to similarly consolidate the management functions for each of Nanotope and Leonardo.

Our mission is to create shareholder value by building subsidiaries that may be monetized in three primary ways: (1) subsidiaries may be sold to existing companies with proceeds flowing back to Arrowhead; (2) subsidiaries may execute an IPO, with proceeds flowing back to Arrowhead and/or providing Arrowhead with tradable stock; and (3) subsidiaries may become mature operating units with earnings growth consolidated with Arrowhead. In the near- to mid-term, we plan to focus on the first two liquidity models. If liquidity events generate additional capital, Arrowhead will look to retain some mature subsidiaries as operating units that drive earnings back to the parent.

Our four subsidiaries are as follows:

#### **Calando Pharmaceuticals, Inc.**

Calando is a clinical stage biopharmaceutical company using proprietary technologies to deliver targeted siRNA (small interfering RNAs) and small molecule therapeutics for oncology. Calando currently has two lead compounds in the clinic, CALAA-01 and IT-101. The former is an siRNA therapeutic that incorporates Calando's RONDEL™ delivery system to address the long-standing obstacle of effective delivery and targeting for this potentially revolutionary new class of pharmaceuticals. CALAA-01 is in a Phase I clinical trial and is believed to be the first siRNA therapeutic to enter the oncology clinic. We further believe that it is also the first systemically delivered siRNA therapeutic formulated with a targeted delivery system. CALAA-01 is a targeted nanoparticle comprised of a patented, non-chemically-modified siRNA against the M2 subunit of ribonucleotide reductase, a clinically-validated cancer target. IT-101, Calando's lead candidate delivering a small molecule drug, began clinical trials in 2006. It is a conjugate of Cycloset™, Calando's proprietary delivery system, and camptothecin. In Phase I clinical studies, IT-101 demonstrated safety, and unique pharmacokinetic properties. IT-101 is currently in a Phase II clinical trial. Both RONDEL™ and Cycloset™ utilize modified cyclodextrin molecules to create an entirely new class of drug delivery materials, which Calando believes have the ability to solve many of the deficiencies observed in therapeutic product candidates. Arrowhead currently owns more than 65% of Calando.

#### **Unidym, Inc.**

Unidym is a broad-based electronics company that utilizes carbon nanotubes (CNTs), a novel material with extraordinary electrical, thermal and mechanical properties. As a result of its roll-up of technology from over a dozen universities and acquisition of three companies (including Nobel Laureate Rick Smalley's technology portfolio), Unidym possesses a foundational patent portfolio that covers nearly every aspect of CNT manufacturing and processing, as well as multiple product applications. Unidym's current revenues are primarily derived from sales of nanotube products for antistatic composites in the semiconductor industry, and the company expects to begin selling transparent conductive films into the touch screen industry by the end of 2008. Unidym intends to sell its electronic ink products in the flat panel display, solar cell, and solid state lighting industries. The company also has a licensing program for companies seeking to market CNT-based products outside of its core target electronic products, having completed two license deals so far this year. Unidym does not expect to generate revenues sufficient to support its operations in the near future. Unidym has received strategic investments from Sumitomo, Tokyo Electron Ventures, Battelle, and Entegris, and has publicly announced a partnership with Samsung Electronics. Arrowhead currently owns greater than 53% of Unidym.

#### **Agonn Systems Corporation**

Arrowhead's newest subsidiary, Agonn Systems, is developing CNT-based energy storage products. Its roll-up model is very similar to that which Arrowhead used to build Unidym. It is acquiring key technologies with the goal of creating a dominant player in nano-enabled next generation energy storage. While substantial investments are being made in energy generation technologies such as solar and wind power, new technologies are needed to store energy. The nickel metal hydride batteries predominantly used in hybrid electric vehicles, for example, do not have the energy density or life time necessary for hybrids to become a cost-effective alternative to traditional gas-powered vehicles. Additionally, new types of energy storage products are needed to store and more efficiently distribute energy on the electric grid. Supercapacitors, devices that can charge and discharge large very rapidly and have significantly longer lives than batteries, could potentially address both these issues if they could be made to store more energy. Agonn is leveraging Arrowhead's previous investments in carbon nanomaterials to seek to bring supercapacitor products to market that could store enough energy to replace batteries in many applications. Arrowhead currently owns 100% of Agonn.

## **Tego Biosciences, Inc.**

Much as Unidym holds a powerful patent position with respect to carbon nanotubes, Tego has a large patent portfolio with fundamental patents relating to fullerene production and derivitization, or the process of attaching a broad array of molecules to them. Fullerenes are powerful antioxidants and have been shown to possess potentially valuable therapeutic characteristics across multiple disease states. Tego is leveraging this patent estate with the goal of developing a treatment for macular degeneration, the greatest cause of blindness for older people, and next generation MRI contrast agent. Tego is also using its strong and broad patent position to establish a licensing program for other companies to develop fullerene-based therapeutics. Arrowhead currently owns 100% of Tego.

We hold minority investments in the following:

### **Nanotope, Inc.**

Nanotope is a regenerative medicine company developing a suite of products customized to regenerate specific tissues; including neuronal, vascular, bone, myocardial, and cartilage. Its two lead candidates are focused on spinal cord regeneration and treatment of peripheral artery disease ("PAD"). With respect to the former, Nanotope has demonstrated that a simple injection of its compound within 48 hours after spinal cord injury leads to the reversal of paralysis in multiple animal models. PAD causes the loss of vasculature in the extremities and it has been estimated that as many as 20% of people over the age of 70 has some form of PAD. Currently there is no way of regenerating lost vasculature. Nanotope has demonstrated in multiple animal models that injection of its angiogenic compound leads to revascularization of effected areas. Importantly, neither the spinal cord or PAD treatments use stem cells. Nanotope's products work with surviving cells and tissues to spur regeneration. Nanotope plans to file at least one IND with the FDA in 2009. Arrowhead currently has a minority position in Nanotope. We intend to increase our equity position over time to achieve majority control.

### **Leonardo Biosystems, Inc.**

Leonardo is a drug delivery company that employs a novel strategy aimed at dramatically increasing targeting efficiency. Leonardo's rationale is that delivering therapeutic agents involves bypassing multiple biological barriers and, therefore, multiple carriers should be employed, each optimized to get through specific barriers. Leonardo's proprietary primary vehicles are designed to preferentially accumulate at tumor vasculature. Secondary carriers are then released from the primary carriers that are designed to accumulate around tumor cells and release their therapeutic payloads. Animal testing suggests that Leonardo's platform enables significantly increased targeting. Leonardo plans to file an IND the end of 2009. Arrowhead currently has a minority position in Leonardo. We intend to increase our equity position over time to achieve majority control.

### **Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:**

*This news release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are based upon our current expectations and speak only as of the date hereof. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties, including the future success of our scientific studies, our ability to successfully develop products, rapid technological change in our markets, changes in demand for our future products, legislative, regulatory and competitive developments and general economic conditions. Arrowhead Research Corporation's Annual Report on Form 10-K and 10-K/A, recent and forthcoming Quarterly Reports on Form 10-Q and 10-Q/A, recent Current Reports on Forms 8-K and 8-K/A, our Registration Statements on Form S-3, and other SEC filings discuss some of the important risk factors that may affect our business, results of operations and financial condition. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.*