Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended September 30, 2006.

☐ **TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number 000-21898

ARROWHEAD RESEARCH CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**46-0408024**
(State of incorporation)	**(I.R.S. Employer Identification No.)**

201 S. Lake Avenue, Suite 703
Pasadena, California 91101
(626) 304-3400
(Address and telephone number of principal executive offices)

1118 East Green Street
Pasadena, California 91106
(Former address of principal executive offices)

Securities registered under Section 12(b) of the Exchange Act:

Title of each class	Name of each exchange on which registered
None	**None**

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

Common Stock, $.001 par value

Indicate by a check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒.

Indicate by a check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the act). Yes ☐ No ☒

Issuer's revenue for its most recent fiscal year: $595,458.

The aggregate market value of issuer's outstanding Common Stock held by non-affiliates was approximately $169,369,989 based upon the bid price of issuer's Common Stock on March 31, 2006.

As of December 11, 2006, 34,203,627 shares of the issuer's Common Stock were outstanding.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Annual Report on Form 10-K except for historical information may be deemed to be forward-looking statements. Without limiting the generality of the foregoing, words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue" or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.

The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to predict accurately and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1 (Business) and Item 1A (Risk Factors) of Part I and Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) of Part II of this Annual Report on Form 10-K. Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission. In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to place undue reliance on such forward-looking information. We undertake no obligation to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

WHERE YOU CAN FIND MORE INFORMATION

As a public company, we are required to file annually, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any of our materials on file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Judiciary Plaza, Washington, DC 20549, as well as at the SEC's regional office at 5757 Wilshire Boulevard, Suite 500, Los Angeles, California 90036. Our filings are available to the public over the Internet at the SEC's website at http:\\.www.sec.gov. Please call the SEC at 1-800-732-0330 for further information on the Public Reference Room. We also provide copies of our Forms 8-K, 10-K, 10-Q, Proxy and Annual Report at no charge to investors upon request and make electronic copies of our most recently filed reports available through our website at www.arrowres.com as soon as reasonably practicable after filing such material with the SEC.

PART I

ITEM 1. BUSINESS

Description of Business.

Unless otherwise noted, (1) the term "Arrowhead Research" refers to Arrowhead Research Corporation, a Delaware corporation and formerly known as InterActive Group, Inc., (2) the terms "Arrowhead," the "Company," "we," "us," and "our," refer to the ongoing business operations of Arrowhead Research and its Subsidiaries, whether conducted through Arrowhead Research or a subsidiary of the company Arrowhead Research, (3) the term "ARC" refers to Arrowhead Research Corporation, a privately-held California corporation with which Arrowhead Research consummated a stock exchange transaction in January 2004, and (4) the term "Common Stock" refers to Arrowhead Research's Common Stock and the term "stockholder(s)" refers to the holders of Common Stock or securities exercisable for Common Stock.

The Company was originally incorporated in South Dakota in 1989, and was reincorporated in Delaware in 2000 under the name InterActive, Inc. ("InterActive"). On January 12, 2004, InterActive consummated a stock exchange transaction with the owners of ARC, a privately-held California corporation, . This transaction is referred to as the "Share Exchange." Upon consummation of the Share Exchange, the owners of ARC acquired approximately 89% of the Common Stock of the Company. InterActive changed its name to Arrowhead Research Corporation and ARC became a wholly owned, non-operating subsidiary of the Company. The Company's principal executive offices are located at 201 South Lake Avenue, Suite 703, Pasadena, California 91101, and its telephone number is (626) 304-3400.

Overview

Arrowhead Research Corporation is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics, and energy. Arrowhead's mission is to build value through the identification, development and commercialization of nanotechnology-related products and applications. The Company works closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. Arrowhead takes a portfolio approach by operating multiple subsidiaries which allows the pursuit of multiple opportunities and diversifies risk. Currently, Arrowhead operates four majority owned Subsidiaries commercializing nanotech products and applications and funds a number of prototype development efforts in leading university labs in exchange for the exclusive right to license the technology developed in such labs.

Nanotechnology

Nanotechnology involves the investigation and design of materials and devices at the atomic and molecular levels. The engineering of materials and devices at the nanoscale is expected to unleash fundamental paradigm shifts in a range of different industries. Large multinational corporations are investing heavily in commercialization efforts and the federal government has authorized an aggregate of $3.7 billion for nanoscale science and engineering projects between 2005 and 2008. Already, nanomaterials are being used to make stain resistant and wrinkle free clothing, lighter and stronger baseball bats, and more durable epoxies and paints. Although nanotechnology is likely to impact virtually every industry ranging from textiles to aerospace, we believe that the most far-reaching impacts of nanoscience will be in life sciences/pharmaceuticals, electronics, and energy.

Nanotechnology is contributing to advances in life sciences including applications in drug development and delivery, diagnostics, stem cell therapeutics, and personalized medicine. Recent breakthroughs in life sciences such as the sequencing of the human genome, the discovery of RNA interference (RNAi), and advances in stem cell techniques are enabling new understanding of diseases and approaches to treatments. Nanotechnology involves engineering on a molecular level; biological processes happen at the molecular scale. Nanotechnology combines the traditional disciplines of chemistry, materials science, physics and biology and enables the

manipulation of matter in powerful new ways. Using the knowledge from all of these disciplines, medicines and diagnostic agents can be designed to interact with cells and tissues with a high degree of specificity and functionality.

The electronics industry is leveraging nanomaterials in devices that are faster, cheaper, more flexible, and consume less energy. Electronic materials and devices used over the past several decades have reached their performance limits. Additionally, because traditional electronic materials such as indium tin oxide, copper, aluminum, and silicon are mined, they are finite and subject to supply shortages. Nanomaterials are likely to be used to enhance the performance of traditional electronic products and to address technological challenges encountered by existing electronics manufacturers.

In energy, nanotechnology is enabling the manufacture of new kinds of solar cells, fuel cells, batteries, and super capacitors. Existing solar cells based on crystalline silicon are bulky and expensive. If successfully developed, solar cells incorporating nanomaterials could be cheaper, lighter and more flexible. Similarly, nanomaterials could yield new light, emitting diodes that are brighter and consume less power than existing sources of lighting. Nanostructured materials promise to give rise to new batteries that last longer, have more energy, and are a fraction of the size of conventional batteries.

Majority-owned Subsidiaries

Arrowhead owns majority interest in its Subsidiaries, securing substantial participation in any success. Each subsidiary is staffed with its own technical and business team that focuses on its specific technology and markets while Arrowhead provides financial, strategic, and administrative resources. The Company's four majority owned Subsidiaries are commercializing a variety of nanotech products and applications, including anti-cancer drugs, RNAi therapeutics, carbon-based electronics and compound semiconductor materials. In the near term, Arrowhead expects to add to its portfolio through selective acquisition and formation of new companies.

Sponsored Research

Arrowhead is taking advantage of a key trend in technology innovation. More and more in recent years, fueled by government and private funding, major new discoveries and product inventions are happening at universities rather than in the research and development divisions of large corporations. Universities are patenting and licensing these inventions through technology transfer offices and academic researchers have become interested in commercialization.

In exchange for the exclusive right to license the technology developed in sponsored laboratories, Arrowhead works with some of the most outstanding academic institutions in the country, including the California Institute of Technology (Caltech), Stanford University, Duke University and the University of Florida, in critical areas such as stem cell research, carbon electronics, and molecular diagnostics. By funding university research, Arrowhead has the ability to ascertain the probability of technical success at low research cost and, if warranted, continue cost effective development at the university by leveraging the already existing resources available to scientists at universities, such as laboratories and equipment as well as a vibrant location that encourages the exchange of ideas. Moreover, the cultivation of relationships in the academic community provides an additional window into other promising technologies.

As of September 30, 2006, Arrowhead Research Corporation had 36 full-time employees, including 11 full-time employees at the corporate office. Arrowhead also had 4 part-time employees.

Subsidiaries

As of September 30, 2006, Arrowhead held a majority of the outstanding, voting stock of the following four operating subsidiaries (the "Subsidiaries"):

Subsidiary	% Ownership[1]	Technology/Product Focus
Insert Therapeutics, Inc. *acquired June 4, 2004*	68.3%[2]	Nano-engineered drug delivery system, in clinical trials with first anti-cancer compound
Calando Pharmaceuticals, Inc. *founded February 20, 2005*	85.1%[3]	Nano-engineered RNAi therapeutics
Unidym,Inc. (formerly NanoPolaris) *founded April 4, 2005*	88.1%	Developing strategic opportunities for the commercialization of nanotube-based products
Aonex Technologies, Inc. *founded April 20, 2004*	80.0%	Semiconductor nanomaterials with initial emphasis on high efficiency solar cells

(1) Each Subsidiary has an option plan to help motivate and retain employees. Insert has 4,336,672 outstanding warrants, primarily issued in connection with a financing event that closed in October 2006. As of December 8, 2006, assuming all options in each Subsidiary plan were awarded and exercised and all warrants were exercised, the Company would own approximately 57.2% of Insert, 63.9% of Calando, 74.0% of Unidym and 50.0% of Aonex as of December 8, 2006.

(2) On October 25, 2006, Arrowhead was the lead investor in a private financing aggregating approximately $10 million for Insert. After giving effect to this financing, Arrowhead's ownership percentage is 64.4%. *See Financial Statements, Note 11, Subsequent Events.*

(3) As of September 30, 2006, Arrowhead has direct ownership of 82.4% of the outstanding, voting stock of Calando and indirectly, through Insert, controls another 2.7% of Calando's outstanding, voting stock. On October 31, 2006, two of the founders of Calando exercised warrants, bringing Arrowhead's ownership to approximately 69.9%. *See Financial Statements, Note 11, Subsequent Events.*

Arrowhead has entered into agreements to provide future additional capital to Calando and Unidym, which funding agreements give Arrowhead the right to provide additional capital to each such Subsidiary or to forfeit a specified portion of its interest in lieu of additional future funding. The following table summarizes the terms and status of these additional capital contributions:

Subsidiary	Total Capital Assuming all Contributions Made	Future Capital Contributions	Time for Additional Capital Contributions
Calando Pharmaceuticals, Inc.	$ 12,000,000	$7,000,000	21 months (1)
Unidym, Inc. (formerly NanoPolaris, Inc.)	$ 7,000,000	$4,000,000	21 months (2)

(1) Under its Agreement to Provide Additional Capital with Calando, Arrowhead has the right to provide Calando up to $7,000,000 in additional capital based upon the achievement of certain development milestones. The first of these milestone payments for $1,000,000 is projected to be payable at Arrowhead's option during the second quarter of fiscal 2007. The second milestone payment of $3,000,000 is projected to be payable at Arrowhead's option during the fourth quarter of fiscal 2007. The last of these milestone payments for $3,000,000 is projected to be payable at Arrowhead's option during the third quarter of fiscal 2008.

(2) Under its Agreement to Provide Additional Capital with Unidym, Arrowhead has the right to provide Unidym up to $4,000,000 in additional capital at specified times. Milestone payments of $2,000,000 each are payable at Arrowhead's option in June 2007 and in June 2008.

Arrowhead may choose not to provide additional capital to either Calando or Unidym, in which case Arrowhead will forfeit the right to make additional milestone payments to such company and would forfeit a proportionate share of equity based on the unfunded payments.

Detail Subsidiary Discussions

Insert Therapeutics, Inc.

General

The scientific team at Insert has developed Cyclosert™, a proprietary drug delivery platform technology based on a nano-engineered class of linear cyclodextrin-containing polymers. Cyclodextins (a cyclic sugar molecule) have been used with great success for drug delivery, principally acting to solubilize drugs that otherwise would not dissolve. In polymeric form, cyclodextrins have been shown to be non-toxic and non-immunogenic, and by enabling the manipulation of particle size and other characteristics, to improve drug properties and performance. The Cyclosert delivery platform has been designed to be used with a variety of drug molecules and targeting agents.

Numerous new drugs attack molecules that are on the surface of cells. Many known molecular targets inside the cell remain "undrugable" because drugs that could attack these targets cannot successfully cross the cell membrane or be taken up by the cell's natural mechanisms. By actively inserting a drug payload into cells, Cyclosert is designed to provide therapeutic treatment focused on previously unreachable targets. The linkage between Cyclosert and the drug payload can be modified to trigger release of the drug at the appropriate time and in the desired location.

Insert's lead anti-cancer drug candidate (IT-101) is a combination of Cyclosert and the potent anti-cancer drug, camptothecin. Camptothecin is an anti-cancer agent that has never been commercialized successfully due its poor solubility, unfavorable pharmacokinetics, and unintended interactions with elements found in human blood. Despite serious side effects, analogs of camptothecin that have been modified primarily to improve their solubility are widely marketed as therapeutics for colorectal, ovarian and lung cancers. The combination of camptothecin with the Cyclosert polymer has been shown to improve solubility, and to increase circulation time in the body, allowing a disproportionate amount of the drug to accumulate in tumors due to the "leaky" nature of tumor vasculature. Perhaps most importantly, camptothecin is joined to the polymer in such a way that keeps it in a form that releases active camptothecin inside the cell—an advantage over the currently marketed analogs, which begin to chemically transform into a form inactive against cancer—but still highly toxic—almost immediately upon entering the bloodstream.

Insert filed its Investigational New Drug (IND) application for IT-101 with the Food & Drug Administration in February 2006, and commenced its first human clinical trials at City of Hope Cancer Center in July 2006. The National Cancer Institute (NCI) has designated City of Hope as a Comprehensive Cancer Center - one of just a handful of elite institutions nationwide. The "Comprehensive Cancer Center" designation indicates that City of Hope has undergone a rigorous peer review process, and has been found to be worthy of this highest level of recognition. The clinical trial is designed to assess the safety, toxicity, maximum tolerated dose and pharmacokinetics of IT-101, with secondary endpoints to assess tumoral response and anti-tumor activity. It is open to all patients with non-resectable solid tumors who have failed existing standard therapies and who meet other specified criteria. The trial is expected to enroll between 24 and 48 patients, and last approximately one year.

Additional information about Insert Therapeutics, Inc. can be found on its website, www.insertt.com.

The Oncology Market

Cancer is characterized by rapid, uncontrolled cell division resulting in the growth of an abnormal mass of cells generally referred to as a malignant tumor. Cancerous tumors can arise in almost any tissue or organ, and cancer cells, if not eradicated, can spread, or metastasize, throughout the body. As these tumors grow, they cause damage to the surrounding tissue and organs and commonly result in death if left untreated. Cancer is believed to occur as a result of a number of hereditary and environmental factors. According to the American Cancer Society, cancer is the second leading cause of death in the United States and accounts for approximately one in every four deaths. Approximately 565,000 Americans are expected to die of cancer in 2006. The National Institutes of Health estimated the direct medical cost of cancer to be $74 billion in 2005.

IT-101

Insert's lead product candidate, IT-101, is a chemotherapy drug candidate. Camptothecin, the active ingredient in IT-101, is a member of the topoisomerase I class of chemotherapy drugs. Topoisomerase inhibiters interfere with DNA synthesis and eventually lead to cell death. There are currently two marketed hydrophilic (water-based) camptothecin analogs that are based on chemical modifications to the native camptothecin molecule. Irinotecan, which is marketed under the name Camptosar® is indicated for treatment of colorectal cancer. Topotecan, which is marketed under the name Hycamtin®, is indicated for treatment of ovarian and non-small cell lung cancers. These drugs generate annual worldwide sales estimated to be in excess of $1.1 billion. IT-101, if approved, would address a portion of this market depending on the approved indication(s). Camptothecins are among the most important classes of anti-cancer drugs introduced in recent years; however, the marketed camptothecin analogs pose substantial challenges in terms of efficacy, tolerability and difficulty of use. Insert's objective with IT-101 is to provide a product that has enhanced tolerability and anti-tumor activity compared with the approved products.

Insert commenced Phase I clinical studies to evaluate the safety, toxicity and pharmacokinetics of IT-101 at the City of Hope National Cancer Center in Duarte, California, in July 2006. Secondary endpoints that will be evaluated include antitumor activity. Insert expects that the trial will be concluded in mid-2007.

Research and Preclinical Development

Insert continues to invest in the research and development of new product candidates, including those that could extend the application of its proprietary drug delivery technology, Cyclosert™. Research and development efforts on these pipeline candidates are preliminary, and there is no assurance that any of these compounds will be successful or will progress to clinical trials. Advancing these development candidates into human clinical trials is dependent on several factors, including technological feasibility and commercial opportunity as well as the availability of financial resources. It is difficult to evaluate the potential markets for these product candidates as the areas of potential application are diverse and specific applications are yet to be determined.

In addition to internal research and development efforts, acquisitions of other products, development candidates or technologies to expand Insert's pipeline and capabilities may be considered.

When developing new products, a variety of factors are considered, including:

- Potential pricing and gross margins
- Existing and potential market size
- High barriers to entry
- Patent expiration dates
- Manufacturing capabilities and access to raw materials
- Potential development and competitive challenges
- How a potential product will fit within our existing array of products under development, and what synergies may exist

Collaboration and Licensing Arrangements

Insert is internally focused on using its technology to develop and commercialize proprietary conjugates of Cyclosert™ with select small-molecule drugs and peptides, initially in the oncology area. With its ability to deliver a wide range of therapeutic payloads, ranging from small molecules to proteins and peptides, Insert's Cyclosert™ technology platform has applications well beyond Insert's capacity to develop internally. Consequently, research and development collaborations with pharmaceutical and biotech companies to deploy our technology with other therapeutics are continually sought, whether for the purpose of extending the life cycle of currently-marketed drugs, or to resolve delivery challenges of new chemical entities.

Manufacturing

Insert currently uses, and expects to continue to be dependent upon, contract manufacturers to manufacture each of its product candidates. Insert has established a quality control and quality assurance program, including a set of standard operating procedures and specifications, designed to ensure that its products are manufactured in accordance with current Good Manufacturing Procedures, or cGMPs, and other applicable domestic and foreign regulations. Additional manufacturing resources will require additional investment, and Insert may seek to enter into additional collaborative arrangements with other parties that have established manufacturing capabilities. Insert expects to continue to rely on third-party manufacture of its development and commercial products on a contract basis. Currently, Insert has agreements with third-party vendors to furnish IT-101 drug supply for clinical studies. Insert will be dependent upon these third-parties to supply it in a timely manner with products manufactured in compliance with cGMPs or similar standards imposed by foreign regulatory authorities where our products are tested and/or marketed.

Competition

The healthcare industry in general is characterized by extensive research efforts, rapid technological change and intense competition. Other pharmaceutical companies will compete with Insert in areas of research and development, acquisition of products and technology licenses, and the manufacturing and marketing of products that could potentially compete with Insert's products. Competition will be based on safety, efficacy, ease of administration, breadth of approved indications, price, reimbursement and physician and patient acceptance.

In addition to the already-approved irinotecan and topotecan, other companies are developing camptothecin formulations with a goal of delivering a more effective and tolerable therapy than the approved camptothecin-based products. Sonus Pharmaceuticals has announced their intention to file an Investigational New Drug Application (IND) for its SN2310 Injectable Emulsion (camptothecin suspended in a vitamin E emulsion) and to commence Phase I trials in 2006. Cell Therapeutics is currently conducting clinical trials in Europe for their product CT-2106, a polyglutamate-camptothecin molecule.

Insert's ability to successfully compete in the biotechnology and pharmaceutical industries will be based on its ability to do the following:

- Create and maintain advanced formulation technologies;
- Develop proprietary products;
- Attract and retain key scientific personnel;
- Obtain patent or other protection for products;
- Obtain required regulatory approvals; and
- Manufacture, market and or license our products alone or with collaborative partners.

Insert faces competition from a variety of companies focused on developing oncology drugs. Insert competes with large pharmaceutical companies and with other specialized biotechnology companies, including but not limited to Cell Therapeutics, Sonus Pharmaceuticals, Abraxis Biosciences, Bristol-Myers Squibb Co., Sanofi-Aventis, Genentech, Lilly and Novartis. Many of Insert's competitors and potential competitors have substantially greater financial, technical and human resources than Insert and have substantially greater experience in developing products, obtaining regulatory approvals and marketing and manufacturing products. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and established biotechnology companies. Many of these competitors have products that have been approved or are in development and operate large, well-funded research and development programs. Companies that complete clinical trials, obtain required regulatory approvals and commence commercial sales of their products before their competitors may achieve a significant competitive advantage if their products work through a similar mechanism as Insert's products. In addition, other technologies or products may be developed that have an entirely different approach that would render Insert's technology and products noncompetitive or obsolete.

Intellectual Property

Insert Therapeutics has an exclusive, worldwide license from Caltech to a suite of U.S. and foreign patents that are pending or have been issued. Insert has also filed its own U.S. and foreign patent applications, which are pending. Insert has licensed its Cyclosert™ delivery technology to an affiliate company, Calando Pharmaceuticals Inc., for the development and commercialization of RNAi therapeutics. Under the terms of the license, Insert received an equity stake in Calando. Insert is also entitled to royalties and sublicensing fees on the sales of products covered by the licensing agreement.

Key Personnel

Insert's corporate and business activities are led by its President, John Petrovich. Mr. Petrovich brings management, strategic planning, legal and fundraising strength and experience to Insert. For the past five years, he has helped guide the development of the Cyclosert™ delivery system and also led the drive to Phase I clinical trials for Insert's lead anti-cancer compound, IT-101. His other activities include serving as Chief Executive Officer and President of Calando, an affiliated company commercializing Insert's delivery technology under license in the area of RNA interference. He earned his B.S. in Business Administration/Finance from the University of Southern California and his J.D. from the UCLA School of Law.

As of January 1, 2007, Edward Jacobs, a seasoned pharmaceutical industry executive, will be appointed Chief Executive Officer & President of Insert. Until then, Mr. Jacobs will serve as a consultant to Insert. At that time, Mr. Petrovich will concentrate on his role as Chief Executive Officer of Calando. Mr. Petrovich will serve in an advisory role after Mr. Jacobs joins Insert full time.

Mr. Jacobs is currently the Chief Operating Officer of SuperGen (NASDAQ:SUPG). Mr. Jacobs is winding down his affairs with SuperGen while coming up to speed with Insert. During his seven-year tenure at SuperGen, Mr. Jacobs served in a number of positions, which culminated with him being named as Chief Operating Officer. Prior to SuperGen, Mr. Jacobs served as President and Chief Executive Officer of ETEX, a Cambridge, MA-based biomaterials and drug-delivery company that was acquired by Medtronics. Also prior to SuperGen, Mr. Jacobs served as Senior Vice President, Commercial Operations at Sequus Pharmaceuticals, Inc., which was acquired by Alza for an aggregate of $800 million. Prior to his association with Sequus, Mr. Jacobs served in a variety of senior management positions with pharmaceutical companies, including as CEO of Trilex (acquired by Titan Pharmaceuticals), CEO of Transplant Therapeutics Inc., Vice President and General Manager of Syncor International, Vice President of NeoRx Corporation and Business Director of Pharmacia (a/k/a Adria Labs, Inc.).

Research and development is under the direction of Dr. Thomas Schluep, Insert's Chief Scientific Officer since August 2004. Dr. Schluep is an expert in the development of formulations for biologics. Prior to joining Insert, he was responsible for the non-viral gene-therapy program at Canji, Inc., a wholly owned subsidiary of Schering-Plough. He successfully led an interdisciplinary team of scientists in their effort to develop synthetic gene delivery vehicles for the systemic treatment of cancer with the p53 tumor suppressor gene. His other research activities included the development of formulations that enhance adenoviral gene delivery after systemic or local regional administration. As a senior member of the bio-analytical group, he was also responsible for assay development, qualification, and GMP testing of adenoviral gene therapy vectors. Prior to Canji, Dr. Schluep was a post-doctoral associate at the department of Chemical Engineering at the Massachusetts Institute of Technology. He received his Sc.D. in Process Engineering in 1995 and an MS in Biotechnology in 1989, both from the Swiss Federal Institute of Technology in Zurich, Switzerland.

Dr. Mark Davis is the founder of Insert and co-inventor of Insert's core technology. Dr. Davis is the Warren and Katharine Schlinger Professor of Chemical Engineering at Caltech. He is a Member of the National Academies of Engineering and Science and a recipient of numerous awards including the prestigious Alan T. Waterman Award, given by the National Science Foundation annually to only one scientist in the United States across all disciplines. Dr. Davis was the first engineer to win this award for his work in rationally designed materials. Dr. Davis earned his B.S., M.S. and Ph.D. degrees in Chemical Engineering and holds over 35 patents, has published more than 350 papers and has presented over 500 seminars throughout the world.

Insert's board of directors is comprised of Mark Davis, who also serves as a director of Calando, R. Bruce Stewart, who also serves as Chairman and CEO of Arrowhead, and Edward W. Frykman, who also serves as director of Arrowhead.

As of September 30, 2006, Insert had 11 employees, all of whom were full time. Mr. Petrovich also serves as Chief Executive Officer and President of Calando.

Calando Pharmaceuticals, Inc.

General

Calando was formed in February 2005 to focus on designing, developing and commercializing novel RNAi therapeutics to treat diseases and other medical conditions by combining effective RNAi therapeutics with patented and proprietary delivery technologies. Calando's delivery technology is one of the family of cyclodextrin-containing polymers developed at Caltech and licensed to Calando for the field of RNAi therapeutics by affiliate Insert Therapeutics. The delivery technology is augmented by a second technology developed at and licensed from Caltech.

RNA interference, or RNAi, is a naturally occurring mechanism within cells for selectively silencing and regulating specific genes. Since many diseases are caused by the inappropriate activity of specific genes, the ability to silence genes selectively through RNAi could provide a new way to treat a wide range of human diseases. RNAi is induced by small, double-stranded RNA molecules. One method to activate RNAi is with chemically synthesized small interfering RNAs, or siRNAs, which are double-stranded RNAs that are targeted to a specific disease-associated gene. The siRNA molecules are used by the natural RNAi machinery in cells to cause highly targeted gene silencing.

A key roadblock to the therapeutic use of RNAi is the lack of an effective delivery mechanism. siRNA is degraded and destroyed in the bloodstream if unprotected and "naked" siRNA is not taken up by cells. Calando's delivery technology binds to and protects siRNA from degradation in the bloodstream. The linear cyclodextrin polymer self-assembles with the siRNA molecule to form a siRNA-containing nanoparticle. With appropriate targeting molecules attached, the siRNA is delivered to cells or tissues of interest, taken up by the cell and released inside the cell.

Preclinical data using Calando's technology from a collaborative study by Caltech and Children's Hospital Los Angeles was published in the journal *Cancer Research* in October 2005. Researchers used a siRNA molecule targeting Ewing's Sarcoma, a deadly metastatic childhood cancer and the synthetic delivery system currently under development at Calando to deliver it. This combination was tested in a mouse model of Ewing's Sarcoma. The results showed sequence-specific, anti-tumor effects and conclusive evidence of molecular targeting to and within tumor cells by the systemically delivered siRNA.

In October 2006, Dr. Jeremy Heidel, Calando's Chief Scientific Officer, presented data from a new study using primates which showed that the therapeutic candidate developed by Calando is well tolerated at doses significantly higher than those shown to be efficacious in previous studies using a similar formulation. The formulation investigated contains Calando's proprietary delivery technology with an siRNA duplex targeting the M2 subunit of ribonucleotide reductase. Ribonucleotide reductase catalyzes the conversion of ribonucleosides to deoxyribonucleosides and is necessary for DNA synthesis and cell replication. This duplex, developed at Calando, demonstrates potent anti-proliferative activity across multiple types of cancer cells. Calando's objective of this escalating-dose pilot study was to assess numerous safety-related parameters for its formulation.

The data show that this formulation is well tolerated in non-human primates at doses well above doses of the early formulation (which was shown to have anti-tumor effects when tested in a metastatic mouse model of Ewing's sarcoma, described above). One area of concern in translating any siRNA-containing formulation from animals to the clinic is the potential for immune responses to the siRNA duplex itself. Another concern is antibody generation

to the formulation, including the targeting components. The Calando study examined both of these issues, and based on these results Calando believes that these problems will not be a barrier to repetitive dosing.

Calando currently is conducting further preclinical testing for its own RNAi drug candidates and hopes to complete the scale-up of the manufacture of its delivery polymer and preclinical testing of its first therapeutic candidate by early calendar 2007.

Additional information about Calando Pharmaceuticals, Inc. can be found at its website, www.calandopharma.com.

The Oncology Market

Cancer is characterized by rapid, uncontrolled cell division resulting in the growth of an abnormal mass of cells generally referred to as a malignant tumor. Cancerous tumors can arise in almost any tissue or organ, and cancer cells, if not eradicated, can spread, or metastasize, throughout the body. As these tumors grow, they cause damage to the surrounding tissue and organs and commonly result in death if left untreated. Cancer is believed to occur as a result of a number of hereditary and environmental factors. According to the American Cancer Society, cancer is the second leading cause of death in the United States and accounts for approximately one in every four deaths. Approximately 565,000 Americans are expected to die of cancer in 2006. The National Institutes of Health estimated the direct medical cost of cancer to be $74 billion in 2005.

CALAA-01

Calando's lead product candidate, CALAA-01, is formulation containing Calando's proprietary delivery technology with an siRNA duplex targeting the M2 subunit of ribonucleotide reductase, a well-established cancer target. Ribonucleotide reductase catalyzes the conversion of ribonucleosides to deoxyribonucleosides and is necessary for DNA synthesis and cell replication. The duplex, developed at Calando, demonstrates potent anti-proliferative activity across multiple types of cancer cells.

Calando is preparing to file an Investigational New Drug (IND) application with the US Food and Drug Administration. Upon clearance of regulatory requirements and institutional review by the clinical trial site, Calando hopes to begin its first clinical trial at a leading Southern California cancer center before the end of calendar 2007. Calando's research and development efforts on CALAA-01 are preliminary, and there is no assurance that this compound will be successful or that it will progress to clinical trials. Advancing this development candidate into human clinical trials is dependent on several factors, including technological feasibility and commercial opportunity as well as the availability of financial resources.

Research and Preclinical Development

Calando continues to invest in the research and development of new product candidates, its proprietary siRNA delivery technology and new siRNA delivery technologies. Research and development efforts in these areas are preliminary, and there is no assurance that any of these compounds will be successful or will progress to clinical trials. Advancing these development candidates into human clinical trials is dependent on several factors, including technological feasibility and commercial opportunity as well as the availability of financial resources. It is difficult to evaluate the potential markets for these product candidates as the areas of potential application are diverse and specific applications are yet to be determined.

In addition to internal research and development efforts, acquisitions of other products, development candidates or technologies to expand Calando's pipeline and capabilities may be considered.

When developing new products, a variety of factors are considered, including:

- Potential pricing and gross margins
- Existing and potential market size

- High barriers to entry
- Patent expiration dates
- Manufacturing capabilities and access to raw materials
- Potential development and competitive challenges
- How a potential product will fit within our existing array of products under development, and what synergies may exist

Collaboration and Licensing Arrangements

Calando is internally focused on using our technology to develop and commercialize siRNA therapeutics for systemic delivery applications, initially in the oncology area.

Insert Therapeutics, Inc., an affiliate of Calando, has licensed its linear cyclodextrin polymer delivery technology to Calando for the development of RNAi therapeutics. Under the terms of the license, Insert received an equity stake in Calando. Insert is also entitled to royalties and sublicensing fees on sales of any products covered by the licensing agreement.

Alnylam Pharmaceuticals, Inc., the holder of a substantial amount of foundational intellectual property for therapeutic uses of siRNA, has granted Calando an InterfeRx(TM) license to discover, develop, and commercialize an RNAi therapeutic utilizing a synthetic siRNA, together exclusively with Calando's proprietary delivery technology, that is directed towards the M2 subunit of ribonucleotide reductase as a cancer target. As part of the agreement, Calando also has an option to acquire an InterfeRx license for a second target gene. The licensing arrangement includes upfront, annual, and milestone payments, and royalties on sales of any products covered by the licensing agreement.

Manufacturing

Calando currently uses, and expects to continue to be dependent upon, contract manufacturers to manufacture each of its product candidates. Calando has established a quality control and quality assurance program, including a set of standard operating procedures and specifications, designed to ensure that its products are manufactured in accordance with current Good Manufacturing Procedures, or cGMPs, and other applicable domestic and foreign regulations. Additional manufacturing resources would require additional investment, and Calando may seek to enter into additional collaborative arrangements with other parties that have established manufacturing capabilities. It is likely that Calando will continue to rely on third-party manufacture of our development and commercial products on a contract basis. Currently, Calando has agreements with third-party vendors to furnish CALAA-01 drug supply for clinical studies. Calando will be dependent upon these third-parties to supply products in a timely manner manufactured in compliance with cGMPs or similar standards imposed by foreign regulatory authorities where Calando's products are tested and/or marketed.

Competition

Calando is engaged in the rapidly changing business of developing treatments for human disease through the regulation of gene expression. Competition among entities attempting to develop products to treat diseases by regulating gene expression is intense and is expected to increase. In addition to competitors in the regulation of gene expression field, there are other competitors using other technologies to target the same diseases that we are targeting.

Calando faces direct competition from companies engaged in the research, development and commercialization of RNA interference-based technology, as well as competition from companies attempting other methods of gene expression control. Calando competes with large pharmaceutical companies and

established biotechnology firms, many of whom are developing new products to treat the same diseases that Calando targets. In some cases, those companies have already commenced clinical trials for their products. Many of these companies have significantly greater financial resources and expertise in research and development, manufacturing, preclinical studies and clinical trials, obtaining regulatory approvals and marketing than Calando does. Calando's collaborators, licensors and potential licensees may be conducting research and development programs using RNA interference technology and non-RNA interference technologies directed at the same diseases that Calando is targeting. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and biotechnology companies. In addition, competitors may complete clinical trials, obtain required regulatory approvals and commence commercial sales of their products before Calando, thus achieving a significant competitive advantage.

A number of companies are pursuing research and development programs relating to the emerging area of RNA interference. A number of these companies have filed patent applications in the area of RNA interference. It is difficult to predict whether any of these companies will be successful in obtaining patent protection, whether the patent protection sought will address important aspects of the technology and, to what extent these companies will be successful in their RNA interference efforts.

Academic institutions, governmental agencies and other public and private research organizations also conduct research, seek patent protection and establish collaborative arrangements for products and clinical development and marketing. These companies and institutions compete with Calando in recruiting and retaining highly qualified scientific and management personnel.

Intellectual Property

Calando Pharmaceuticals has an exclusive, worldwide license from Insert to a suite of U.S. and foreign patents that are pending or have been issued to Insert for its Cyclosert™ delivery technology for the development and commercialization of RNAi therapeutics. Calando has also filed its own U.S. patent applications, which are pending. Calando has an exclusive, worldwide license from Caltech to other proprietary delivery technology for RNAi therapeutics invented at Caltech by Dr. Davis.

Key Personnel

Dr. Mark Davis is the founder of Calando. Mr. Petrovich is Calando's Chief Executive Officer and President. Dr. Davis is also the founder of Insert, and Mr. Petrovich is President of Insert. Their biographies are set forth under the above section discussing the Key Personnel of Insert.

Jeremy Heidel, Ph.D. is Chief Scientific Officer and Vice President, Research & Development, at Calando. Dr. Heidel earned his B.S. in Chemical Engineering and Biology from Massachusetts Institute of Technology and his M.S. and Ph.D. degrees in Chemical Engineering from Caltech. Dr. Heidel performed his doctoral thesis research on targeted, systemic, non-viral delivery of siRNA in the laboratory of Dr. Mark Davis, and has expertise in the areas of: (i) synthesis and characterization of polymeric delivery vehicles and their formulations, (ii) identification of siRNA target sites and the design of potent RNAi molecules, and (iii) the design and execution of in vitro and in vivo experiments to evaluate formulation efficacy. He was the first to show that synthetic siRNA molecules do not elicit immune responses in animals.

Calando's board of directors is comprised of Mark Davis, who also serves as a director of Insert, R. Bruce Stewart, who also serves as Chairman and CEO of Arrowhead, and Edward W. Frykman, who also serves as director of Arrowhead.

As of September 30, 2006, Calando had 7 employees, all of whom were full time, not including Mr. Petrovich, who also serves as President of Insert.

Unidym, Inc. (formally NanoPolaris, Inc)

General

Unidym, Inc. is focused on the application of low-cost, carbon-based materials to the electronics industry. The Company's initial product is a thin, transparent film of carbon nanotubes (CNTs) that could replace the expensive, failure-prone materials currently employed by manufacturers of such devices as touch screens, flat panel displays, and solid state lighting. Longer term, the Company expects to extend its technology platform to support the fabrication of complete electronic devices via inexpensive, solution based processes and carbon-based materials.

Unidym was formed when NanoPolaris, a Subsidiary of Arrowhead Research Corporation, acquired the assets of an early stage company called Unidym, Inc. NanoPolaris was founded to consolidate foundational intellectual property related to carbon nanomaterials. At the time of the acquisition, NanoPolaris had successfully negotiated exclusive commercial rights to nanotechnologies, mostly in the area of carbon nanotubes, developed at the California Institute of Technology, Duke University, Pennsylvania State University, State University of New York at Buffalo, University of Toronto, Rensselaer Polytechnic Institute and Tsinghua University. NanoPolaris purchased the assets of the former Unidym to gain access to the company's substantial expertise and intellectual property in carbon nanotube films, which may have broad application to the electronics industry. After its purchase of Unidym's assets in June 2006, NanoPolaris changed its name to Unidym and began a three pronged program to commercialize its technology.

First, after significant market analysis, the Company scaled up its development efforts on a CNT-based replacement for the transparent, conductive films currently used in a wide variety of electronic devices. The majority of these films are made of indium tin oxide (ITO) and act as the transparent conductor in such devices as touch screens, LCD displays, electro-luminescent (EL) lamps, and organic light emitting diode (OLED)-based solid state lighting. Despite its wide application, ITO has multiple shortcomings. First, it is extremely brittle, which can lead to failure in devices that must bend repeatedly (e.g., flexible displays) or endure point loads (e.g., touch screens acted upon by a finger or stylus). Second, its core component, indium, is in short supply; indium prices have climbed substantially in the last few years and as a result, display manufacturers are eager to find a replacement. Third, it must be deposited via an expensive vacuum-based process. Finally, it is highly reactive and has compatibility issues with many of the chemicals used in the manufacture of displays and OLEDs. Unidym's nanotube-based films address all of these issues. CNT films are flexible, made of a highly abundant material (carbon), can be deposited via low cost, solution-based processes, and are highly chemical resistant. Taken together, Unidym believes these advantages will lead to substantial adoption of CNT technology by the electronics industry. Unidym plans to pursue an outsourced production and licensing to existing device manufacturers to bring the films to market. The capabilities and relationships that Unidym develops in bringing the films to market are expected to provide a strong foundation for the company's more expansive second product.

Transparent, conductive nanotube films are just the beginning of the electronic industry's transition to carbon. Consequently, the second prong of Unidym's commercialization efforts is focused on using CNT films as transistors in printed electronics. The current silicon-based solutions employed by the electronics industry require capital intensive manufacturing facilities, expensive inputs, and long lead times. Additionally, consumer electronics are rigid, bulky, and consume substantial amounts of power. It is anticipated that the industry will be disrupted by low cost, highly flexible printed solutions, which use 'electronic' inks and conventional ink jet printing techniques to create electronic devices. This disruptive technology could lead to inexpensive, large area flexible displays and hosts of other devices. Unidym believes it has expertise in the area of carbon nanotube CNT-based transistors that could form the foundation for this breakthrough technology. Unidym expects to employ a significant number of partnerships with leading device manufacturers to bring this novel technology to market.

The third prong of Unidym's commercialization efforts will be focused on partnerships with leading companies in promising areas not covered by Unidym's other efforts. These areas include the use of nanotubes in

existing silicon-based semiconductor processes as well as the application of nanotubes and nanomaterials to other novel areas outside of electronics. For example, carbon nanomaterials could be used to replace the copper interconnects and silicon transistors in integrated circuits. While both of these efforts are longer term, Unidym believes it possesses key technologies which promise to be an integral part of a commercially viable solution. The specific strategy in these areas is to couple Unidym's knowledge with research at University of Florida and at Duke University to further develop the concepts and then partner with established companies in the electronics industry. As an example of Unidym's efforts outside of electronics, Unidym has a number of patents related to carbon nanotube CNT technology which can be used in many applications from structural composites to field emission displays. While Unidym intends to remain focused on its primary goal of developing thin film nanotube films for the electronics industry, Unidym will partner with larger firms providing its patents and, in some cases, technical expertise, in return for an eventual share of the profits should the larger firm be successful.

Competition

Unidym will face competition from a number of start-ups and established companies in the industries it enters. In the electronics industry, there are a number of start-up companies that are focused on nanotubes including Nantero, Eikos, Atomate, and Molecular Nanosystems. More established companies (who are also potential partners) include Samsung, LG, and Sumitomo.

Manufacturing

While Unidym may set up limited production equipment to prove that it has a viable program for producing thin films comprised of nanotubes, there is no intention, at this time, to go into full scale production. Instead, the Company intends to rely on outsourced production for discrete products that it can sell directly and licensing deals where a higher level of technology integration is required.

Marketing and Sales

Revenue is expected to be generated through direct product sales and license deals into relatively consolidated industries. Unidym intends to leverage the sales force and relationships of its development and production partners.

Intellectual Property

Unidym has a broad intellectual property portfolio covering significant areas of CNT compositions of matter, devices, production methods, and applications. Unidym will continue to pursue its strategy of consolidating key patents and patent applications related to carbon nanomaterials.

Key Personnel

Sean Olson is the President of Unidym and has both technical and business experience in the semiconductor industry. Mr. Olson has served in engineering and in management positions at Silicon Valley Group Lithography (acquired by ASML), and supported technology and business development efforts at Oraxion Diagnostics, a start-up in the metrology space. He was also a strategy consultant for The Boston Consulting Group. He received engineering degrees from the Massachusetts Institute of Technology and an MBA from The Harvard Business School. Mr. Olson also serves as President of Aonex.

Dr. George Gruner serves as the Chief Technical Officer (CTO) of Unidym. He is also a professor at the University of California in Los Angeles. Dr. Grüner has held visiting professor positions at several leading universities and served as consultant and advisory board member for companies including IBM, Exxon and Superconductor Technologies, Inc., as well as a number of government agencies. He received the Alexander von Humboldt and Guggenheim Awards, and is Fellow of both the American Physical Society and the Hungarian

Academy of Sciences. From 2001 to 2004, Dr. Grüner was the Chief Technical Officer and Chief Scientist of Nanomix Inc., a role for which he received the World Economic Forum's Technology Pioneer Award. His research interests include novel electronic materials and devices and their application for flexible electronics, and optoelectronics. He has published 400 academic research papers and two books, and holds more than 20 patents and patent applications.

John Miller is the Vice President, Intellectual Property at Unidym. Mr. Miller also serves as Vice President, Business Development at Arrowhead where he monitors the intellectual property landscape and licensing and enforcing patents held by Arrowhead and its Subsidiaries. Mr. Miller is also a Managing Editor of Nanotechnology Law & Business, a peer-reviewed, quarterly journal. He has published various articles on legal and policy issues in nanotechnology and co-authored The Handbook of Nanotechnology Business, Policy, and Intellectual Property Law (John Wiley, 2004). Mr. Miller is a member of the California bar and federal courts in the Northern District of California. He graduated Order of the Coif from Stanford Law School in 2003.

Unidym's board of directors is comprised of George Gruner, R. Bruce Stewart who also serves as Chairman and CEO of Arrowhead, and Edward W. Frykman, who also serves as director of Arrowhead.

At September 30, 2006, Unidym had 3 employees, two of whom were full time.

Aonex Technologies, Inc.

General

Aonex Technologies is developing engineered wafers to enable manufacturers of blue and white LEDs to reduce their production costs and create higher efficiency devices. The market for blue LEDs is currently $4 billion and expected to grow to $9 billion by 2009.

Blue and white LEDs are manufactured by depositing (or "growing") gallium nitride (and its alloys) onto 2" sapphire substrates at high temperatures. While relatively inexpensive, sapphire poses two challenges to device manufacturers. First, it is an electrical and thermal insulator which means that it must be removed following device growth in order to create high efficiency (i.e., vertical) device structures. Second, it expands at a different rate than gallium nitride as the temperature is changed (a material property termed coefficient of thermal expansion or CTE) resulting in high levels of stress and wafer bow during and after the growth process. This latter limitation is the primary obstacle that prevents the industry from moving to larger wafer sizes to reduce costs.

Aonex's engineered wafers are comprised of thin films of materials suitable for LED fabrication that have been bonded onto specially engineered support wafers using a proprietary process. By optimizing the support wafer's properties, Aonex is able to simplify the manufacture of high efficiency LED structures, improve yields, and offer a viable path to larger wafer sizes (and corresponding lower costs). Aonex has performed testing of prototypes of its products and is shipping samples to potential partners.

Collaboration and Licensing Arrangements

Aonex is in the process of exploring possibilities with several firms to develop its technology further and to integrate the process into existing manufacturing processes. After analyzing the existing competition and scale required for success in its core markets, Aonex has opted to seek an established company with which to partner in its future commercialization efforts. In such a partnership, Aonex would provide the technology developed to date while the larger partner would provide resources and the product stream. This change of strategy will likely limit the return that Arrowhead is able to achieve on its investment in Aonex. Therefore, the Company has elected to write off the goodwill attributable to its investment in Aonex. The consolidated statement of operations includes a $999,000 impairment expense related to Aonex.

Intellectual Property

Aonex has licensed a suite of intellectual property from Caltech in exchange for the issuance to Caltech of a warrant to purchase 700,000 shares of Aonex common stock for nominal consideration. This license agreement provides Aonex with exclusive, worldwide rights to certain patents and patent applications filed by Caltech. In addition, Aonex believes it possesses blocking intellectual property in a number of key areas of engineered substrates for compound semiconductor device production.

Key Personnel

Harry Atwater is a founder of Aonex and is Chairman of Aonex's Scientific Advisory Board. Dr. Atwater is the Howard Hughes Professor of Applied Physics and Materials Science at Caltech and possesses over 25 years of experience in Aonex's core technologies. Professor Atwater holds BS / MS / PhD degrees from MIT.

Sean Olson is the President of Aonex. Mr. Olson is also the President of Unidym. His biography is set forth under the above section discussing Key Personnel of Unidym.

James Zahler, VP of Technology, co-developed Aonex's core technology while a graduate student in Professor Atwater's research group at Caltech. He worked in semiconductor manufacturing at Texas Instruments prior to receiving his PhD from Caltech.

Aonex's board of directors is comprised of Sean Olson, Harry Atwater, R. Bruce Stewart who also serves as Chairman and CEO of Arrowhead, and Edward W. Frykman, who also serves as director of Arrowhead.

As of September 30, 2006, Aonex had 7 employees, all of whom were full time.

Discontinued Operations

As part of Arrowhead's model, the Company will open or close subsidiaries based upon the success of the subsidiary. The Company closed one subsidiary, Nanotechnica, in FY 2005. The subsidiary is shown in the line Loss on Discontinued Operations on the consolidated statements of operations.

Nanotechnica, Inc.

In the third quarter of FY 2005, the Company determined that the progress being made by Nanotechnica in commercializing microfluidics technology was not progressing satisfactorily and the market potential was uncertain. Therefore, on June 3, 2005, a majority of the stockholders of Nanotechnica voted to dissolve the company. Because of Arrowhead's liquidation preference as Series A Preferred Stockholders, $2.8 million in cash was remitted to Arrowhead along with $213,000 of the other remaining assets. Arrowhead has discontinued development efforts related to microfluidics and returned the applicable patents to Caltech. The losses incurred by Nanotechnica are segregated on the Consolidated Statement of Operations as Loss from Operation of Discontinued Nanotechnica, Inc. Nanotechnica had no revenue in either FY 2004 or FY 2005.

Sponsored Research

As of September 30, 2006, Arrowhead had four sponsored research agreements; one with the California Institute of Technology, one with Stanford University, one with Duke University and one with University of Florida to finance research and development projects in various aspects of nanotechnology.

By funding university research, Arrowhead has the ability to ascertain the probability of technical success at low research cost and, if warranted, continue cost effective development at the university by leveraging the already existing resources available to scientists at universities, such as laboratories and equipment as well as a vibrant location that encourages the exchange of ideas. Moreover, the cultivation of relationships in the academic

community provides an additional window into other promising technologies. For each research agreement, the researchers focus their efforts on achieving certain mutually agreed upon goals. Arrowhead monitors the progress of the research, guides the researchers toward commercially viable prototypes, and works with the researchers in developing an intellectual property portfolio and commercialization plan for the technologies. In exchange for funding the research, the Company has the right to exclusively license and commercialize any technology developed as a result of the research.

On October 3, 2005, the Company terminated two sponsored research agreements with Caltech based on management's assessment that the research was not leading to commercially viable prototypes. The changes are part of the Company's strategy to add or, if necessary, to terminate research agreements based upon their commercialization potential.

The four sponsored research and development efforts currently being financed by Arrowhead are more fully described below:

California Institute of Technology- Drug Discovery Tools

Professor Patrick Collier's research team at Caltech is developing new tools for drug discovery. Modern drug discovery is inefficient and costly. It generally involves the creation of many molecules (often thousands at a time) and then testing them for desired properties in biological systems. There is a substantial need in the pharmaceutical industry for information about protein structure in order to design drugs in a rational and specific manner. Yet, existing tools for purifying and analyzing proteins require large amounts of sample and are costly, bulky, and not sensitive enough to identify many small molecules involved in protein interactions.

Professor Collier's team is developing two technologies that could form the basis for future drug discovery tools. First, the team has demonstrated catalytic activity from nanoarrays of functional enzymes patterned with dip-pen nanolithography by monitoring the formation of fluorescent products of enzymatic reactions in microfluidic channels. This sets the stage for potential rapid testing of large libraries of enzymes in microfluidic "lab-on-a-chip" based devices as well as the screening of inhibitors against substrate binding as possible new drugs.

Second, the team has also developed scanning "nanoelectrode" probes consisting of single-wall carbon nanotubes attached to atomic force microscope (AFM) tips. Carbon nanotube tips offer superior imaging resolution compared to conventional AFM tips. Additionally, the nanotubes can be chemically or biologically functionalized in unique ways to serve as biomolecule-specific sensors and triggering devices integrated with AFM. These nanotube AFM probes have the capability to generate higher resolution topographical imaging and are expected to be used to correlate molecular structure to biochemical dynamics.

The terms of the agreement between the Company and Caltech provide for annual funding of approximately $300,000 to fund Dr. Collier work for five years beginning in October 2003 and ending in September 2008.

Stanford University—Stem Cell Device

Professor Nick Melosh and his colleagues at the Stanford Stem Cell Institute and the Lucile Packard Children's Hospital are developing a tool for controlling and testing adult stem cell behavior. Both embryonic and adult stem cells have the potential to become the cells of different tissues and represent a potential treatment for diseases such as neurological disorder, heart failure, and diabetes. Adult stem cells from the patient's own body are less likely to generate immune reactions in patients and, therefore, could be better suited for therapeutic use than embryonic stem cells. At present, there is no commercially available tool to enable scientists and doctors to precisely control the differentiation and function of stem cells.

Professor Melosh's team is creating a synthetic microchip platform that replicates the spatial and temporal distribution of chemical signals that occur around cells *in vivo*. If successful, this technology would create an

"artificial niche" for the cell that closely resembles the natural environment. Researchers using this technology could ascertain the necessary conditions that cause specific cell behaviors, or direct the activity of a collection of cells through appropriate signal delivery. The device will consist of arrays of nano to microscale device "reservoirs" on a microchip with an electrically-reversible seal to control chemical flow with these devices potentially able to be filled with different drugs or biological signaling agents, which are released on command by the user.

The Company believes that the product resulting from this development effort would initially be manufactured and sold to stem cell researchers in academic and corporate labs to study and manipulate stem cell behavior. The platform could also be used to develop a surgical tool for performing tissue engineering procedures in a hospital setting.

The terms of the agreement between the Company and Stanford provide for annual funding of $300,000 to fund Dr. Melosh's work for two years beginning in June 2005 and ending in May 2007.

Stanford University—Clinical Application

Arrowhead contributed $100,000 to the Lucile Packard Children's Hospital in four quarterly installments beginning July 1, 2005 to fund a project to identify how new technologies, such as nanotechnology and stem cell technology, can address existing clinical needs

Duke University—Nanoscale Interconnects For Integrated Circuit

Dr. Jie Liu and his team of researchers at Duke University are developing a process for fabricating new nanoscale interconnect materials in integrated circuits. Interconnects, which are metallic wires that carry electric power in computer chips, are currently made of copper. Resistance and electro-migration in copper interconnects cause problems in smaller integrated circuits. The momentum from moving electrons can cause atoms to move from their original positions which leads to gaps in the connection. As a result, progressively smaller integrated circuits made with copper interconnects have reduced reliability, lose one or more connections, or can even cause failure of the entire circuit.

The Liu group is using carbon nanotubes to replace copper wires. Carbon nanotubes can carry larger current densities, have lower resistance, and may be more stable than copper at certain size scales. Metallic nanotubes have a current carrying capacity of one billion amps per square centimeter while copper wires burn out at one million amps per square centimer. At this time, one model demonstrates that, when bundles of tens-of-micrometer long densely packed nanotubes with small contact resistances are used, nanotubes can be 80% faster than copper wires at the 22 nm node.

Arrowhead intends to commercialize the technology developed at Duke by partnering with device manufacturers to integrate carbon-based interconnects into their manufacturing processes.

The terms of the agreement between the Company and Duke provide for annual funding of approximately $340,000 to fund Dr. Liu's work beginning in December 2005 and ending in November 2007.

University of Florida—Flexible Electronic Devices

Dr. Andrew Rinzler and his group at the University of Florida are developing flexible electronic devices. Thin film transistors (TFTs) could be used to make products such as low cost RFID (radio frequency ID) tags, flexible displays, and electronic paper. Further, unlike state of the art electronics manufacturing facilities which cost billions of dollars, flexible electronics are likely to be produced with low cost ink-jet printing technologies. According to estimates from NanoMarkets, the total market for products based on thin film transistors could reach over $20 billion by 2012.

Companies seeking to commercialize thin film transistors have primarily focused on organic transistors. Organic transistors have not, however, demonstrated the mobility and lifetimes necessary for device integration. Dr. Rinzler's team uses carbon nanotubes to make thin film transistors. In addition to having high carrier mobility, nanotubes can be deposited at low temperatures on most substrates directly from solutions. Transistors comprising nanotubes are robust, air stable, and can be bent substantially.

Under the agreement with the University of Florida, Arrowhead will provide $647,000 over a two year period to develop optimized TFT devices and prototypes of TFT arrays.

Acquired Technology

On May 19, 2005, the Company acquired a suite of patent and patent applications covering nanosensor technology developed by Dr. Hermann Gaub, a Professor of Biophysics at the Center for Nanoscience at Ludwig-Maximilians University in Munich. The portfolio covers techniques for measuring biomolecular interactions by single-molecule force spectroscopy. As reported in *Science* in 2003, the devices are sensitive enough to detect single-base pair mismatches of DNA and have demonstrated significant improvement over state-of-the-art instrumentation. The patent applications also cover construction of parallel assays for placing millions of sensors on a chip. These patent and patent applications were acquired for $53,000. At this point, the company does not see an immediate corporate need for this technology and has chosen to write off the remaining cost of $33,000 at September 30, 2006. Work continues on this technology by individuals not associated with the Company with long term hopes of developing a viable product.

ITEM 1A. RISK FACTORS

We are a development stage company and we have limited historical operations. We urge you to consider our likelihood of success and prospects in light of the risks, expenses and difficulties frequently encountered by entities at similar stages of development.

The following is a summary of certain risks we face. They are not the only risks we face. Additional risks of which we are not presently aware or that we currently believe are immaterial may also harm our business and results of operations. The trading price of our common stock could decline due to the occurrence of any of these risks, and investors could lose all or part of their investment. In assessing these risks, investors should also refer to the other information contained or incorporated by reference in our other filings with the Securities and Exchange Commission.

CERTAIN RISK FACTORS RELATING TO THE COMPANY'S FOCUS ON NANOTECHNOLOGY

There are substantial inherent risks in attempting to commercialize new technological applications, and, as a result, we may not be able to successfully develop nanotechnology for commercial use.

The Company finances research and development of nanotechnology, which is a new and unproven field. The Company's research scientists are working on developing technology in various stages. However, such technology's commercial feasibility and acceptance is unknown. Scientific research and development requires significant amounts of capital and takes an extremely long time to reach commercial viability, if at all. To date, the Company's research and development projects have not produced commercially viable applications, and may never do so. During the research and development process, the Company may experience technological barriers that it may be unable to overcome. For example, our scientists must determine how to design and develop nanotechnology applications for potential products designed by third parties for use in cost-effective manufacturing processes. Because of these uncertainties, it is possible that none of our potential applications will be successfully developed. If the Company is unable to successfully develop nanotechnology applications for commercial use, we will be unable to generate revenue or build a sustainable or profitable business.

We will need to achieve commercial acceptance of our applications to obtain revenue and achieve profitability.

Even if our research and development yields technologically feasible applications, the Company may not successfully develop commercial products, and even if it does, it may not be on a timely basis. If the Company's research efforts are successful on the technology side, it could take at least several years before this technology will be commercially viable. During this period, superior competitive technologies may be introduced or customer needs may change, which will diminish or extinguish the commercial uses for our applications. To date, the commercial markets have generally not adopted nanotechnology-enabled products. The Company cannot predict when commercial market acceptance for nanotechnology-enabled products will develop, if at all, and we cannot reliably estimate the projected size of any such potential market. If markets fail to accept nanotechnology-enabled products, we may not be able to derive revenue from the commercial application of our technologies. Our revenue growth and achievement of profitability will depend substantially on our ability to introduce new technological applications to manufacturers for products accepted by customers. If we are unable to cost-effectively achieve OEM acceptance of our technology, or if the associated products do not achieve wide market acceptance, our business will be materially and adversely affected.

The Company may not be able to effectively secure first-tier research and development projects when competing against existing or new ventures.

Management believes that the Company's success to date in raising capital to finance nanotechnology research and commercialization projects can be largely attributed to the fact that the plan of operations adopted by the Company is relatively novel. If the Company continues to be successful in attracting funding for research and commercialization projects, it is possible that additional competitors could emerge and compete for such funding. Should that occur, the Company could encounter difficulty in raising funds to finance its future operations and further research and commercialization projects.

Additionally, there are some companies that already fund early-stage, scientific research at universities, and some venture capital funds invest in companies seeking to commercialize technology. It is possible that these established companies and venture funds, as well as possible additional competitors, have financed or will begin to finance nanotechnology research. Should that occur, the Company may not be able to secure the opportunity to finance first-tier research and commercialization projects. Furthermore, should any commercial undertaking by the Company, prove to be successful, there can be no assurance competitors with greater financial resources will not offer competitive products and/or technologies.

Nanotechnology-enabled products are new and may be viewed as being harmful to human health or the environment.

There is an increase in public concern regarding the environmental and ethical implications of nanotechnology that could impede market acceptance of products developed through these means. Potentially, nanotechnology-enabled products could be composed of materials such as carbon, silicon, silicon carbide, germanium, gallium arsenide, gallium nitride, cadmium selenide or indium phosphide, which may prove to be unsafe. In addition, nanotechnology-enabled products have no historical safety record. Because of the size, shape, or composition of the nanostructures and because they may contain harmful elements, nanotechnology-enabled products could pose a safety risk to human health or the environment. Furthermore, some countries have adopted regulations prohibiting or limiting the use of materials that contain certain chemicals, which may limit the market for nanotechnology-enabled products. U.S. government authorities could, for social or other purposes, prohibit or regulate the use of nanotechnology. The regulation and limitation of the kinds of materials used in or used to develop nanotechnology-enabled products, or the regulation of the products themselves, could halt the commercialization of nanotechnology-enabled products or substantially increase the cost, which will impair our ability to achieve revenue from the license of nanotechnology applications.

The Company will need approval from governmental authorities in the United States and other countries to successfully realize commercial value from the Company's activities.

In order to clinically test, manufacture, and market products for commercial use, two of the Company's current Subsidiaries must satisfy mandatory procedures and safety and effectiveness standards established by various regulatory bodies, including the U.S. Food and Drug Administration (FDA). Technology and product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources. The time and expense required to perform the necessary testing can vary and is substantial. In addition, no action can be taken to market any biologic, drug or device in the United States until the FDA approves an appropriate marketing application. Furthermore, even after initial FDA approval has been obtained, further trials may be required to obtain additional data on safety and effectiveness. Adverse events that are reported during regulatory trials or after marketing approval can result in additional limitations being placed on a product's use and, potentially, withdrawal of the product from the market. Any adverse event, either before or after approval, can result in product liability claims against the Company, which could significantly and adversely impact the value of our Common Stock.

If export controls affecting our products are expanded, our business will be adversely affected.

The U.S. government regulates the sale and shipment of numerous technologies by U.S. companies to foreign countries. Arrowhead's Subsidiaries may develop products that might be useful for military and antiterrorism activities. Accordingly, U.S. government export regulations could restrict sales of these products in other countries. If the U.S. government places burdensome export controls on our technology or products, our business would be materially and adversely affected. If the U.S. government determines that we have not complied with the applicable export regulations, we may face penalties in the form of fines or other punishment.

Our research and product development efforts pertaining to the pharmaceutical industry are subject to additional risks.

As of September 30, 2006, two of our Subsidiaries, Insert and Calando, were focused on research and development projects related to new and improved pharmaceutical conjugates. Drug development is time-consuming, expensive, and risky. Even product candidates that appear promising in the early phases of development, such as in early animal and human clinical trials, often fail to reach the market for a number of reasons, such as:

- clinical trial results are not acceptable, even though preclinical trial results were promising;
- inefficacy and/or harmful side effects in humans or animals;
- the necessary regulatory bodies, such as the FDA, did not approve our potential product for the intended use; and
- manufacturing and distribution is uneconomical;

Clinical trial results are frequently susceptible to varying interpretations by scientists, medical personnel, regulatory personnel, statisticians, and others, which often delays, limits, or prevents further clinical development or regulatory approvals of potential products. If Insert and Calando are unable to cost-effectively achieve acceptance of their respective biopharmaceutical technology, or if the associated drug products do not achieve wide market acceptance, the businesses of Insert and Calando will be materially and adversely affected, and the value of Company's interest in each Subsidiary will diminish.

Our corporate compliance program cannot guarantee that we are in compliance with all applicable federal and state regulations.

The Company's operations, including, its research and development, its commercialization efforts, such as clinical trials, manufacturing and distribution, are subject to extensive federal and state regulation. While we have developed and instituted a corporate compliance program based on current best practices, we cannot assure

you that the Company or its employees are or will be in compliance with all potentially applicable federal and state regulations or laws. If we fail to comply with any of these regulations or laws, a range of actions could result, including, but not limited to, the termination of clinical trials, the failure to approve a commercialized product, significant fines, sanctions, or litigation.

The Company's ability to protect its patents and other proprietary rights is uncertain, exposing it to the possible loss of competitive advantage.

The Company's Subsidiaries have licensed rights to pending patents and have filed and will continue to file patent applications. The researchers sponsored by the Company may also file patent applications that Arrowhead chooses to license. If a particular patent is not granted, the value of the invention described in the patent would be diminished. Further, even if these patents are granted, they may be difficult to enforce. Even if successful, efforts to enforce our patent rights could be expensive, distracting for management, cause our patents to be invalidated, and frustrate commercialization of products. Additionally, even if patents are issued, and are enforceable, others may independently develop similar, superior, or parallel technologies to any technology developed by us, or the Company's technology may prove to infringe upon patents or rights owned by others. Thus, the patents held by or licensed to us may not afford us any meaningful competitive advantage. If we are unable to derive value from our licensed or owned intellectual property, the value of your investment in the Company may decline.

CERTAIN RISK FACTORS RELATING TO THE EARLY STAGE OF THE COMPANY'S BUSINESS

We are a development stage company and the Company's success is subject to the substantial risks inherent in the establishment of a new business venture.

As a consequence of the change in the control of the Company on January 12, 2004, the Company changed management and all efforts that were previously initiated by prior management were abandoned. At that time, the Company's new management adopted a new plan of operations based on the strategy that was formulated by the California corporation following its formation in May 2003 and not previously proven successful. To date, implementation of this strategy is still in the development stage. We have acquired majority interests in four Subsidiary companies and, are sponsoring one university research project at Caltech, one university research project at Duke University, one university research project at Stanford and one university research project at the University of Florida. The Company's business and operations should be considered to be in the development stage and subject to all of the risks inherent in the establishment of a new business venture. Accordingly, the intended business and operations of the Company may not prove to be successful in the near future, if at all. Any future success that the Company might enjoy will depend upon many factors, several of which may be beyond the control of the Company, or which cannot be predicted at this time, and could have a material adverse effect upon the financial condition, business prospects and operations of the Company and the value of an investment in the Company.

The Company has not generated revenue and its business model does not predict significant revenues in the foreseeable future.

To date, the Company has only generated a small amount of revenue as a result of its current plan of operations. Moreover, given its strategy of financing new and unproven technology research, we do not expect to realize significant revenue from operations in the foreseeable future, if at all.

We must overcome the many obstacles associated with integrating and operating varying business ventures to succeed.

Arrowhead's model to integrate and oversee the strategic direction of various Subsidiaries and research and development projects presents many risks, including:

- the difficulty of integrating operations and personnel; and
- the diversion of our management's attention as a result of evaluating, negotiating and integrating acquisitions or new business ventures.

If we are unable to timely and efficiently design and integrate administrative and operational support for our Subsidiaries, we may be unable to manage projects effectively, which could adversely affect our ability to meet our business objectives and the value of an investment in the Company could decline.

In addition, consummating acquisitions and taking advantage of strategic relationships could adversely impact our cash position, and dilute Stockholder interests, for many reasons, including:

- changes to our income to reflect the amortization of acquired intangible assets, including goodwill;
- interest costs and debt service requirements for any debt incurred to fund our growth strategy; and
- any issuance of securities to fund our operations or growth, which dilutes or lessens the rights of current Stockholders.

The Company may need to raise additional capital in the near future, and, if we are unable to secure adequate funds on acceptable terms, the Company may be unable to support its business plan.

The Company's plan of operations is to provide substantial amounts of research project funding and financial support for majority-owned Subsidiaries over an extended period of time. Accordingly, the Company may need to raise additional capital in the near term, and may seek to do so by conducting one or more private placements of equity securities, selling additional securities in a registered public offering, or through a combination of one or more of such financing alternatives. There can be no assurance that any additional capital resources needed by the Company will be available to the Company as and when required, or on favorable terms that will be acceptable to the Company. If the Company is unable to raise the capital required on a timely basis, it may not be able to fund its research projects or the development of the businesses of its Subsidiaries. In such event, the Company may be required to delay or reduce implementation of certain aspects of its plan of operations.

Stockholder interest in the Company may be substantially diluted in additional financings by the Company.

Our Certificate of Incorporation authorizes the issuance of an aggregate of 75,000,000 shares of Common Stock, on such terms and at such prices as the Board of Directors of the Company may determine. As of September 30, 2006, 34,143,652 shares of common stock were outstanding. As of September 30, 2006, 1,712,500 shares and 5,000,000 shares were reserved for issuance upon exercise of options granted under Arrowhead's 2000 Stock Option Plan and 2004 Equity Incentive Plan, respectively. As of September 30, 2006, options to purchase 1,712,500 shares were outstanding under the 2000 Stock Option Plan and options to purchase 2,684,539 shares had been granted under the 2004 Incentive Plan. The Company has warrants outstanding to purchase 1,397,500 shares of Common Stock that are callable by the Company under certain market conditions. The issuance of additional securities would dilute the equity interests of the Company's existing Stockholders, perhaps substantially, and might result in dilution in the tangible net book value of a share of our Common Stock, depending upon the price and other terms on which the additional shares are issued.

The Company's success depends on the attraction and retention of senior management and scientists with relevant expertise.

The Company's future success will depend to a significant extent on the continued services of its key employees, particularly Mr. R. Bruce Stewart, Chief Executive Officer, who conceived of the Company's business and overall operating strategy and has been most instrumental in assisting the Company raise capital. On September 7, 2004, Mr. Joseph T. Kingsley joined the Company as its Chief Financial Officer and on June 2, 2006 was appointed Interim President. Mr. Kingsley also remains the Company's Chief Financial Officer. Mr. Kingsley is a key member of the Company's management team. The Company does not maintain key man life insurance for Mr. Stewart, Mr. Kingsley, or any other executive. The Company's ability to execute its strategy also will depend on its ability to continue to attract and retain qualified scientists, sales, marketing and additional managerial personnel. If we are unable to find, hire and retain qualified individuals, we could have difficulty implementing our business plan in a timely manner, or at all.

CERTAIN RISK FACTORS RELATING TO OUR STOCK

Arrowhead's Common Stock price has fluctuated significantly during fiscal 2005 and 2006 and may continue to do so in the future.

Because we are a developmental stage company, there are few objective metrics by which our progress may be measured. Consequently, we expect that the market price of our Common Stock will likely continue to fluctuate significantly. We do not expect to generate substantial revenue from the license or sale of our nanotechnology for several years, if at all. In the absence of product revenue as a measure of our operating performance, we anticipate that investors and market analysts will assess our performance by considering factors such as:

- announcements of developments related to our business;
- developments in our strategic relationships with scientists within the nanotechnology field;
- our ability to enter into or extend investigation phase, development phase, commercialization phase and other agreements with new and/or existing partners;
- announcements regarding the status of any or all of our collaborations or products;
- market perception and/or investor sentiment regarding nanotechnology as the next technological wave;
- announcements regarding developments in the nanotechnology field in general;
- the issuance of competitive patents or disallowance or loss of our patent rights; and
- quarterly variations in our operating results.

We will not have control over many of these factors but expect that they may influence our stock price. As a result, our stock price may be volatile and you may lose all or part of your investment.

The market for purchases and sales of the Company's Common Stock may be very limited, and the sale of a limited number of shares could cause the price to fall sharply.

Although the Company's Common Stock is listed for trading on The NASDAQ Capital Market, currently, our securities are relatively thinly traded. Accordingly, it may be difficult to sell shares of Common Stock quickly without significantly depressing the value of the stock. Unless we are successful in developing continued investor interest in our stock, sales of our stock could continue to result in major fluctuations in the price of the stock.

If securities or industry analysts do not publish research reports about our business, of if they make adverse recommendations regarding an investment in our stock, our stock price and trading volume may decline.

The trading market for our Common Stock will be influenced by the research and reports that industry or securities analysts publish about our business. We do not currently have and may never obtain research coverage by industry or securities analysts. If no industry or securities analysts commence coverage of our Company, the trading price of our stock could be negatively impacted. In the event we obtain industry or security analyst coverage, if one or more of the analysts downgrade our stock or comment negatively on our prospects, our stock price would likely decline. If one of more of these analysts cease to cover our industry or us or fails to publish reports about our Company regularly, our Common Stock could lose visibility in the financial markets, which could also cause our stock price or trading volume to decline.

The market price of our Common Stock may be adversely affected by the sale of shares by the Company's management or founding Stockholders.

Sales of our Common Stock by our officers, directors and founding Stockholders could adversely and unpredictably affect the price of those securities. Additionally, the price of Arrowhead's Common Stock could be

affected even by the potential for sales by these persons. We cannot predict the effect that any future sales of our Common Stock or the potential for those sales, will have on our share price. Furthermore, due to relatively low trading volume of our stock, should one or more large stockholders seek to sell a significant portion of its stock in a short period of time, the price of our stock may decline.

We may be the target of securities class action litigation due to future stock price volatility.

In the past, when the market price of a stock has been volatile, holders of that stock have often initiated securities class action litigation against the company that issued the stock. If any of our Stockholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management.

We do not intend to declare cash dividends on our Common Stock.

We will not distribute cash to our stockholders until and unless we can develop sufficient funds from operations to meet our ongoing needs and implement our business plan. The time frame for that is inherently unpredictable, and you should not plan on it occurring in the near future, if at all.

Our Board of Directors has the authority to issue shares of "blank check" Preferred Stock, which may make an acquisition of our company by another company more difficult.

We have adopted and may in the future adopt certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of the Company that a holder of our Common Stock might consider in its best interest. Specifically, the Company's Board of Directors, without further action by the Company's stockholders, currently has the authority to issue up to 5,000,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares ("blank check" preferred). Such preferred stock may have rights, including economic rights, senior to our Common Stock. As a result, the issuance of the preferred stock could have a material adverse effect on the price of our Common Stock and could make it more difficult for a third party to acquire a majority of our outstanding Common Stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters is located in Pasadena, California. The Company leases the following facilities in or near Pasadena, California:

	Lab/Office Space	Monthly Rent	Lease Commencement	Lease Term
Arrowhead				
Pasadena (1)	7,388 sq ft	$ 16,992	March 1, 2006	62 Months
Pasadena	3,653 sq ft	$ 6,575	January 10, 2005	26 Months
New York (2)	130 sq ft	$ 3,484	September 15, 2006	12 Months
Aonex	4,000 sq ft	$ 7,211	July 1, 2004	48 Months
Calando	7,000 sq ft	$ 12,944	June 1, 2006	18 Months
Insert	4,354 sq ft	$ 11,761	June 1, 2006	36 Months

(1) Arrowhead leased new corporate office space in Pasadena, which it occupied beginning March 1, 2006. The new lease agreement provides Arrowhead with two months free rent which was recorded as a deferred liability and is being amortized over the life of the lease. The lease for the prior corporate office space terminated on February 28, 2006.

(2) In September 2005, Arrowhead opened an office in New York City and has one employee working out of that office. In November 2006, the lease was renewed for 12 additional months retroactive to September 15, 2006.

The Company has no plans to own any real estate and expects all facility leases are expected to be operating leases.

ITEM 3. LEGAL PROCEEDINGS

The Company is not a party to any lawsuit.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders during the fourth quarter of fiscal year ended September 20, 2006.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Price Range of Common Stock

On January 12, 2004, the Company effected a 65-for-1 "reverse split" of its Common Stock and changed its name to Arrowhead Research Corporation. Through January 13, 2004, the Company's Common Stock was traded in the over-the-counter market and was quoted on the NASD Electronic Bulletin Board under the symbol "IACG." The symbol under which the Common Stock subsequently traded was changed to "ARWR."

On August 27, 2004, NASDAQ approved the Company's Common Stock and Warrants for listing on the NASDAQ SmallCap Market™. The Warrants were traded under the symbol "ARWRW." On October 7, 2004, a registration statement became effective covering 13,061,350 shares of the Company's Common Stock, 13,837,748 Warrants for purchase of its Common Stock, and all of the 13,837,748 shares of Common Stock issuable upon exercise of the Warrants. Substantially all the outstanding warrants were exercised by June 2005 and those warrants not exercised were redeemed at $.001 per share.

During the year ended September 30, 2006, the weekly trading volume ranged from 100,000 shares to 2,248,700 shares with an average weekly volume of 501,056 shares.

The following table sets forth the high and low bid prices for a share of the Company's Common Stock during each period indicated, as quoted on the NASD Electronic Bulletin Board and the NASDAQ SmallCap Market™ after August 27, 2004. Bid quotations reflect inter-dealer prices, without mark-up, mark-down or commission, and may not represent actual transactions. The share prices are adjusted to give effect to the 65-for-1 "reverse split" as if it had occurred at the beginning of the first period indicated.

	Fiscal Year Ended September 30,			
	2006		2005	
	High	Low	High	Low
1st Quarter	5.25	2.99	5.60	2.02
2nd Quarter	5.62	4.04	4.52	3.54
3rd Quarter	7.65	4.10	4.22	2.14
4th Quarter	5.38	4.45	3.04	2.49

On September 29, 2006, the closing price of a share of the Company's Common Stock, as quoted on NASDAQ, was $4.99.

Shares Outstanding

At September 30, 2006, an aggregate of 34,143,588 shares of the Company's Common Stock were issued and outstanding, and were owned by 577 stockholders of record, based on information provided by the Company's transfer agent.

Dividends

The Company has never paid dividends on its Common Stock and does not anticipate that it will do so in the foreseeable future.

Sales of Unregistered Securities

The Company did not conduct any offerings of equity securities during the fourth quarter of 2006 that were not registered under the Securities Act of 1933.

Repurchases of Equity Securities

We did not repurchase any shares of our common stock during FY 2006 or FY 2005.

Information Regarding Equity Compensation Plans

As of September 30, 2006:

	Equity Compensation Plan Information		
Plan Category	**Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)**	**Weighted average exercise price of outstanding options, warrants and rights (b)**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)**
Equity compensation plans approved by security holders	4,397,039	$ 2.74	2,248,667
Equity compensation plans not approved by security holders (1)	—	—	—
Total	4,397,039		2,248,667

(1) Includes the 2000 Stock Option Plan and the 2004 Equity Incentive Plan.

ITEM 6. SELECTED FINANCIAL DATA

The table below presents selected consolidated financial data of Arrowhead and its Subsidiaries as of and for the years ended September 30, 2006, 2005, 2004 and 2003 derived from Arrowhead's audited consolidated financial statements included in this Annual Report on Form 10-K and prior years reports filed on Form 10-K. Certain prior year amounts may have been reclassified to conform to current year presentation or the retroactive application of FAS 123(R).

The selected consolidated financial data set forth below should be read in conjunction with our consolidated financial statements and related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report on Form 10-K.

Arrowhead Research Corporation & Subsidiaries Selected Financial Data

	Year Ended September 30,			
	2006	2005	2004	2003
Consolidated Statements of Operations Data:				
REVENUE	595,458	590,683	196,306	—
OPERATING EXPENSES				
Salaries	6,471,169	2,848,049	555,802	25,000
Consulting	749,720	697,952	624,330	25,000
General and administrative	5,034,172	2,676,832	913,653	41,063
Research and development	8,582,019	3,793,377	793,354	3,375
Goodwill impairment & other charges	999,000			
TOTAL OPERATING EXPENSES	21,836,080	10,016,210	2,887,139	94,438
OPERATING LOSS	(21,240,622)	(9,425,527)	(2,690,833)	(94,438)
OTHER INCOME (EXPENSE)				
Gain on sale of stock in subsidiary		2,292,800		
Unrealized (loss) in marketable securities	315,616	78,761	(12,113)	
Other income		3,308	—	
Interest	852,967	151,052	31,341	
Minority interests	1,316,590	1,520,039	251,723	
Patent amortization	(241,760)	(167,321)		
TOTAL OTHER INCOME (EXPENSE)	2,243,413	3,878,639	270,951	—
Loss from continuing operations	(18,997,209)	(5,546,888)	(2,419,882)	(94,438)
Loss from discontinued operations of Nanotechnica, Inc.		(1,234,233)	(108,272)	
Loss on disposal of Nanotechnica, Inc.		(73,797)		
Provision from income taxes			(800)	(800)
NET LOSS	$ (18,997,209)	$ (6,854,918)	$ (2,528,954)	$ (95,238)
Amounts per common share:				
Loss from continuing operations per share, basic and diluted	$ (0.59)	$ (0.30)	$ (0.22)	$ (0.03)
Loss from discontinued operations per share, basic and diluted		(0.07)	(0.01)	—
Net loss, basic and diluted	$ (0.59)	$ (0.37)	$ (0.23)	$ —
Weighted-average shares, basic and diluted	31,953,806	18,725,263	11,002,094	3,738,750
Consolidated Balance Sheet Data:				
Cash, cash equivalents and marketable securities	$ 28,020,304	$ 22,543,896	$ 9,040,554	$ 1,355,289
Working capital	25,855,557	21,789,931	8,807,377	1,417,737
Total assets	34,525,878	29,040,721	11,915,778	1,515,939
Current liabilities	2,920,234	1,024,064	689,698	96,177
Minority interests	934,438	1,889,190	1,777,699	
Stockholders' equity	30,671,206	26,127,467	9,448,381	1,419,762

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

Arrowhead Research Corporation ("Arrowhead" or the "Company") is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics, and energy. Arrowhead's mission is to build value through the identification, development and commercialization of nanotechnology-related products and applications. The Company works closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. Arrowhead takes a portfolio approach by operating multiple subsidiaries (each a "Subsidiary," and, collectively the "Subsidiaries") which allows the pursuit of multiple opportunities and diversifies risk. Currently, Arrowhead operates four majority owned Subsidiaries commercializing nanotech products and applications and funds a number of prototype development efforts in leading university labs in exchange for the exclusive right to license the technology developed in such labs.

Majority-owned Subsidiaries

Arrowhead owns majority interest in its Subsidiaries, securing substantial participation in any success. Each subsidiary is staffed with its own technical and business team that focuses on its specific technology and markets while Arrowhead provides financial, strategic, and administrative resources. The Company's four majority owned Subsidiaries are commercializing a variety of nanotech products and applications, including anti-cancer drugs, RNAi therapeutics, carbon-based electronics and compound semiconductor materials. In the near term, Arrowhead expects to add to its portfolio through selective acquisition and formation of new companies.

Sponsored Research

In exchange for the exclusive right to license the resultant technology developed in sponsored laboratories, Arrowhead works with some of the most outstanding academic institutions in the country, including the California Institute of Technology (Caltech), Stanford University, Duke University and the University of Florida, in critical areas such as stem cell research, carbon electronics, and molecular diagnostics. By funding university research, Arrowhead has the ability to ascertain the probability of technical success at low research cost and, if warranted, continue cost effective development at the university by leveraging the already existing resources available to scientists at universities, such as laboratories and equipment as well as a vibrant location that encourages the exchange of ideas. Moreover, the cultivation of relationships in the academic community provides an additional window into other promising technologies.

Subsidiaries

At September 30, 2006, the Company has four majority owned operating Subsidiaries, Insert Therapeutics, Inc. ("Insert"), Calando Pharmaceuticals, Inc. ("Calando"), Unidym, Inc. ("Unidym") (formally NanoPolaris, Inc.) and Aonex Technologies, Inc. ("Aonex"). As part of our model, the company will create or close subsidiaries based upon the success of the subsidiary.

Insert has developed Cyclosert™, a proprietary drug delivery platform technology based on a nano-engineered class of linear cyclodextrin-containing polymers. Insert's first investigational new drug application for its first drug candidate, IT-101, was approved by the U.S. Food and Drug Administration in March 2006. IT-101 is a conjugate of Insert's patented nano-engineered drug delivery polymer and camptothecin, a potent anti-cancer compound. A Phase I study for IT-101 is being conducted at the City of Hope, in Duarte, California.

Calando is designing, developing and commercializing novel RNAi therapeutics to treat diseases and other medical conditions by combining effective RNAi therapeutics with patented and proprietary delivery technologies.

Unidym is developing thin film nanotube electronics and has assembled exclusive commercial rights to nanotube materials and processes developed at several universities. On June 13, 2006, NanoPolaris acquired the net assets, including the name, of Unidym, a Los Angeles-based company that develops carbon nanotube electronics. On August 3, 2006, NanoPolaris changed its name to Unidym, Inc.

Aonex is developing engineered wafers to enable manufacturers of blue and white LEDs to reduce their production costs and create higher efficiency devices. After analyzing the existing competition and scale required for success in its core markets, Aonex has opted to seek an established company with which to partner in its future commercialization efforts. Aonex is in the process of exploring possibilities with several firms to develop its technology further and to integrate its process into existing manufacturing processes. In such a partnership, Aonex would provide the technology developed to date while the larger partner would provide resources and the product stream. This change of strategy will likely limit the return that Arrowhead is able to achieve on its investment in Aonex. Therefore, the Company has elected to write off $999,000 in goodwill attributable to the investment in Aonex. The consolidated statements of operations includes a $999,000 impairment expense related to Aonex.

On June 3, 2005, a majority of the shareholders of Nanotechnica, Inc. voted to dissolve that company. Pursuant to the license agreements between Nanotechnica and Caltech, Nanotechnica returned two issued patents to Caltech and transferred the remaining 32 patents to Arrowhead. Arrowhead performed a market study covering the technology represented by the patents and concluded that there is only a remote possibility for near term commercialization of the technology transferred to Arrowhead. Therefore Arrowhead has accounted for the approximately $1.2 million loss generated by Nanotechnica in FY 2005 as a Loss on Dissolution of Nanotechnica, Inc. With the dissolution of Nanotechnica, the Company's agreement to provide additional capital of up to $16 million to Nanotechnica terminated.

Results of Operations

The Company had a consolidated loss of approximately $19.0 million for the year ended September 30, 2006 versus a consolidated loss of $6.9 million and $2.5 million for September 30, 2005 and 2004, respectively. During the second quarter of FY 2005, the company recognized a gain of $2.3 million applicable to the sale to third parties of a portion of Arrowhead's ownership in Insert, thereby reducing the loss for FY 2005 by the same amount.

The increase in the FY 2006 consolidated loss adjusted for the one time gain in FY 2005 occurred in several areas. First, staffing continues to increase as the Company grows. Staff has been added at all levels within the company to accommodate the increase in development efforts, to handle the increase in general, accounting and administrative responsibilities as the Company has grown and to comply with the Sarbanes Oxley Act of 2002, as amended ("SOX"). Second, Insert incurred major expenses during FY 2006 and FY 2005 related to preclinical research, to filing the Investigational New Drug application (IND) with the U.S. Food and Drug Administration, ("FDA") to obtaining sufficient IT-101 drug inventories to be able to enter Phase I Clinical Trials and finally to pay for preparation required to enter the trials. Third, legal expenses increased as the Company completed a private placement, recapitalized Calando, acquired the net assets of Unidym, examined or reviewed new potential deals and maintained patents licensed from various universities. Fourth, facilities cost increased at Corporate headquarters, Calando and Insert due to each moving in to new facilities, refurbishing an existing space to meet Calando's needs and the establishment of new facilities to meet growth of or to house new subsidiaries. Fifth, the Company has elected to record $2,448,000 paid in the acquisition of a portion of the outstanding minority interest in Calando as acquired in-process research and development that was expensed in fiscal 2006.

Expenses

The analysis below details the operating expenses and discusses the increased expenditures within the major categories.

For purposes of comparison, the amounts for twelve month periods ended September 30, 2006, 2005 and 2004 respectively are shown in the tables below. Certain prior period amounts have been reclassified to conform to the current period presentation.

The amounts for each period have been adjusted to include the adoption of SFAS 123R and to eliminate Nanotechnica from continuing operations.

Salary & Wage Expenses

(in thousands)

	Year Ended September 30 2006	% of expense category	Year Ended September 30 2005	% of expense category	Year Ended September 30 2004	% of expense category
G&A—compensation-related	$ 2,697	42%	$ 1,058	37%	$ 257	46%
Stock-based compensation	1,369	21%	509	18%	42	8%
R&D—compensation-related	2,405	37%	1,281	45%	257	46%
Total	$ 6,471	100%	$ 2,848	100%	$ 556	100%

The Company was established in May 2003 but had only one employee until the second quarter of FY 2004. The major reason for the growth in compensation over the three year period was the addition of administrative and technical staff. During this three year period, the Company started Aonex (April 2004), NanoPolaris (April 2005), Calando (February 2005), Nanotechnica (September 2004 and closed in June 2005) and acquired Insert (June 2004).

In FY 2006, FY 2005 and FY 2004, the Company and its Subsidiaries also had performance reviews and increased the pay of existing employees where warranted. These increases contributed to the growth in salary expense over the three year period.

Another major reason for the increase in G&A related compensation in FY 2006 when compared to FY 2005 is the result of hiring and subsequent departure of a new President for Arrowhead and the associated severance. The Company intends to hire a new Chief Executive Officer in FY 2007 and began the search process in November 2006. In addition to cost associated with the prior President and his severance, the corporate office hired one additional executive to support the Company and the Subsidiaries in the areas of SOX implementation, financial analysis and budgeting. In May 2005, Arrowhead's CEO pay was adjusted upward by the Compensation Committee. Prior to June 2005, the CEO was paid a nominal amount to accommodate the Company's start up status while the Company obtained financing and began operations. Prior to January 2005, the President of Insert/Calando was a consultant. Beginning in January 2005, he became a full time employee. Both Insert and Calando hired administrators in FY 2005 which further added to the increase in FY 2006. The change between FY 2005 and FY 2004 was caused by the need to add staff to handle human resources and accounts payable as the Company grew and the addition of a president and administrators for Insert and Calando.

The increase in stock based compensation in FY 2006, FY 2005 and FY 2004 is related to the issuance of stock options to new and existing employees and expense booked pursuant to the adoption of SFAS 123R which requires expensing of stock-based compensation for all options granted.

The R&D compensation increased from fiscal year to fiscal year as a result of establishing new Subsidiaries, hiring additional technical staff for the new Subsidiaries and to increase the pace of development. The Company expects that salaries and wages will continue to grow during FY 2007 as more people are hired to support development within the Subsidiaries.

General & Administrative Expenses

(in thousands)

	Year Ended September 30 2006	% of expense category	Year Ended September 30 2005	% of expense category	Year Ended September 30 2004	% of expense category
Professional/outside services	$ 1,610	32%	$ 920	34%	$ 180	20%
Facilities related	995	20%	594	22%	161	18%
Patent expense	782	15%	164	6%		%
Travel expense	288	6%	172	7%	85	9%
Business insurance	291	6%	156	6%	39	4%
Depreciation-G&A	295	6%	277	10%	75	8%
Others	773	15%	394	15%	374	41%
Total	$ 5,034	100%	$ 2,677	100%	$ 914	100%

G&A expenses have increased each year since the Company was founded in May 2003. The major increases in non-compensation related professional/outside services are associated with the purchase of Subsidiary stock in all years shown, capital contributions to Subsidiaries in all years shown, the acquisition of the net assets of Unidym in FY 2006, and SOX compliance (primarily in FY 2006 but also in FY 2005). The Company has also spent money in both FY 2005 and FY 2006 to increase its public and investor relations as the Company seeks to gain more recognition in the market place. In FY 2005, the Company incurred one-time expenses in connection with the call of its previously issued warrants to purchase Common Stock and the dissolution of Nanotechnica.

Arrowhead incurred additional expense for new or expanded leases as Subsidiaries are established or expanded. Facilities related expenses are expected to increase in FY 2007 with the Company's move to larger corporate offices in March 2006, and the move of Insert into new laboratory facilities in June 2006. In addition, Calando moved in July 2006 into the facility previously occupied by Insert which increased Calando's rent expense. The Company purchased the assets of Unidym in June 2006 and will seek office and lab facilities for Unidym in FY 2007.

The increase in patent expense during FY 2006 relates primarily to $300,000 of patent expenses billed by Caltech for patent & patent applications that Insert licenses relating to a time period from calendar 2003 through 2006. The Company was not aware of the magnitude of these charges until they were billed by Caltech. Patent expense was also incurred related to due diligence for the acquisition of Unidym and for carbon nanotube licenses expense by Unidym.

Insurance increased as a result of increases in limits and coverage as the Company has grown since FY 2004. For instance, the director and officer insurance coverage was increased from $1 million in FY 2004 to $5 million in FY 2005 to $15 million in FY 2006. The Company incurred this expense in anticipation of attracting new executive management to the Company and its Subsidiaries. The Company will continue to see this expense increase as the Company grows.

Travel increased as the Company management pursues increased public and investor relations activities, new business initiatives and collaborations with others.

Research and Development Expenses

(in thousands)

	Year Ended September 30 2006	% of expense Category	Year Ended September 30 2005	% of expense category	Year Ended September 30 2004	% of expense category
R&D contract labor	2,542	30%	$ 1,025	27%	$ 61	7%
In-Process R&D purchased	2,448	28%				
Laboratory supplies & services	1,856	22%	1,319	35%	196	25%
Sponsored research	1,170	13%	945	25%	536	68%
Depreciation-R&D	244	3%	200	5%		%
Other research expenses	322	4%	304	8%		%
Total	$ 8,582	100%	$ 3,793	100%	$ 793	100%

R&D contract labor involves work done on behalf of the Subsidiaries. Using contract labor allows each Subsidiary to keep its cost of development to a minimum only hiring those people that it will need in the long run. Therefore, this expense can grow or can decrease depending on the need of each Subsidiary. Due to the continued growth of the Subsidiaries since FY 2004, there has been an increase in contract labor.

The Company believes in commercial potential of RNAi in general and in Calando in particular. This belief is supported by the recently announced purchase of Sirna Therapeutics, Inc. by Merck & Co. for $1.1 billion and the award of the Nobel Prize for the discovery of RNAi. This belief is further evidenced by the Company's decision to invest an additional $3 million in Calando in March 2006 and commit an additional $7 million based upon Calando achieving certain milestones. The Company does not believe there has been impairment in Calando's goodwill.

At the end of fiscal 2006, the Company finalized its purchase accounting for its acquisition of a portion of Calando's minority interest. Arrowhead purchased 1,224,000 shares of Calando's common stock from various minority shareholders for an aggregate price of $2,448,000. The purchases were made through a series of transactions during the year. Payment for the shares included a total of $1,370,667 in cash and $1,077,333 of Arrowhead common stock. The Interpretations of FASB NO. 141, "Business Combinations" do not provide specific guidance in this situation, the Company has elected to take a conservative approach and account for the acquisition of the Calando minority interests as a purchase of in-process research and development. Under current agreements, the minority shareholders are not required to fund a proportionate share of the operating losses. Therefore, the Company has also elected to assume 100% of the operating loss with respect to future contributions to majority owned subsidiaries and newly issued shares, and does not allocate the operating loss to the minority shareholders for their proportionate ownership. Also, rather than allocate any of the purchase price to goodwill at September 30, 2006, the Company has recorded the acquisition of the additional interest as an in-process research and development expense to account for the acquisition of 1,224,000 shares from Calando's minority shareholders. As a result, $2,448,000 was recorded as acquired in-process research and development and is included in Research and Development expense for the fiscal year ended September 30, 2006.

On March 14, 2006, Insert received approval for its IND application from the FDA for its lead anti-cancer therapeutic, IT-101 and began Phase I clinical trials in the third quarter of calendar 2006. In advance of the clinical trials, Insert was required to pay the cost to manufacture the entire amount of IT-101 necessary to complete animal trials in FY 2005 and Phase I clinical trials in FY 2006. It is the Company's policy to expense the cost of the supplies and services when received even if they benefit subsequent years. Laboratory supplies & services remained fairly constant in FY 2006 and FY 2005. The cost of the supplies and services expensed in both years was approximately $1.3 million. While Insert was beginning Phase I clinical trials, Calando was beginning large mammal studies. While the purchase of supplies and animal studies of this magnitude is not a normal recurring expense, the continued development of new products in the Subsidiaries will result in increased R&D laboratory supplies and services in the future.

Use of contract labor and outside laboratory supplies and service allows the Subsidiaries access to equipment which is expensive to buy and which may not be needed on a regular basis. Arrowhead encourages its Subsidiaries to purchase assets when justified and to use outside services when possible to limit investment in capital equipment. This mode of operation keeps the depreciation low as a percentage of total cost.

The Company continues to sponsor research at Caltech (commencing in FY 2003), Stanford (commencing in June 2005), Duke (commencing in December 2005) and the University of Florida (commencing in August 2006.) The number of research projects can fluctuate as the Company adds or terminates projects. The increase in sponsored research expense in the September 30, 2006 compared to the year ended September 30, 2005 is in large part due to the expense of the Duke and the Stanford projects; each of these 2-year projects has an annual cost of approximately $300,000.

Consulting

This expense has stayed fairly consistent over the three year period but the composition has changed. In FY 2004, the major cost ($300,000) was related to raising capital and to gaining market awareness for Arrowhead. In addition, approximately $150,000 was related to consulting fees paid to Caltech professors/non employee subsidiary founders and approximately $142,000 in compensation expenses related to options granted to these consultants. In FY 2005 consulting fees to Caltech professors/non employee subsidiary founders was approximately $194,000 while compensation expense related to issuance of options to consultants was about $213,000. Outside public and investor relations services were about $120,000, directory and advisory board fees were about $85,000 and technical and computer services were about $85,000. In FY 2006 consulting fees to professors/non employee subsidiary founders was approximately $230,000. There was almost no compensation expense related to issuance of options to consultants as few options were awarded to consultants. Director and advisory board fees were about $95,000. Approximately $390,000 was related to outside consultants who performed services from looking at investment to helping with the IND to helping with the establishment of some of the efforts of Unidym. The use of consultants with diverse backgrounds enabled the Company to accomplish various missions without having to add full time staff.

Leveraged Technology and Revenue Strategy

Arrowhead continues to follow its strategy to leverage technology which is being or has been developed at universities. By doing so, Arrowhead benefits from work done at those universities and through majority-owned Subsidiaries, which can commercialize the most promising technologies developed from sponsored research and other sources. Although the Company is likely to produce prototypes and develop manufacturing processes, it may not ultimately manufacture products developed. The Company has three primary strategies to potentially generate product sales revenue:

- License the products and processes to a third party for a royalty or other payment. By licensing, the Company would not be required to allocate resources to build a sales or a production infrastructure and could use those resources to develop additional products.

- Retain the rights to the products and processes, but contract with a third party for production. The Company would then market the finished products. This approach would require either the establishment of a sales and distribution network or collaboration with a supplier who has an established sales and distribution network, but would not require investment in production equipment.

- Build production capability in order to produce and market the end products. This last approach would likely require the most capital to build the production, sales and distribution infrastructure.

On a case-by-case basis, the Company will choose the strategy, which, in the opinion of management, will generate the highest return for the Company.

The Company seeks and has been awarded grants from private and public entities. While the ultimate goal of the Company is to generate revenue through the sale of products and/or the licensing of technology, the Company does record revenue from grants and from development fees. Revenue from grants and development fees are considered to be reimbursements for efforts performed on behalf of third parties and not part of the Company's primary strategy to generate revenue.

In June 2005, Calando entered into the Company's first commercial licensing deal whereby Calando granted an exclusive worldwide license to Benitec Ltd. (ASX:BLT) for the combination of Calando's polymeric RNA interference ("RNAi") delivery technology with Benitec's RNAi-based therapeutic for the hepatitis C virus ("HCV"). Under this license agreement, Calando received an upfront payment of $150,000, which was amortized over 12 months. For the years ended September 30, 2006 and 2005 respectively, the Company recognized $406,250 and $43,750 in revenue applicable to this agreement. On July 31, 2006, the License Agreement with Benitec was terminated by mutual agreement.

In addition to the upfront payment of $150,000 to Calando, $311,280 and $43,750 in revenue for the years September 30, 2006 and 2005 respectively, was generated primarily related to development fees paid to Calando by Benitec. During FY 2006 and FY 2005, Aonex recognized revenue of $134,178 and $10,000 related to an SBIR grant and other research fees. Finally, Insert had revenue of $0, $536,932 and $196,306 for the years ended September 30, 2006, 2005 and 2004, respectively. Insert's revenue in 2005 and 2004 came from grants received by Insert prior to its being acquired by Arrowhead.

During FY 2006, the Company was told by the Small Business Administration that it no longer qualified as a small business because it could not show that 51% of its shareholders were U.S. citizens or legal resident aliens. Therefore, the Company does not expect to receive any small business funding in the future.

The Company does not expect any product sales in FY 2007. Therefore, losses can be expected to increase before any substantial revenue is generated. To partially offset these losses, the Company is pursuing other means of funding such as licenses, contracts and collaborations with third parties. The award of such grants and contracts depends on numerous factors, many of which are not in the Company's control, and therefore it is difficult to predict if this strategy will be successful.

Liquidity and Capital Resources

Since inception in May 2003, the Company has generated significant losses. As of September 30, 2006, the Company had $28.0 million in cash and cash equivalents compared to $22.5 million in cash and cash equivalents and marketable securities at September 30, 2005. The Company's investment objectives are primarily to preserve capital and liquidity and secondarily to obtain investment income. The Company invests excess cash in certificates of deposit, U.S. government obligations and high grade commercial paper.

The Company's operating activities have required significant amounts of cash. This trend will continue through FY 2007 as the Company's Subsidiaries continue to develop and refine their products and technology. During this period the Company does not expect to generate significant amounts of revenue. It is projected that the Company and its Subsidiaries will continue to add staff, property, and equipment during FY 2007. In addition, the Company expects to continue to invest in new sponsored research projects and new business opportunities. At September 30, 2006, the Company had the right to provide, in its sole discretion, an additional $7 million to Calando if certain milestones are reached and $4 million to Unidym at specified times. These capital commitments will be used for research and development, for business development and salaries. The remainder of the cash will be used to fund on going operations. The Company believes that the cash on hand at September 30, 2006 is sufficient to meet all existing obligations and fund existing operations in FY 2007.

Since inception, the Company has funded operations and acquisitions through the issuance of equity. As of September 30, 2006, the Company had raised approximately $53 million through the sale of Common Stock and

the exercise of Warrants. New business opportunities may require additional cash resources. In the future, the Company may seek additional funding through public or private financing, through collaborations and/or through private and U.S. government grants.

Except for copy machines, the Company does not lease any equipment and purchases all of its required capital assets. To date, when leasing facility space, the Company has been successful in having most leasehold improvements paid for by the landlord and included in the lease cost. The Company may not be able to do so in all cases going forward.

Off-Balance Sheet Arrangements

We do not have and have not had any off-balance sheet arrangements or relationships.

Inflation and Changing Prices

Inflation has not generally been a material factor affecting our financial condition, results of operations or cash flows in the periods shown. Management does not believe that inflation will be a material factor in FY 2007, even though our general operating expenses, such as salaries, employee benefits and facilities costs are subject to normal inflationary pressures.

Contractual Obligations and Commitments

	Payments due by period				
	Total	Less than 1 year	1-3 Years	3-5 Years	More than 5 Years
Operating Lease Obligation	$ 1,781,486	$ 664,949	$ 768,193	$ 348,344	$ —

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We manage our fixed income investment portfolio in accordance with our Investment Policy that has been approved by our Board of Directors. The primary objectives of our Investment Policy are to preserve principal, maintain a high degree of liquidity to meet operating needs, and obtain competitive returns subject to prevailing market conditions. Investments are made primarily in certificates of deposit, U.S. government agency debt securities and high grade commercial paper. Management may use additional investment vehicles as long as the vehicle meets the Investment Objectives and Minimum Acceptable Credit Quality. Our Investment Policy specifies credit quality standards for our investments. We do not own derivative financial instruments in our investment portfolio.

As of September 30, 2006, we have no debt, no derivative instruments outstanding and we did not have any financing arrangements that were not reflected in our balance sheet.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial statements and notes thereto appear on pages F-1 to F-21 of this Form 10-K Annual Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Our chief executive officer and our chief financial officer, after evaluating our "disclosure controls and procedures" (as defined in Securities Exchange Act of 1934 (Exchange Act) Rules 13a-15(e) and 15-d-15(e)) as of the end of the period covered by this Annual Report on Form 10-K (Evaluation Date) have concluded that as of the Evaluation Date, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including our chief executive officer and chief financial officer where appropriate, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting

Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. This process includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of the internal control over financial reporting to future periods are subject to risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Management's Assessment of the Effectiveness of our Internal Control over Financial Reporting

Management has evaluated the effectiveness of our internal control over financial reporting as of September 30, 2006. In conducting its evaluation, management used the framework set forth in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under such framework, our management has concluded that our internal control over financial reporting was effective as of September 30, 2006.

Attestation Report

Rose, Snyder & Jacobs the independent registered public accounting firm that audited our consolidated financial statements included in this Annual Report on Form 10-K, has issued an attestation report on our management's assessment of our internal control over financial reporting. Such attestation report is included below under the heading "Attestation Report of Independent Registered Public Accounting Firm."

Attestation Report of Independent Registered Public Accounting Firm

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

The Board of Directors and Stockholders of Arrowhead Research Corporation

We have audited management's assessment, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting, that Arrowhead Research Corporation maintained effective internal control over financial reporting as of September 30, 2006, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Arrowhead Research Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Arrowhead Research Corporation maintained effective internal control over financial reporting as of September 30, 2006, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Arrowhead Research Corporation maintained, in all material respects, effective internal control over financial reporting as of September 30, 2006, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Arrowhead Research Corporation as of September 30, 2006 and 2005, and the related consolidated statements of operations, , stockholders' equity, and cash flows for each of the three years in the period ended September 30, 2006, and for the period from May 7, 2003 (inception) through September 30, 2006 of Arrowhead Research Corporation and our report dated December 6, 2006 expressed an unqualified opinion thereon.

/s/ Rose, Snyder & Jacobs

A Corporation of Certified Public Accountants

Encino, California
December 6, 2006

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fourth quarter of the year ended September 30, 2006 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

The executive officers and directors of the Company currently are as follows:

Name	Age	Title
R. Bruce Stewart	69	Chief Executive Officer and Director
Joseph T. Kingsley	61	Interim President, CFO & Secretary
Edward W. Frykman	70	Director
LeRoy T. Rahn	71	Director
Charles P. McKenney	67	Director

R. Bruce Stewart has been Arrowhead's Chief Executive Officer and Chairman of the Board of the Company since January 2004. Mr. Stewart was the Chairman of the Board of the predecessor California corporation since its inception in May 2003 and devoted much of his time from early in 2003 to development of its plan of operations. Mr. Stewart founded Acacia Research Corporation in March 1991, and was employed by Acacia Research Corporation in various capacities until January 2003, serving as its President from inception through January 1997, Chairman until April 2000, and as a senior advisor until January 2003. From August 1977 to March 1991, Mr. Stewart was the President of Annandale Corporation. He also was a licensed principal of Annandale Securities, Inc., a licensed broker-dealer.

Joseph T. (Ted) Kingsley has been Arrowhead's Inteim President of the Company since June 2, 2006 and Chief Financial Officer and Secretary since September 2004. Mr. Kingsley brings to Arrowhead more than 20 years of executive-level, financial management experience in biotech, commercial, international, and defense-related industries. Prior to joining the Company, from January 2002 to September 2004, he was Chief Financial Officer for Eidogen, Inc. a Pasadena-based company developing computational drug discovery platforms. From March 1997 to January 2002, Mr. Kingsley was Vice President Operations and Chief Financial Officer for Paracel, an integrated turnkey computer systems provider for the life sciences community that was acquired by Celera Genomics (AMEX:CRA) in June 2000. Mr. Kingsley held similar positions with Pico Products, a publicly-held cable TV product supplier, Kaiser Marquardt, Inc., and Science Applications International Corp. (SAIC), a Fortune 500 government and commercial contractor. Mr. Kingsley is a CPA. He received his B.A. in Economics from Ohio Wesleyan University, and his MBA from Northwestern University.

Edward W. Frykman has been a director of the Company since January 2004. Mr. Frykman has been an Account Executive with Crowell, Weedon & Co. since 1992. Previously, Mr. Frykman served as Senior Vice President of L.H. Friend & Co. Both Crowell, Weedon & Co. and L.H. Friend & Co. are investment brokerage firms located in Southern California. In addition, Mr. Frykman was a Senior Account Executive with Shearson Lehman Hutton, where he served as the Manager of the Los Angeles Regional Retail Office of E. F. Hutton & Co. Mr. Frykman was a director in the predecessor California corporation since its inception in May 2003 until January 2004, when he became a director of the Company. Mr. Frykman is also a director of Acacia Research Corporation (NASDAQ: ACTG & CBMX), a publicly-held corporation based in Newport Beach, California.

LeRoy (Lee) T. Rahn has been a director of the Company since January 2004. Mr. Rahn was a partner with the intellectual property law firm of Christie, Parker & Hale from 1968 to 2003, more than 30 years, with a

practice focused on assisting clients in protecting their intellectual property through obtaining, maintaining and enforcing patents and other legal rights. He retired from the law firm's partnership in 2003, but remains affiliated with the firm on an "of counsel" basis. He is a former president of the Los Angeles Intellectual Property Association and frequently makes presentations on intellectual property law to legal and trade groups. Prior to becoming an attorney, Mr. Rahn obtained a degree in electrical engineering. Mr. Rahn was a director in the predecessor California corporation from December 2003 to January 2004 when he became a director of the Company.

Charles P. McKenney has been a director of the Company since April 2004. Mr. McKenney has maintained a government affairs law practice in Pasadena, California since 1989, representing businesses and organizations in their relations with state and local government regarding their obligations under state and local land use and trade practices laws. From 1973 through 1989, he served as Attorney for Corporate Government Affairs for Sears, Roebuck and Co., helping organize and carry out Sears' western state and local government relations programs. Mr. McKenney has served two terms on the Pasadena, California City Council as well as on several city boards and committees, including three city Charter Reform Task Forces. Mr. McKenney became a director of the Company in March 2004.

Information appearing in the Proxy Statement for the 2007 Annual Meeting under the captions Election of Directors, Executive Officers, and Compliance with Section 16 of the Securities Exchange Act of 1934, is hereby incorporated by reference.

ITEM 11. EXECUTIVE COMPENSATION.

The information required hereunder is incorporated herein by reference to our Proxy Statement to be filed within 120 days of September 30, 2006 and delivered to stockholders in connection with our Annual Meeting of Stockholders to be held on February 22, 2007.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required hereunder is incorporated herein by reference to our Proxy Statement to be filed within 120 days of September 30, 2006 and delivered to stockholders in connection with our Annual Meeting of Stockholders to be held on February 22, 2007.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

On December 12, 2006, the Board adopted an Executive Incentive Plan (the "Incentive Plan") designed to provide incentive bonus compensation to the Company's executive officers if a Subsidiary engages in a liquidation event yielding net proceeds to the Company, with the total bonus pool capped at 10% of the actual net proceeds received by the Company in cash or securities in a liquidation event. The Incentive Plan gives the Board ultimate authority over discretionary bonus payments, after recommendation by the Company's sitting Chief Executive Officer. The Incentive Plan defines a liquidation event as (i) any sale, transfer or issuance or series of sales, transfers and/or issuances of capital stock or other voting equity of the Subsidiary by the Subsidiary or any holders thereof (whether by merger, recapitalization, public offering or otherwise) which results in any person or group of persons (as the term "group" is used under the Securities Exchange Act of 1934, as amended) other than the Company and its affiliates owning a majority of the Subsidiary's outstanding voting equity, and (ii) any sale or transfer of all or substantially all of the assets of a Subsidiary (including any securities held by the Company and the Subsidiary), taken as a whole, in any transaction or series of transactions (whether by merger, recapitalization, public offering or otherwise). "Net proceeds" means the net cash and or stock proceeds (after deducting all cash and non-cash costs and expenses related to the transaction and any and all cash and non-cash investments in the Subsidiary) received by the Company from a Liquidation Event. The foregoing is summary in nature and you are referred to the full text of the Incentive Plan, filed as Exhibit 10.11 to this Form 10-K.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required hereunder is incorporated herein by reference to our Proxy Statement to be filed within 120 days of September 30, 2006 and delivered to stockholders in connection with our Annual Meeting of Stockholders to be held on February 22, 2007.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements.

See Index to Financial Statements and Schedule on page F-1.

(2) Financial Statement Schedules.

See Index to Financial Statements and Schedule on page F-1. All other schedules are omitted as the required information is not present or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements or notes thereto.

(3) Exhibits.

The following exhibits are filed (or incorporated by reference herein) as part of this Annual Report on Form 10-K:

Exhibit Number	Document Description
3.1	Certificate of Incorporation of InterActive, Inc., a Delaware company, dated February 8, 2001 (1)
3.2	Certificate of Amendment of Certificate of Incorporation of InterActive Group, Inc., dated January 12, 2004 (effecting, among other things a change in the corporation's name to "Arrowhead Research Corporation") (2)
3.3	Certificate of Amendment to Certificate of Incorporation, dated January 25, 2005 (3)
3.4	Bylaws (1)
4.1	Form of Registration Rights Agreement dated January 24, 2006 (4)
4.2	Form of Warrant to Purchase Common Stock issued January 24, 2006 (4)
10.1**	Copy of the Arrowhead Research Corporation (fka InterActive, Inc.) 2000 Stock Option Plan, the Arrowhead Research Corporation Stock Option Agreement (Incentive Stock Option) and the Arrowhead Research Corporation Stock Option Agreement (Nonstatutory Option) (5)
10.2**	Copy of the Arrowhead Research Corporation 2004 Equity Incentive Plan (6)
10.3	Common Stock and Warrant Purchase Agreement, dated as of January 11, 2006, among Arrowhead, York, Knott and certain affiliates (4)
10.4**	Copy of Arrowhead Research Corporation 2004 Equity Incentive Plan, as amended February 23, 2006 (7)
10.5	Series A Preferred Stock Purchase Agreement between Arrowhead Research and Calando Pharmaceuticals, Inc. dated March 31, 2006 (8)
10.6	Agreement to Provide Additional Capital between Arrowhead Research and Calando Pharmaceuticals, Inc. dated March 31, 2006 (8)

Exhibit Number	Document Description
10.7	Common Stock Transfer Agreement among Arrowhead Research, Mark Davis, John Petrovich and John Rossi (8)
10.8	Series A Preferred Stock Purchase Agreement between Arrowhead Research Corporation and Nanopolaris, Inc. dated June 13, 2006 (9)
10.9	Agreement to Provide Additional Capital between Arrowhead Research Corporation and NanoPolaris, Inc. dated June 13, 2006 (9)
10.10	Severance Agreement and General Release between Arrowhead Research Corporation and Leon Ekchian dated August 1, 2006 (10)
10.11**	Executive Incentive Plan, adopted December 12, 2006*
10.12**	Directors Compensation Policy, as amended December 12, 2006*
10.13	Amended and Restated License Agreement between Insert Therapeutics, Inc. and Calando Pharmaceuticals, Inc. dated July 1, 2005 (Portions omitted pursuant to request for confidential treatment.)*
31.1	Section 302 Certification of Chief Executive Officer*
31.2	Section 302 Certification of President & Chief Financial Officer *
32.1	Section 1350 Certification by Principal Executive Officer*
32.2	Section 1350 Certification by President & Principal Financial Officer*

* Filed herewith.
** Indicates compensation plan, contract or arrangement.
(1) Incorporated by reference from the Schedule 14C filed by registrant on December 22, 2000.
(2) Incorporated by reference from the Schedule 14C filed by registrant on December 22, 2003.
(3) Incorporated by reference from the Quarterly Report on Form 10-QSB for the quarter ended December 31, 2004, filed by registrant on February 11, 2005.
(4) Incorporated by reference from the Current Report on Form 8-K, filed by registrant on January 18, 2006.
(5) Incorporated by reference from the Registration Statement on Form S-8, filed by registrant on October 29, 2004.
(6) Incorporated by reference from Annex A to the definitive Schedule 14C filed by registrant on December 16, 2004.
(7) Incorporated by reference from the Current Report on Form 8-K filed by registrant on February 28, 2006.
(8) Incorporated by reference from the Current Report on Form 8-K filed by registrant on April 6, 2006.
(9) Incorporated by reference from the Current Report on 8-K filed by the registrant on June 16, 2006.
(10) Incorporated by reference from the Quarterly Report on 10-Q filed by the registrant on August 9, 2006.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, on this 14th day of December 2006.

ARROWHEAD RESEARCH CORPORATION

By: /s/ R. BRUCE STEWART
R. Bruce Stewart
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints R. Bruce Stewart and Joseph T. Kingsley and each of them, jointly and severally, his attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each said attorneys-in-fact or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/S/ R. BRUCE STEWART **R. Bruce Stewart**	Chief Executive Officer and Director (Principal Executive Officer)	December 14, 2006
/S/ JOSEPH T. KINGSLEY **Joseph T. Kingsley**	Interim President & Chief Financial Officer (Principal Financial and Accounting Officer)	December 14, 2006
/S/ EDWARD W. FRYKMAN **Edward W. Frykman**	Director	December 14, 2006
/S/ LEROY T. RAHN **LeRoy T. Rahn**	Director	December 14, 2006
/S/ CHARLES P. MCKENNEY **Charles P. McKenney**	Director	December 14, 2006

INDEX TO FINANCIAL STATEMENTS AND SCHEDULE

As a result of the change in control resulting from the stock exchange transaction (the "Share Exchange") with the owners of Arrowhead Research Corporation, a California corporation ("ARC"), the financial statements of the Company are deemed to be the historical financial statements of ARC.

Arrowhead Research Corporation,

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Arrowhead Research Corporation

We have audited the accompanying consolidated balance sheets of Arrowhead Research Corporation (a Delaware corporation) and Subsidiaries as of September 30, 2006 and 2005 and the related consolidated statements of operations, stockholders' equity and cash flows for the years ended September 30, 2006, 2005 and 2004 and for the period from May 7, 2003 (inception) through September 30, 2006. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards established by the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Arrowhead Research Corporation and Subsidiaries as of September 30, 2006 and 2005, and the consolidated results of their operations and their cash flows for the years ended September 30, 2006, 2005 and 2004, and for the period from May 7, 2003 (inception) through September 30, 2006 in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Arrowhead Research Corporation's internal control over financial reporting as of September 30, 2006, based on the criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated December 6, 2006 expressed an unqualified opinion on management's assessment of, and the effective operation of, internal control over financial reporting.

Rose, Snyder & Jacobs
A Corporation of Certified Public Accountants

Encino, California

December 6, 2006

Arrowhead Research Corporation and Subsidiaries
(A Development Stage Company)
Consolidated Balance Sheets

	September 30, 2006	September 30, 2005
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 28,020,304	$22,467,016
Investments at fair market value	—	76,880
Grant receivable, net of allowance for doubtful account of $0	3,697	25,748
Other receivables	70,517	7,700
Prepaid sponsored research, *Note 6*.	358,020	10,000
Other prepaid research	7,600	81,666
Other prepaid expenses	315,653	144,985
TOTAL CURRENT ASSETS	28,775,791	22,813,995
PROPERTY & EQUIPMENT		
Computers, office equipment and furniture	544,823	392,164
Research equipment	1,375,595	860,759
Software	68,969	52,023
Construction in progress	—	—
Leasehold improvement	369,699	324,690
	2,359,086	1,629,636
Less: Accumulated depreciation & amortization	(1,088,105)	(551,514)
NET PROPERTY & EQUIPMENT	1,270,981	1,078,122
OTHER ASSETS		
Rent deposit	161,469	110,379
Patents, *Note 1*.	3,354,487	3,276,075
Goodwill	963,150	1,762,150
TOTAL OTHER ASSETS	4,479,106	5,148,604
TOTAL ASSETS	**$ 34,525,878**	**$29,040,721**
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 846,580	$ 471,943
Accrued expenses	677,722	264,541
Payroll liabilities	233,932	181,330
Preferred stock liability, *Note 11*	1,162,000	—
Deferred revenue	—	106,250
TOTAL CURRENT LIABILITIES	2,920,234	1,024,064
Minority interests	934,438	1,889,190
Commitment and contingencies, *Note 6*.		
STOCKHOLDERS' EQUITY, par value $.001 per share *Note 4*.		
Common stock	34,156	27,997
Preferred stock	—	—
Additional paid-in capital	59,113,369	35,578,580
Accumulated deficit during the development stage	(28,476,319)	(9,479,110)
TOTAL STOCKHOLDERS' EQUITY	30,671,206	26,127,467
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$ 34,525,878**	**$29,040,721**

The accompanying notes are an integral part of these financial statements.

Arrowhead Research Corporation and Subsidiaries
(A Development Stage Company)
Consolidated Statements of Operations

	Year ended September 30, 2006	Year ended September 30, 2005	Year ended September 30, 2004	Period from May 7, 2003 (Date of inception) to September 30, 2006
REVENUE	**$ 595,458**	**$ 590,683**	**$ 196,306**	**$ 1,382,447**
OPERATING EXPENSES				
Salaries	6,471,169	2,848,049	555,802	9,900,020
Consulting	749,720	697,952	624,330	2,097,002
General & administrative expenses	5,034,172	2,676,832	913,653	8,665,720
Research & development	8,582,019	3,793,377	793,354	13,172,125
Goodwill impairment	999,000	—	—	999,000
TOTAL OPERATING EXPENSES	**21,836,080**	**10,016,210**	**2,887,139**	**34,833,867**
OPERATING LOSS	(21,240,622)	(9,425,527)	(2,690,833)	(33,451,420)
OTHER INCOME (EXPENSES)				
Gain on sale of stock in subsidiary	—	2,292,800	—	2,292,800
Loss on disposition of building & equipment	—	—	—	—
Realized & unrealized gain (loss) in marketable securities	315,616	78,761	(12,113)	382,264
Interest income	852,967	151,052	31,341	1,035,360
Other income	—	3,308	—	3,308
Minority interests	1,316,590	1,520,039	251,723	3,088,352
Patents—amortization	(241,760)	(167,321)	—	(409,081)
TOTAL OTHER INCOME (EXPENSES)	2,243,413	3,878,639	270,951	6,393,003
Loss from continuing operations	(18,997,209)	(5,546,888)	(2,419,882)	(27,058,417)
Loss from discontinued operations of Nanotechnica, Inc.	—	(1,234,233)	(108,272)	(1,342,505)
Loss on disposal of Nanotechnica, Inc. (July 2005—September 2005)	—	(73,797)	—	(73,797)
Provision for income taxes	—	—	(800)	(1,600)
NET LOSS	$ (18,997,209)	$ (6,854,918)	$ (2,528,954)	$ (28,476,319)
Loss from continuing operations per share, basic and diluted	(0.59)	(0.30)	(0.22)	
Loss from discontinued operations per share, basic and diluted	—	(0.07)	(0.01)	
Net loss per share, basic and diluted	(0.59)	(0.37)	(0.23)	
Weighted average shares outstanding, basic and diluted	31,953,806	18,725,263	11,002,094	

The accompanying notes are an integral part of these financial statements.

Arrowhead Research Corporation and Subsidiaries
(A Development Stage Company)
Consolidated Statement of Stockholders' Equity
from inception to September 30, 2006

	Common Stock		Additional Paid-in-Capital	Accumulated Deficit during the Development Stage	Totals
	Shares	Amount			
Initial Issuance of Stock:					
Common stock & warrants issued for cash @ $0.001 per unit	3,000,000	$ 3,000	$ —	$ —	$ 3,000
Common stock & warrants issued for cash @ $1.00 per unit	1,680,000	1,680	1,678,320	—	1,680,000
Stock issuance cost charged to additional paid-in capital	—	—	(168,000)	—	(168,000)
Net loss for period from inception to September 30, 2003	—	—	—	(95,238)	(95,238)
Balance at September 30, 2003	**4,680,000**	**4,680**	**1,510,320**	**(95,238)**	**1,419,762**
Exercise of stock options @ $0.20 per share	75,000	75	14,925	—	15,000
Common stock & warrants issued for cash @ $1.00 per unit	475,000	475	474,525	—	475,000
Common stock & warrants issued for marketable securities @ $1.00 per unit	500,000	500	499,500	—	500,000
Stock issuance cost charged to additional paid-in capital	—	—	(96,500)	—	(96,500)
Common stock and warrants issued for cash @ $1.50 per unit	6,608,788	6,609	9,906,573	—	9,913,182
Common stock issued in reverse acquisition	705,529	706	(151,175)	—	(150,469)
Common stock issued as a gift for $1.09 per share	150,000	163	162,587	—	162,750
Common stock and warrants issued as stock issuance cost @ $1.50 per unit	356,229	356	533,988	—	534,344
Stock issuance cost charged to additional paid-in capital	—	—	(991,318)	—	(991,318)
Exercise of stock option @ $0.20 per share	75,000	75	14,925	—	15,000
Exercise of stock options @ $1.00 per share	6,000	6	5,994	—	6,000
Amortization of deferred compensation expense	—	—	175,653	—	175,653
Net loss for the year ended September 30, 2004	—	—	—	(2,528,954)	(2,528,954)
Balance at September 30, 2004	**13,631,546**	**13,645**	**12,059,997**	**(2,624,192)**	**9,449,450**
Exercise of warrants @ $1.50 per share	13,812,888	13,813	20,705,522	—	20,719,335
Exercise of stock options @ $1.00 per share	25,000	25	24,975	—	25,000
Purchase of Insert Therapeutics shares @ $0.28/share	502,260	502	1,999,498	—	2,000,000
Common stock issued for services	12,500	12	49,988	—	50,000
Amortization of deferred compensation expense	—	—	508,513	—	508,513
Change in percentage of ownership in subsidiary	—	—	230,087	—	230,087
Net loss for the year ended September 30, 2005	—	—	—	(6,854,918)	(6,854,918)
Balance at September 30, 2005	**27,984,194**	**27,997**	**35,578,580**	**(9,479,110)**	**26,127,467**
Exercise of stock options	115,794	116	341,421	—	341,537
Stock issued @ $4.88 per share	204,854	205	999,795	—	1,000,000
Common stock issued @ $3.84 per share as payment for application of patents	15,000	15	57,585	—	57,600
Common stock and warrants issued @ $3.50 per unit	5,590,000	5,590	19,539,410	—	19,545,000
Common stock issued to Caltech as payment for legal fees	25,364	25	149,975	—	150,000
Purchase of Calando Pharmaceuticals, Inc.@ 5.17/share	208,382	208	1,077,125	—	1,077,333
Accelerated stock options	—	—	99,139	—	99,139
Amortization of deferred compensation expense	—	—	1,270,339	—	1,270,339
Net loss for the year ended September 30, 2006	—	—	—	(18,997,209)	(18,997,209)
Balance at September 30, 2006	**34,143,588**	**$ 34,156**	**$ 59,113,369**	**$ (28,476,319)**	**$ 30,671,206**

The accompanying notes are an integral part of these financial statements.

Arrowhead Research Corporation and Subsidiaries
(A Development Stage Company)
Consolidated Statements of Cash Flows

	Year ended September 30, 2006	Year ended September 30, 2005	Year ended September 30, 2004	Period from May 7, 2003 (Date of inception) to September 30, 2006
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net Loss	$ (18,997,209)	$ (6,854,918)	$ (2,528,954)	$ (28,476,319)
Loss on disposal of assets				—
Realized/unrealized (gain) loss on investment	(315,616)	(78,761)	12,113	(382,263)
Stock issued as gift to Caltech	—	—	162,750	162,750
Stock issued for professional services	150,000	50,000	—	200,000
Stock issued for in-process research and development	1,077,333	—	—	1,077,333
Compensation expense related to stock option issuance	1,369,478	508,513	175,653	2,053,644
Depreciation & amortization	886,956	644,006	74,740	1,605,792
Impairment of goodwill	999,000	—	—	999,000
Gain on sale of stock in subsidiary		(2,292,800)	—	(2,292,800)
Minority interests	(1,316,590)	(1,520,039)	(251,723)	(3,088,352)
Decrease/increase in:				
Receivables	(40,766)	18,387	(51,835)	(74,214)
Prepaid research expense	(273,954)	272,711	(205,753)	(365,621)
Other prepaid expenses	(170,668)	(104,677)	(40,308)	(315,653)
Deposits	(51,090)	(85,761)	(14,660)	(151,511)
Accounts payable	370,365	(68,795)	248,160	642,418
Accrued expenses	413,182	191,216	39,422	644,619
Deferred revenue	(106,250)	106,250	—	—
Preferred stock liability	1,162,000	—	—	1,162,000
Other liabilities	52,602	115,351	65,979	236,621
NET CASH USED IN OPERATING ACTIVITIES	(14,791,227)	(9,099,317)	(2,314,416)	(26,362,556)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Purchase of marketable securities – US Treasury Bills	(18,575,915)	—	—	(18,575,915)
Purchase of property & equipment	(729,450)	(672,761)	(665,465)	(2,069,791)
Cash paid for interest in Nanotechnica	—	—	(4,000,000)	(4,000,000)
Cash paid for interest in Aonex	(1,000,000)	(2,000,000)	(2,000,000)	(5,000,000)
Cash paid for interest in Insert	—	(4,000,000)	(1,000,000)	(5,000,000)
Cash paid for interest in Calando	(5,000,000)	(2,000,000)	—	(7,000,000)
Cash paid for interest in Unidym	(3,000,000)	(1,000)	—	(3,001,000)
Cash obtained from interest in Nanotechnica	—	—	4,000,000	4,000,000
Cash obtained from interest in Aonex	1,000,000	2,000,000	2,001,250	5,001,250
Cash obtained from interest in Insert		4,075,000	1,304,594	5,379,594
Cash obtained from interest in Calando	5,000,000	2,000,000	—	7,000,000
Cash obtained from interest in Unidym	3,000,000	1,000	—	3,001,000
Proceed from sale of marketable securities – US Treasury Bills	18,888,265	—	—	18,888,265
Proceeds from sale of stock in subsidiary	—	2,424,924	—	2,424,924
Proceeds from sale of investments	80,145	489,768	—	569,913
Payment for patents	(205,067)	(98,373)	—	(303,440)
Restricted cash	—	50,773	—	50,773
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES	(542,022)	2,269,331	(359,621)	1,365,573
CASH FLOWS FROM FINANCING ACTIVITIES:				
Proceeds from issuance of common stock & warrants, net	20,886,537	20,744,335	9,871,415	53,017,287
NET CASH PROVIDED BY FINANCING ACTIVITIES	20,886,537	20,744,335	9,871,415	53,017,287
NET INCREASE IN CASH	5,553,288	13,914,349	7,197,378	28,020,304
CASH AT BEGINNING OF PERIOD	22,467,016	8,552,667	1,355,289	—
CASH AT END OF PERIOD	$ 28,020,304	$ 22,467,016	$ 8,552,667	$ 28,020,304
Supplementary disclosures:				
Interest paid	$ —	$ —	$ —	$ —
Income tax paid	$ 4,000	$ 2,400	$ 800	$ 7,200

SUPPLEMENT NON CASH TRANSACTIONS

On March 23, 2005, Arrowhead purchased 7,375,000 shares of Insert Therapeutic, Inc. common stock from two minority stockholders of Insert for 502,260 newly issued shares of Arrowhead Common Stock valued at $2,000,000 based on the closing market price of Arrowhead Common Stock on NASDAQ on the date of the closing.

On March 31, 2006, Arrowhead purchased 964,000 shares of Calando Pharmaceuticals, Inc. common stock from minority stockholders of Calando for $1,928,000 consisting of 208,382 newly issued shares of Arrowhead Common Stock valued at $1,077,333 plus $850,667 in cash. The 208,382 shares of Arrowhead common stock were valued based on the average closing price of Arrowhead's Common Stock on NASDAQ during the last ten days prior to the date of the closing.

The accompanying notes are an integral part of these financial statements.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements
September 30, 2006

NOTE 1: ***ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES***

Nature of Business

Arrowhead Research Corporation is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics, and energy. Nanotechnology involves the investigation and design of materials and devices at the atomic and molecular levels. The Company works closely with universities to source early stage deals and to generate rights to intellectual property. Arrowhead operates four majority owned Subsidiaries commercializing nanotech products and applications and funds a number of prototype development efforts in university labs in exchange for the exclusive right to license technology developed in such labs.

Currently, operations conducted by Arrowhead and its Subsidiaries consist primarily of technological research and development. It could take a long time to bring products to market, and success is uncertain. We can give no assurances that research and development being conducted by Arrowhead or any of its Subsidiaries will generate any revenue or profits.

Arrowhead is incorporated in Delaware and its principal executive offices are located in Pasadena, California.

The Company has had no revenue from product sales since its inception. The Company has had some revenue from licensing and from grants.

Summary of Significant Accounting Policies

Basis of Presentation—The presentation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Principles of Consolidation—The consolidated financial statements of the Company include the accounts of Arrowhead and its Subsidiaries Calando Pharmaceuticals, Inc. (“Calando”), Insert Therapeutics, Inc. (“Insert”) and Unidym, Inc. (formally known as NanoPolaris, Inc.) and Aonex Technologies, Inc. (“Aonex”). Nanotechnica, Inc. (“Nanotechnica”) is included in the results as Loss from Discontinued Operations. All significant intercompany accounts and transactions are eliminated in consolidation and minority interests were accounted for in the consolidated statements of operations and the balance sheets.

Use of Estimates—The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the accompanying financial statements. Significant estimates made in preparing these financial statements include the allowance for doubtful accounts, deferred tax asset valuation allowance, patents, goodwill, minority—interest common stock and useful lives for depreciable and amortizable assets. Actual results could differ from those estimates.

Cash and Cash Equivalents—For purposes relating to the statement of cash flows, the Company considers all liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

Concentration of Credit Risk—The Company maintains checking accounts for Arrowhead and separate accounts for each subsidiary at one financial institution. These accounts are insured by the Federal Deposit

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

Insurance Corporation (FDIC), up to $100,000. The Company has a portion of its excess cash in three "Diversifier Accounts" at the same financial institution. The "Diversifier Accounts" invest in other bank issued CD's in amounts of $100,000, each of which are fully insured by FDIC. The Company has a Wealth Management Account at the same financial institution which invests in higher yield money market accounts and in government securities. At September 30, 2006, the Company had uninsured cash deposits totaling $18,691,214. The Company has not experienced any losses in such accounts and management believes it has placed its cash on deposit with financial institutions that are financially stable.

Property and Equipment—Property and equipment are recorded at cost. Depreciation of property and equipment is recorded on the straight-line method over the respective useful lives of the assets ranging from 3 to 7 years. Leasehold improvements are amortized over the life initial term of the leases.

Intellectual Property—At September 30, 2006, intellectual property consists of patents and patent applications licensed or purchased in the gross amount of $570,983. The purchased patent applications are being amortized over three years unless a patent is determined to have no foreseeable commercial value and is written down to $1. During fiscal 2006, it was determined that patents and patent applications covering CFIT technology, useful for measuring the force between DNA and small molecule drugs had no foreseeable commercial value and $44,497 was expensed during the fiscal year reducing the patent's carrying value to $1. A portion of the Company's investment in Insert has been allocated to the patent held by Insert. The Insert patent, in the gross amount of $3,301,190, is being amortized over the life of this patent. As of September 30, 2006, the Insert patent has 146 months until its expiration. The accumulated amortization of patents totaled $517,686 at September 30, 2006. The majority of the Nanotechnica patents were transferred from Nanotechnica to Arrowhead in June 2005. The transferred patents were returned to the California Institute of Technology in January 2006.

Goodwill—Goodwill represents the excess of cost over the value of net assets of businesses acquired pursuant to Statement of Financial Accounting Standards ("SFAS") No. 141, "Business Combinations" and is carried at cost unless write-downs for impairment are required. The Company evaluates the carrying value of goodwill on an annual basis and whenever events and changes in circumstances indicate that the carrying amount may not be recoverable, an adjustment is then made. The goodwill of $999,000 for Aonex was written down to zero as of September 30, 2006. While Aonex remains an operating subsidiary, it has become clear that Aonex needs to team with a larger partner. Aonex has several candidates with which it is exploring possibilities. However, the goodwill associated with Aonex can not be supported without a partner and therefore management believes that it is impaired and should be written off. Goodwill at September 30, 2006 consisted of $963,150 for Calando.

Revenue Recognition—The Company recognizes license fee revenue on a straight-line basis over the term of the license. Development fees, milestone fees, collaboration fees and grant revenues are recognized upon the completion and payment of services or achievement of the mutually agreed milestones.

Research and Development—Costs and expenses that can be clearly identified as research and development are charged to expense as incurred in accordance with FASB statement No. 2, "Accounting for Research and Development Costs."

Earnings (Loss) per Share—Basic earnings (loss) per share is computed using the weighted-average number of common shares outstanding during the period. Diluted earnings (loss) per share is computed using the weighted-average number of common shares and dilutive potential common shares outstanding during the period. Dilutive potential common shares primarily consist of stock options issued to employees and consultants

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

and warrants of the Company. For the years ended September 30, 2006 and 2005 respectively, the effect of options was anti-dilutive.

New Accounting Standards

In June 2006, the Financial Accounting Standards Board (FASB) issued Interpretation No. 48, *"Accounting for Uncertainty in Income Taxes"*, ("FIN 48"). This Interpretation clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, *"Accounting for Income Taxes."* This Interpretation prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This Interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company does not expect the adoption of FIN 48 to have a material impact on its financial statements.

In May 2005, the FASB issued SFAS No. 154, *"Accounting Changes and Errors Corrections,* a replacement of APB Opinion No. 20, *Accounting Changes,* and FASB Statement No. 3, *Reporting Accounting Changes in Interim Financial Statement."* SFAS 154 changes the requirements for the accounting for and reporting of a change in accounting principle. Previously, most voluntary changes in accounting principles required recognition via a cumulative effective adjustment within net income of the period of the change. SFAS 154 requires retrospective application to prior periods' financial statements, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005; however, the Statement does not change the transition provisions of any existing accounting pronouncements. The Company does not believe this pronouncement will have a material impact in its financial position, results of operations or cash flows.

In February 2006, the FASB issued FAS 155 (SFAS No. 155), Accounting for Certain Hybrid Financial Instruments—an amendment of FASB Statements No. 133 and 140. This statement permits fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that would otherwise have to be accounted for separately. The new statement also requires companies to identify interests in securitized financial assets that are freestanding derivatives or contain embedded derivatives that would have to be accounted for separately, clarifies which interest-and principal-only strips are subject to Statement 133, and amend Statement 140 to revise the conditions of a qualifying special purpose entity due to the new requirement to identify whether interests in securitized financial assets are freestanding derivatives or contain embedded derivates. This statement is effective for all financial instruments acquired or issued after the beginning of an entity's first fiscal year that begins after September 15, 2006, but can be adopted early as long as financial statements for the fiscal year in which early adoption is elected, including interim statements, have not yet been issued. The adoption of this accounting pronouncement is not expected to have a material effect on our consolidated financial statements.

In March 2006, the FASB issued FAS 156 (SFAS No. 156), Accounting for Servicing of Financial Assets— an amendment of FASB Statement No. 140. This standard clarifies when to separately account for servicing rights, requires servicing rights to be separately recognized initially at fair value, and provides the option of subsequently accounting for servicing rights at either fair value or under the amortization method. The standard is effective for fiscal years beginning after September 15, 2006 but can be adopted early as long as financial statements for the fiscal year in which early adoption is elected, including interim statements, have not yet been issued. The adoption of this accounting pronouncement is not expected to have a material effect on our consolidated financial statements.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

In September 2006, the FASB issued FAS 157 (SFAS No. 157), Fair Value Measurements. This standard defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. This statement is effective for financial statements issued for fiscal years beginning after November 15, 2007. Earlier application is encouraged. The adoption of this accounting pronouncement is not expected to have a material effect on our consolidated financial statements.

In September 2006, the FASB issued SFAS No. 158, Employers, Accounting for Defined Benefit Pension and Other Postretirement Plans—an amendment of FASB Statements No. 87, 88, 106 and 132(R). SFAS 158 improves financial reporting by requiring an employer to recognize the overfunded or underfunded status of a defined benefit pension and a postretirement plan as an asset or liability in its statement of financial position. The changes in funded status in that year are required to go through other comprehensive income. Additional disclosure will also be required on certain effects on net periodic benefit cost for the next fiscal year that arise from delayed recognition of the gains or losses, prior service costs or credits, and transition asset or obligation. SFAS 158 is effective for fiscal years ending after December 15, 2006 for recognition, as related to disclosure provisions, and it is effective for fiscal years ending after December 15, 2008 for measurement date provisions. The adoption of this accounting pronouncement is not expected to have a material effect on our consolidated financial statements.

NOTE 2: ***BASIS OF CONSOLIDATION***

The consolidated financial statements for the years ended September 30, 2006 and 2005 respectively, include the accounts of Arrowhead and its Subsidiaries, Insert, Calando, Unidym, Aonex and Nanotechnica (which a majority of its shareholders voted to dissolve on June 3, 2005). All significant intercompany accounts and transactions are eliminated in consolidation and minority interests were accounted for in the consolidated statements of operations and the balance sheets.

In January 2004, the shareholders of a private California corporation entered into a share exchange with the Company that resulted in a change of control of the Company. The share exchange transaction was accounted for as a "reverse acquisition," as though the California corporation acquired the Company through a purchase of the net assets of the Company with no goodwill being recognized. Therefore, the financial statements of the Company are deemed to be those of the California corporation from its inception on May 7, 2003 and reflect the consolidated assets and operations from and after January 12, 2004.

NOTE 3. ***INVESTMENT IN SUBSIDIARIES***

Insert Therapeutics, Inc.

On June 4, 2004, Arrowhead purchased 24,496,553 shares of Series B Preferred Stock of Insert, a Pasadena, California based company for $1,000,000. The Series B Preferred Stock allows Arrowhead to elect a majority of Insert's Board of Directors. On March 29, 2005, Arrowhead exchanged 4,000,000 shares of its Series B Preferred Stock for 4,000,000 shares of Series C Preferred Stock. The Series C Preferred Stock has a liquidation preference senior to Series B Preferred Stock.

On March 23, 2005, Arrowhead purchased 7,375,000 shares of Insert common stock from two minority stockholders of Insert for 502,260 newly issued shares of Arrowhead Common Stock. The Arrowhead Common Stock was valued at $2,000,000 based on the closing market price of Arrowhead Common Stock on NASDAQ on March 23, 2005.

On June 30, 2005, Arrowhead sold 2,640,000 shares of its Series C Preferred Stock to qualified investors for $1.00 per share. Net proceeds of the sale were $2,424,924.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

As of September 30, 2006, Arrowhead owns 68.3% of the outstanding, voting securities of Insert. Since its initial investment on June 4, 2004, Arrowhead has provided $4,000,000 of additional capital to Insert.

As of September 30, 2006, Arrowhead had loans outstanding to Insert totaling $2,300,000, bearing simple interest at 6 percent, while Insert finalized its financing which closed in October 2006. As a result of the new financing, Insert paid back all advances and accrued interest owed to Arrowhead in October 2006. *See Note 11, Subsequent Events for further details*.

As a result of the October 2006 financing, Arrowhead owns 64.5% of the outstanding, voting securities of Insert. *See Note 11, Subsequent Events for further details*.

Calando Pharmaceuticals, Inc.

On February 22, 2005, Arrowhead purchased 4,000,000 shares of common stock in a newly-formed entity, Calando, for $250,000. Calando and Insert have entered into a license agreement giving Calando exclusive rights to Insert's technology for the delivery and therapeutic use of RNAi in Calando's research, development and business efforts. A voting agreement between Arrowhead and certain shareholders in Calando gives the Company the right to designate a majority of Calando's Board of Directors. Arrowhead has provided $7,000,000 in additional capital to Calando, including $5,000,000 contributed during the fiscal year ended September 30, 2006, including $3,000,000 paid for Series A Preferred Stock.

On March 31, 2006, Arrowhead purchased 5,000,000 shares of Calando's Series A Preferred Stock for $3,000,000. The preferred shares are convertible to common stock on a one to one basis, are entitled to a non-cumulative dividend of eight percent (8%) and have a liquidation preference over the common stock. Concurrent with the Series A purchase, Arrowhead purchased 964,000 shares of common stock for $2.00 per share from minority shareholders. The $1,928,000 payment for the purchase of Calando common stock consisted of $850,667 in cash and 208,382 in shares of Arrowhead common stock with an estimated value of $1,077,333 or $5.17 per share based on the average closing price of Arrowhead's common stock during the last ten days prior to the transaction closing. At March 31, 2006, the $850,667 cash portion of the payment was included in accounts payable until payment was made on April 10, 2006.

On March 31, 2006, Arrowhead entered into an Agreement with Calando to provide up to $7,000,000 of additional capital to Calando subject to the attainment of certain milestones in its preclinical testing, clinical testing and related approval processes. Should Arrowhead elect not to make the additional capital contributions, the preferred stock conversion right of one to one will be adjusted to approximately three to one.

On August 14, 2006 Arrowhead purchased 240,000 shares of Calando common stock from a minority shareholder for an aggregate purchase price of $480,000 or $2.00 per share.

As a result of the transactions described above, Arrowhead increased its ownership from 58.2% to 85.1% of the outstanding, voting stock of Calando. Arrowhead has direct ownership of 82.4% of the outstanding, voting stock of Calando and indirectly, through Insert, controls another 2.7% of the outstanding, voting stock. Two of Calando's founders have warrants for Calando common stock that were exercised in October 2006 reducing Arrowhead's direct and indirect ownership from 85.1% to approximately 69.9%. *See Note 11, Subsequent Events for further details.*

The Company believes in commercial potential of RNAi in general and in Calando Pharmaceuticals in particular. This belief is supported by the recently announced purchase of Sirna by Merck for $1.1 billion and the award of the Nobel Prize for the discovery of RNAi. This belief is further evidenced by the Company's decision

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

to invest an additional $3 million in Calando in March 2006 and commit an additional $7 million based upon Calando achieving certain milestones. The Company does not believe there has been impairment in Calando's goodwill.

At the end of fiscal 2006, the Company finalized its purchase accounting for its acquisition of a portion of Calando's minority interest. Arrowhead purchased 1,224,000 shares of Calando's common stock from various minority shareholders for an aggregate price of $2,448,000. The purchases were made through a series of transactions during the year. Payment for the shares included a total of $1,370,667 in cash and $1,077,333 of Arrowhead common stock. The Interpretations of FASB No. 141, "Business Combinations" do not provide specific guidance in this situation, the Company has elected to take a conservative approach and account for the acquisition of the Calando minority interests as a purchase of in-process research and development. Under current agreements, the minority shareholders are not required to fund a proportionate share of the operating losses. Therefore, the Company has also elected to assume 100% of the operating loss with respect to future contributions to majority owned subsidiaries and newly issued shares, and does not allocate the operating loss to the minority shareholders for their proportionate ownership. Also, rather than allocate any of the purchase price to goodwill at September 30, 2006, the Company has recorded the acquisition of the additional interest as an in-process research and development expense to account for the acquisition of 1,224,000 shares from Calando's minority shareholders. As a result, $2,448,000 was recorded as acquired in-process research and development and is included in Research and Development expense for the fiscal year ended September 30, 2006.

Unidym, Inc. (formally NanoPolaris, Inc)

On April 4, 2005, Arrowhead founded NanoPolaris as a wholly owned subsidiary of Arrowhead. NanoPolaris was initially capitalized with $1,000.

On June 13, 2006, NanoPolaris acquired substantially all of the net assets and the name of Unidym, a Los Angeles company that develops carbon nanotube-based electronics. The net assets acquired include Unidym's intellectual property, prototypes, and equipment, for a purchase price consisting of $25,000 in cash paid for laboratory equipment, the assumption of $75,000 of liabilities and shares of NanoPolaris common stock, with an estimated value of $154,350, equal to 11.9% (10% on a fully diluted basis) of NanoPolaris' outstanding voting stock, at closing. At the closing, Arrowhead Research invested $3,000,000 in NanoPolaris and committed up to $4 million of additional capital to NanoPolaris, with $2 million to be paid on the first anniversary of closing and the remaining $2,000,000 to be paid on the second anniversary of the closing. In August 2006, NanoPolaris changed its name to Unidym, Inc.

Aonex Technologies, Inc.

On April 20, 2004, Arrowhead acquired 1,000,000 shares of Series A Preferred stock in a newly-formed entity, Aonex for $2,000,000. The 1,000,000 shares of Series A Preferred stock represent 80% of the outstanding, voting shares of Aonex and allow Arrowhead to elect a majority of Aonex' Board of Directors. To date, Arrowhead provided $3,000,000 of additional capital to Aonex, including $1,000,000 during the year ended September 30, 2006.

As of September 30, 2006, after analyzing the existing competition and scale required for success in its core markets, Aonex has opted to seek an established company with which to partner in its future commercialization efforts. This change of strategy will likely limit the return that Arrowhead is able to achieve on its investment in Aonex. Therefore, the Company has elected to write down the goodwill attributable to its investment in Aonex. The consolidated statement of operations includes a $999,000 impairment expense related to Aonex.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

As of September 30, 2006, Arrowhead had loans outstanding to Aonex totaling $250,000. Each loan bears simple interest at 6 percent.

Discontinued Operation

Nanotechnica, Inc.

In the third quarter of FY 2005, the Company determined that the progress being made by Nanotechnica in commercializing microfluidics technology was not satisfactory and the market potential was uncertain. Therefore, on June 3, 2005, a majority of the stockholders of Nanotechnica voted to dissolve the company. Because of Arrowhead's liquidation preference as Series A Preferred Stockholders, $2.8 million in cash was remitted to Arrowhead along with $213,000 of the other remaining assets. Arrowhead has discontinued development efforts related to microfluidics and returned the applicable patents to Caltech. The losses incurred by Nanotechnica are segregated on the Consolidated Statement of Operations as Loss from Operation of Discontinued Nanotechnica, Inc. Nanotechnica had no revenue in either FY 2004 or FY 2005.

NOTE 4: *STOCKHOLDERS' EQUITY*

On January 26, 2005, after stockholder approval, the Company's Certificate of Incorporation was amended to increase the number of authorized shares of the Company to a total of 75,000,000 shares, consisting of 70,000,000 authorized shares of common stock, par value $0.001, and 5,000,000 shares of authorized preferred stock. The number of authorized shares of the Company, prior to this Amendment, was 60,000,000 shares, consisting of 50,000,000 shares of authorized common stock and 10,000,000 shares of authorized preferred stock.

At September 30, 2006, 34,143,588 shares of common stock were outstanding. At September 30, 2006, 1,712,500 shares and 5,000,000 shares were reserved for issuance upon exercise of options granted under Arrowhead's 2000 Stock Option Plan and 2004 Equity Incentive Plan, respectively. Through September 30, 2006, options to purchase 1,712,500 shares were outstanding under the 2000 Stock Option Plan and options to purchase 2,684,539 shares were outstanding under the 2004 Equity Incentive Plan.

In connection with the formation of the Company and two private placements, the Company issued approximately 13.8 million common stock purchase warrants, which were called on May 4, 2005. Substantially all of the outstanding warrants were exercised by June 2005, and the Company received approximately $20.7 million in total exercise proceeds. The warrants not exercised were redeemed by the Company for $0.001 per share.

On January 24, 2006, the Company completed a private placement of 5,590,000 shares of restricted common stock at $3.50 per share that generated $19.6 million in total proceeds. The purchasers received warrants, exercisable after July 25, 2006, to purchase an additional 1,397,500 shares of restricted common stock at $5.04 per share. The exercise price of the warrants at closing was at a premium to the closing market price of the common stock on January 24, 2006. The warrants may be called by the Company any time after July 25, 2006 if the closing price of the Company's Common stock is $6.50 or above for the previous 30 trading days.

The following table summarizes information about warrants outstanding at September 30, 2006:

Exercise price	Number of Warrants	Weighted Average Remaining Life in Years	Weighted Average Exercise Price
$5.04	1,397,500	9.3	$ 5.04

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

NOTE 5: *LEASES*

The Company leases the following facilities:

	Lab/Office Space	Monthly Rent	Lease Commencement	Lease Term
Arrowhead				
Pasadena (1)	7,388 sq ft	$ 16,992	March 1, 2006	62 Months
Pasadena	3,653 sq ft	$ 6.575	January 10, 2005	26 Months
New York (2)	130 sq ft	$ 3,484	September 15, 2006	12 Months
Aonex	4,000 sq ft	$ 7,211	July 1, 2004	48 Months
Calando	7,000 sq ft	$ 12,944	June 1, 2006	18 Months
Insert	4,354 sq ft	$ 11,761	June 1, 2006	36 Months

(1) Arrowhead leased new corporate office space in Pasadena, which it occupied beginning March 1, 2006. The new lease agreement provides Arrowhead with two months free rent which was recorded as a deferred liability and is being amortized over the life of the lease. The lease for the prior corporate office space terminated on February 28, 2006.

(2) In September, Arrowhead opened an office in New York City and has one employee working out of that office. In November 2006, the lease was renewed for 12 months retroactive to September 15, 2006.

The Company has no plans to own any real estate and expects all facility leases will be operating leases.

At September 30, 2006, the future minimum commitments remaining under leases are as follows:

Twelve months ending September 30	Facilities Leases	Equipment Leases
2007	$664,949	$ 19,222
2008	$452,782	$ 7,550
2009	$315,411	$ 3,460
2010	$219,054	$ 0
2011	$129,290	$ 0

Rent expense for the years ended September 30, 2006, 2005 and 2004 was $702,581, $455,241 and $83,829 respectively. From inception to date, rent expense has totaled $1,140,991.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

NOTE 6: ***COMMITMENTS AND CONTINGENCIES—SUBSIDIARIES AND SPONSORED RESEARCH***

Subsidiaries

As of September 30, 2006, Arrowhead held a majority of the voting stock of the following four operating Subsidiaries (the "Subsidiaries"):

Subsidiary	% Ownership[1]	Technology/Product Focus
Insert Therapeutics, Inc. *acquired June 4, 2004*	68.3%[2]	Nano-engineered drug delivery system, in clinical trials with first anti-cancer compound
Calando Pharmaceuticals, Inc. *founded February 20, 2005*	85.1%[3]	Nano-engineered RNAi therapeutics
Unidym,Inc. (formerly NanoPolaris) *founded April 4, 2005*	88.1%	Developing strategic opportunities for the commercialization of nanotube-based products
Aonex Technologies, Inc. *founded April 20, 2004*	80.0%	Semiconductor nanomaterials with initial emphasis on high efficiency solar cells

1) Each Subsidiary has an option plan to help motivate and retain employees. Insert has 4,336,672 outstanding warrants, primarily issued in connection with a financing event that closed in October 2006. As of December 8, 2006, assuming all options in each Subsidiary plan were awarded and exercised and all warrants were exercised, the Company would own approximately 57.2% of Insert, 63.9% of Calando, 74.0% of Unidym and 50.0% of Aonex as of December 8, 2006.
2) On October 25, 2006, Arrowhead was the lead investor in a private financing aggregating approximately $10 million for Insert. After giving effect to this financing, Arrowhead's ownership percentage is 64.5%. *See Note 11, Subsequent Events*.
3) Arrowhead has direct ownership of 82.4% of the outstanding, voting stock of Calando and indirectly, through Insert, controls another 2.7% of the outstanding, voting stock. On October 31, 2006, two of the founders of Calando exercised warrants, bringing Arrowhead's ownership to approximately 69.9%. *See Note 11—Subsequent Events*.

Arrowhead entered into an agreement to provide future additional capital to Calando and to Unidym, which funding agreements give Arrowhead the right to provide additional capital to each such Subsidiary or to forfeit a specified portion of its interest in lieu of additional future funding.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

The following table summarizes the terms and status of these additional capital contributions:

Subsidiary	Total Capital Assuming all Contributions Made	Future Capital Contributions	Time for Additional Capital Contributions
Calando Pharmaceuticals, Inc.	$ 12,000,000	$7,000,000	18 months (1)
Unidym, Inc. (previously known as NanoPolaris)	$ 7,000,000	$4,000,000	18 months (2)

(1) Under its Agreement to Provide Additional Capital with Calando, Arrowhead has the right to provide Calando up to $7,000,000 in additional capital based upon the achievement of certain development milestones. The first of these milestone payments for $1,000,000 is projected to be due during the second quarter of fiscal 2007. The second milestone payment of $3,000,000 is projected to be due during the fourth quarter of fiscal 2007. The last of these milestone payments for $3,000,000 is projected to be due during the third quarter of fiscal 2008.

(2) Under its Agreement to Provide Additional Capital with Unidym, Arrowhead has the right to provide Unidym up to $4,000,000 in additional capital. Milestone payments of $2,000,000 each are payable in June 2007 and in June 2008.

Sponsored Research

Sponsored Research expense for the years ended September 30, 2006, 2005 and 2004 was $1,170,383, $944,425 and $364,378 respectively.

Sponsored Research Agreement—University of Florida

The terms of the sponsored research agreement between Arrowhead and the University of Florida ("UF") are summarized in the following table:

Research Project	Period covered	Total estimated project cost	Annual Cost	Amount paid as of September 30, 2006	Prepaid Amt as of September 30, 2006
Development of flexible electronic devices—Thin film transistors (Dr. Andrew Rinzler)	Jul. 1, 2006 – Jun 30, 2008 (2 years)	$ 647,533	$ 323,767	$ 225,422	$ 144,481

Sponsored Research Agreement—Duke University

The terms of the sponsored research agreement between Arrowhead and Duke University ("Duke") are summarized in the following table:

Research Project	Period covered	Total estimated project cost	Annual Cost	Amount paid as of September 30, 2006	Prepaid Amt as of September 30, 2006
CVD Growth of Well-Aligned Individual Single Walled Carbon Nanotubes (Dr. Jie Liu)	Dec. 1, 2005 – Nov. 30, 2007 (2 years)	$ 677,651	$ 338,826	$ 435,894	$ 153,539

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

Sponsored Research Agreements—California Institute of Technology

The terms of the sponsored research agreement between Arrowhead and the California Institute of Technology ("Caltech") is summarized in the following table:

Research Project	Period covered	Total estimated project cost	Annual Cost	Amount paid as of September 30, 2006	Prepaid Amt as of September 30, 2006
Drug Discovery & Diagnostics (Dr. C. Patrick Collier)	Oct. 1, 2003 – Sept. 30, 2008 (5 years)	$1,393,806	$ 292,540	$ 808,726	$ 0

During the second quarter of FY 2005, the terms of this agreement were amended to allow for quarterly rather than annual funding for this research project. The terms of the agreement calls for funding, as indicated above, to subsidize all direct and indirect costs incurred in the performance of the research, not to exceed total estimated project cost. If any of this agreement is extended, the dollar value of costs that will be reimbursed may be modified by mutual agreement to cover additional work performed during the extension. This research agreement is terminable by either party on 60-days written notice with an obligation to satisfy outstanding obligations at the time of cancellation.

As of September 30, 2006, the Company had paid to Caltech a total $808,726 for research and development costs under this research agreement. The cost is amortized over the time period of this agreement and relates to technology development and application research.

In January and July of 2006, Insert made two contributions of $50,000 each to Caltech for laboratory research in the field of synthetic polymers for use primarily in drug delivery applications. Caltech has granted Insert an exclusive license to the patent rights and improvements in the field of synthetic polymers for drug delivery.

Sponsored Research Agreement—Stanford University

Arrowhead has exclusively licensed intellectual property from Stanford University for a nanotech device designed to control the behavior of stem cells. Arrowhead has agreed to fund additional research involving the device at Stanford in exchange for the right to exclusively license and commercialize the technology.

Research Project	Period covered	Total estimated project cost	Annual Cost	Amount paid as of September 30, 2006	Prepaid Amt as of September 30, 2006
Microchip-based Biological Signal Delivery (Dr. Nicholas Melosh)	Jun. 1, 2005 – May 31, 2007 (2 years)	$ 600,000	$ 300,000	$ 460,000	$ 60,000

Arrowhead makes quarterly payments of $70,000 each, over the remainder of the agreement term.

Sponsored Research Agreement—Lucile Packard Children's Hospital

In FY 2005, Arrowhead agreed to contribute $100,000 to Stanford's Lucile Packard Children's Hospital to fund a project to identify how new technologies, such as nanotechnology and stem cell technology, can address

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

existing clinical needs. This amount was paid at a rate of $25,000 per quarter commencing July 1, 2005 through June 30, 2006. The full $100,000 was contributed.

NOTE 7. ***STOCK OPTIONS***

Stock-Based Compensation—Arrowhead has two plans that provide for the granting of equity-based compensation. Under the 2000 Stock Option Plan, 1,712,500 shares of Arrowhead's common stock are reserved for issuance upon exercise of non-qualified stock options. The 2004 Incentive Plan reserves 5,000,000 shares for the grant of stock options, stock appreciation rights, restricted stock awards and performance unit/share awards by the Board of Directors to employees, consultants and others expected to provide significant services to Arrowhead. The Company's stockholders approved the 2004 Equity Incentive Plan on January 20, 2005. Pursuant to this approval, no further grants may be made under the 2000 Stock Option Plan. During the year ended September 30, 2006, 2,235,000 options were granted under the 2004 Equity Incentive Plan.

Prior to October 1, 2005, Arrowhead accounted for employee stock option grants in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees and Related Interpretations" (APB 25), and has adopted the "disclosure only" alternative described in Statement of Financial Accounting Standards (SFAS) No. 123, Accounting for Stock-Based Compensation, amended by SFAS No. 148 "Accounting for Stock Based Compensation-Transition and Disclosure."

Effective October 1, 2005, the Company accounts for its stock options under SFAS 123R, using the retrospective method. The retrospective application of SFAS 123R results in an increase of the net losses reported in FY 2005 and FY 2004 of $229,025 and $33,081, respectively. The accumulated deficit during the development stage as of September 30, 2005 increased by $262,106, from a loss of $9,217,004 to $9,479,110 as a result of the retrospective application of SFAS 123R.

The following tables summarize information about stock options:

	Number of Options Outstanding	Weighted-Average Exercise Price Per Share
Balance at May 7, 2003	—	—
Granted	150,000	0.20
Canceled	—	—
Exercised	—	—
Balance at September 30, 2003	150,000	0.20
Granted	1,570,000	1.00
Canceled	(25,000)	1.00
Exercised	(156,000)	0.23
Balance at September 30, 2004	1,539,000	1.00
Granted	2,095,000	2.53
Canceled	(170,000)	1.00
Exercised	(25,000)	1.00
Balance at September 30, 2005	3,439,000	1.93
Granted	2,235,000	4.79
Canceled	(1,161,167)	4.27
Exercised	(115,794)	2.95
Balance at September 30, 2006	4,397,039	2.74
Exercisable at September 30, 2006	2,103,382	

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

Exercise Prices	Number of Options	Weighted Average Remaining Life in Years	Weighted Average Exercise Price
$1.00 – 6.36	4,397,039	8.5	$ 2.74

At September 30, 2006, there were 2,248,667 options available for future grants under the 2004 Equity Incentive Plan.

The fair value of the options granted by Arrowhead for the year ended September 30, 2006 is estimated at $4,701,098.

The aggregate fair value of options issued by Aonex, Calando, Unidym and Insert for FY 2006 is estimated at $102,413.

The fair value of options was estimated at the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions: dividend yield of 0%, expected volatility of 30% to 50%, risk-free interest rate of 4.77% to 5.25%, and expected life of five years. The weighted-average fair value of options granted by Arrowhead for the year ended September 2006 was estimated at $2.10 and the weighted-average exercise price was estimated at $4.79.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which do not have vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

NOTE 8. ***INCOME TAXES***

The Company utilizes SFAS No. 109, "Accounting for Income Taxes," which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns.

Under this method, deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year-end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized. The provision for income taxes represents the tax payable for the period and the change during the period in deferred tax assets and liabilities.

For the years ended September 30, 2006, 2005 and 2004, the Company had consolidated losses of $18,997,209, $6,854,918 and $2,528,954 respectively. The losses result in a deferred income tax benefit of approximately $7,504,000 for FY 2006, $2,617,000 for FY 2005 and $986,000 for FY2004, offset by an increase in the valuation allowance for the same amount for Arrowhead. Since the Company is a development stage company, management has chosen to take a 100% valuation allowance against the tax benefit until such time as management believes that its projections of future profits as well as expected future tax rates make the realization of these deferred tax assets more-likely-than-not. Significant judgment is required in the evaluation of deferred tax benefits and differences in future results from our estimates could result in material differences in the realization of these assets.

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

NOTE 9: ***SEGMENT AND GEOGRAPHIC REPORTING***

The Company accounts for segments and geographic product and licensing revenues in accordance with SFAS No. 131, "Disclosure about Segments of an Enterprise and Related Information." The Company's operates in a single segment, nanotechnology.

Grant and collaborations agreements are not considered to be product or licensing revenue as the Plan of Operations for the Company is to sell products and/or license technology. The grant revenue is a way to fund and to offset development costs.

NOTE 10. ***RELATED PARTY TRANSACTIONS***

In fiscal years 2006 and 2005, there were no related party transactions.

In FY 2004 there were two related party transactions.

(1) James M. Phillips, Jr., director and secretary of the Company was paid a monthly retainer of $4,500 per month for legal services. Mr. Phillips retired and resigned from all positions with the Company, including his position as a director in August 2004. For the year ended September 30, 2004, Mr. Phillips was paid a total of $51,833 under this arrangement.

(2) Robert Stewart acted on behalf of the Company in connection with its private placement of securities in January 2004. In connection with this work, Robert Stewart received approximately $130,550 and warrants to purchase 87,033 shares at an exercise price of $1.50 from the Company. Robert Stewart is the son of R. Bruce Stewart, the Company's Chief Executive Officer.

NOTE 11. ***SUBSEQUENT EVENTS***

On October 12, 2006, the Company announced that Edward Jacobs will be appointed Chief Executive Officer & President of its majority-owned subsidiary, Insert Therapeutics on January 1, 2007. Until then, Mr. Jacobs will serve as a consultant to Insert. Mr. Jacobs is currently the Chief Operating Officer of SuperGen (NASDAQ:SUPG). During the next three months, Mr. Jacobs will be winding down his affairs with SuperGen while coming up to speed with Insert. During his seven-year tenure at SuperGen, Mr. Jacobs served in a number of positions, which culminated with him being named as Chief Operating Officer. Prior to SuperGen, Mr. Jacobs served as President and Chief Executive Officer of ETEX, a Cambridge, MA-based biomaterials and drug-delivery company that was acquired by Medtronics. Also prior to SuperGen, Mr. Jacobs served as Senior Vice President, Commercial Operations at Sequus Pharmaceuticals, Inc., which was acquired by Alza for an aggregate of $800 million. Prior to his association with Sequus, Mr. Jacobs served in a variety of senior management positions with pharmaceutical companies, including as CEO of Trilex (acquired by Titan Pharmaceuticals), CEO of Transplant Therapeutics Inc., Vice President and General Manager of Syncor International, Vice President of NeoRx Corporation and Business Director of Pharmacia (a/k/a Adria Labs, Inc.).

On October 26, 2006 the Company announced that majority owned subsidiary, Insert Therapeutics, Inc., completed a $10 million private placement with a select group of accredited investors, including a $5 million follow-on investment by Arrowhead itself. The private placement offered units at $1.00 per unit, each unit consisting of a share of Series C-2 Preferred Stock and 40% warrant coverage to purchase shares of Series D Preferred Stock at an exercise price of $1.25 per share. The warrants are callable by Insert after July 1, 2007. Arrowhead owns 64.5% of the 53 million shares of outstanding common and preferred stock of Insert. As of

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

September 30, 2006, Insert had received $1,162,000 in advance of completing the subscription agreements as part of the $10 million private placement. The $1,162,000 is recorded on the balance sheet as Preferred Stock Liability as of the fiscal year end.

On October 27, 2006, Insert repaid Arrowhead the $2,500,000 of working-capital loans, of which $2,300,000 was outstanding at September 30, 2006 and $42,501 of 6-percent simple interest incurred while the loans were outstanding.

On October 31, 2006, two founders of Calando exercised warrants for 2.7 million shares bringing the Company's ownership down to approximately 69.9%. These warrants were the only warrants for Calando.

On December 12, 2006, the Board adopted an Executive Incentive Plan (the "Incentive Plan") designed to provide incentive bonus compensation to the Company's executive officers if a Subsidiary engages in a liquidation event yielding net proceeds to the Company, with the total bonus pool capped at 10% of the actual net proceeds received by the Company in cash or securities in a liquidation event. The Incentive Plan gives the Board ultimate authority over discretionary bonus payments, after recommendation by the Company's sitting Chief Executive Officer. The Incentive Plan defines a liquidation event as (i) any sale, transfer or issuance or series of sales, transfers and/or issuances of capital stock or other voting equity of the Subsidiary by the Subsidiary or any holders thereof (whether by merger, recapitalization, public offering or otherwise) which results in any person or group of persons (as the term "group" is used under the Securities Exchange Act of 1934, as amended) other than the Company and its affiliates owning a majority of the Subsidiary's outstanding voting equity, and (ii) any sale or transfer of all or substantially all of the assets of a Subsidiary (including any securities held by the Company and the Subsidiary), taken as a whole, in any transaction or series of transactions (whether by merger, recapitalization, public offering or otherwise). "Net proceeds" means the net cash and or stock proceeds (after deducting all cash and non-cash costs and expenses related to the transaction and any and all cash and non-cash investments in the Subsidiary) received by the Company from a Liquidation Event. The foregoing is summary in nature and you are referred to the full text of the Incentive Plan, filed as Exhibit 10.11 to this Form 10-K.

NOTE 12. ***SUPPLEMENTARY QUARTERLY CONSOLIDATED FINANCIAL DATA (unaudited)***

	First Quarter Ended December 31, 2005	Second Quarter Ended March 31, 2006	Third Quarter Ended June 30, 2006	Fourth Quarter Ended September 30, 2006
Revenues:				
Net sales	$ 252,500	$ 57,500	$ 246,229	$ 39,229
Costs and expenses:				
Salaries	1,366,266	1,463,539	2,036,639	1,604,725
Consulting	118,478	149,874	171,375	309,993
General & administrative	1,098,095	1,253,056	1,439,881	1,243,140
Research & development	1,722,393	3,064,182	1,121,332	2,674,112
Goodwill impairment				999,000
Total operating expenses	4,305,232	5,930,651	4,769,227	6,830,970
Operating loss	(4,052,732)	(5,873,151)	(4,522,998)	(6,791,741)
Other income (expenses), net	767,934	678,606	411,565	385,308
Net income (loss)	$ (3,284,798)	$ (5,194,545)	$ (4,111,433)	$ (6,406,433)
Amounts per common share:				
Net loss per share, undiluted	(0.12)	(0.16)	(0.12)	(0.19)
Weighted-average shares, undiluted	27,991,305	32,102,463	33,810,131	33,995,351

Arrowhead Research Corporation
(A Development Stage Company)
Notes to Consolidated Financial Statements—(Continued)
September 30, 2006

	First Quarter Ended December 31, 2004	Second Quarter Ended March 31, 2005	Third Quarter Ended June 30, 2005	Fourth Quarter Ended September 30, 2005
Revenues:				
Net sales	$ 129,490	$ 77,614	$ 173,304	$ 210,275
Costs and expenses:				
Salaries	496,168	590,471	700,891	1,060,519
Consulting	161,607	238,419	136,482	161,444
General & administrative	491,515	477,117	796,191	912,009
Research & development	647,906	439,038	1,344,781	1,361,652
Total operating expenses	1,797,196	1,745,045	2,978,345	3,495,624
Operating loss	(1,667,706)	(1,667,431)	(2,805,041)	(3,285,349)
Other income (expenses), net	408,277	2,560,010	493,938	416,414
Loss from continuing operations	(1,259,429)	892,579	(2,311,103)	(2,868,935)
Loss from discontinued operations, net	(302,986	(276,649)	(654,598)	(73,797)
Net income (loss)	$ (1,562,415)	$ 615,930	$ (2,965,701)	$ (2,942,732)
Amounts per common share:				
Income (loss), continuing operations undiluted	(0.09)	0.06	(0.12)	(0.15)
Income (loss), continuing operations diluted		0.04		
Income (loss), discontinued operations, undiluted	(0.02)	(0.02)	(0.04)	(0.01)
Net loss per share, undiluted	(0.11)	0.04	(0.16)	(0.16)
Weighted-average shares, undiluted	13,769,287	14,310,243	18,760,122	18,725,263
Weighted-average shares, diluted	13,769,287	23,639,419	18,760,122	18,725,263

The quarterly amounts above include the impact of the acquisitions of Calando minority interests that are accounted for as a purchase of in-process research & development. Prior year quarterly amounts include the adjustments required by the retrospective adoption of SFAS 123(R), Accounting for Stock Based Compensation, in 2006.

Exhibit 10.11

Arrowhead Research Corporation
Executive Incentive Plan

Section 1 – Name, Background, Purpose and Duration

1.1 *Name*. The name of this plan shall be the "Arrowhead Research Corporation. 2006 Executive Incentive Plan." Unless otherwise expressly provided herein, the capitalized terms used in this Plan shall have the meanings set forth in Section 2.

1.2 *Background*. The Company's business model is to acquire or form companies, owned as subsidiaries, in which the Subsidiary management has a significant equity stake. The Company funds the Subsidiary and provides the strategic, financial, administrative and IT management to allow the Subsidiary to concentrate solely on commercializing their technology.

Only members of the Company's management who serve on the Board of a particular Subsidiary own stock or are awarded stock options in the Subsidiary. As a result, despite the participation of the Company's management in the success of a Subsidiary, those individuals will not receive any direct benefit in the event of a Subsidiary's successful Liquidation Event, as the Subsidiary's management and staff will through their direct equity stake in the Subsidiary. The Company's Executive management's efforts can not be independently measured as to how much they contributed to the success of the Subsidiary, although the Company's Board believes any success is certainly the result of the two groups working together.

1.3 *Purpose of the Plan*. The purpose of this Plan is to allow the Company's Executive management to participate in any Net Proceeds realized upon a Liquidation Event of a Subsidiary. The Plan is intended to allow the Company to motivate, attract and retain the services of outstanding Executives upon whose judgment, interest and special effort the success of the Company is largely dependent. This Plan shall constitute an unfunded, nonqualified Plan, established for the purpose of providing to a select group of management or highly compensated employees of the Company.

1.4 *Duration of the Plan*. The Plan shall commence on December 12, 2006 and shall remain in effect until amended or terminated by the Board, however the termination of the Plan shall not alter the right of any Participant to receive any Incentive Payment previously awarded and accrued under the Plan.

Section 2 – Definitions

The following words and phrases shall have the following meaning unless a deferent meaning is plainly required by the context:

2.1 "*Award*" means a stock or cash payment granted by the Committee under this Plan.

2.2 "*Affiliate*" of any particular Person means any other Person controlling, controlled by or under common control with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct the management and policies of a Person whether through the ownership of voting securities, contract or otherwise, and if such Person is a partnership, "*Affiliate*" shall also mean each general partner and limited partner of such Person.

2.3 *"Board or Board of Directors*" means the Board of Directors of the Company.

2.4 "*CEO*" means the Company's acting Chief Executive Officer.

2.5 "*CFO*" means the Company's acting Chief Financial Officer.

2.6 "*Committee"* means the Compensation Committee of the Board, which will administer this Plan.

2.7 "*Company"* means Arrowhead Research Corporation, a Delaware Corporation or any successor thereto.

2.8 *"Director"* means any individual who is a member of the Board of Directors of the Company.

2.9 *"Executive"* means a senior Company manager with a title of Vice President or above.

2.10 *"Incentive Payment"* means a payment in cash or in stock or a combination of both cash and stock as determined and approved by the Committee under this Plan.

2.11 *"Incentive Pool"* means the amount, in U.S. dollars, approved by the Committee for distribution to Participants under this Plan.

2.12 *"Liquidation Event"* means, with respect to a Subsidiary, (i) any sale, transfer or issuance or series of sales, transfers and/or issuances of capital stock or other voting equity of the Subsidiary by the Subsidiary or any holders thereof (whether by merger, recapitalization, through a Public Offering or otherwise) which results in any person or group of persons (as the term "group" is used under the Securities Exchange Act of 1934, as amended), other than the Company and its Affiliates, owning a majority of the Subsidiary's outstanding voting equity, and (ii) any sale or transfer of all or substantially all of the assets of a Subsidiary (including any securities held by the Company and the Subsidiary), taken as a whole, in any transaction or series of transactions (whether by merger, recapitalization, Public Offering or otherwise).

2.13 *"Net Proceeds"* means the net cash and or stock proceeds (after deducting all cash and non-cash costs and expenses related to the transaction and any and all

cash and non-cash investments in the Subsidiary) received by the Company from a Liquidation Event.

2.14 "Participant" means any eligible, current, former or future employee of the Company who has been selected by the Committee to be eligible for an award.

2.15 "*Person*" means an individual, a partnership, a corporation, a limited liability company, an association, a joint stock company, a trust, a joint venture, an unincorporated organization and a governmental entity or any department, agency or political subdivision thereof.

2.16 *"Plan"* means this "Arrowhead Research Corporation 2006 Executive Incentive Plan" as set forth in this instrument, and as amended from time to time.

2.17 *"Public Offering"* means any public offering of capital stock of the Subsidiary, whether on a primary or secondary basis, pursuant to an effective registration statement filed under the Securities Act.

2.18 *"Subsidiary"* means any entity owned by the Company, regardless of whether the Company owns a majority or minority of the fully diluted equity of the entity.

Section 3 – Administration and Authority

The following administration and the authority of the Committee:

3.1 *The Committee.* The Plan shall be administered by the Committee. The Committee will not have less than two (2) Directors and all the Directors on the Committee must be "outside directors" under rule 16b-3.

3.2 *Authority of the Committee.* The Committee shall have all powers and discretion necessary or appropriate to administer the Plan and to control its operations, including but not limited to, the power to (a) to determine which Executives will be Participants in the Plan, (b) to grant Awards under the Plan and (c) to amend, modify or recommend discontinuance the Plan to the Board.

3.3 *Decisions Binding.* All determinations and decisions made in good faith with respect to any matter within the authority of the Committee shall be final, conclusive and binding on all persons and shall be given the maximum deference by law. Any decision of the Committee made shall be final, binding and conclusive upon the Company and each Participant, former Participant, designated beneficiary, and each person claiming under or through any Participant or designated beneficiary; and no additional authorization or ratification by the Board or stockholders of the Company shall be required. Any action taken by the Committee with respect to any one or more Participants shall not be binding on the Committee as to any action to be taken with respect to any other Participant.

3.4 The duties and authority of the Committee under the Plan shall include (i) the interpretation of the provisions of the Plan, (ii) the adoption of any rules and regulations which may become necessary or advisable in the operation of the Plan, (iii) the making of such determinations as may be permitted or required pursuant to the Plan, and (iv) the taking of such other actions as may be required for the proper administration of the Plan in accordance with its terms.

Section 4 – The Plan

The following outlines the sequence to be followed when a Liquidation Event occurs:

4.1 *Participant*. Initially, the participants in the Plan will be the Chief Executive Officer (CEO), the President and Chief Financial Officer (CFO) of the Company and the Vice Presidents of the Company on the date this Plan is adopted. If a participant holds more than one title, he or she will be listed only once on the CEO's list.

4.2 *Liquidation Event*. Upon a Liquidation Event, the Company's CFO will calculate the Net Proceeds received by the Company for review by the outside, independent accountants chosen by the CFO, with the approval of the Committee. In the event of a discrepancy between the calculation of the CFO and the outside accountants, the CFO and the outside accountants shall work together to agree upon the Net Proceeds.

4.3 *Incentive Pool Calculation*. The CEO will, based upon the Net Proceeds calculation, determine the Incentive Pool, if any, to be distributed to Participants; provided, however, the Incentive Pool shall not exceed ten percent (10%) of Net Proceeds.

4.4 *Allocation of the Incentive Pool*. The CEO will recommend to the Committee for approval a proposed allocation among Participants of the Incentive Pool.

4.5 *Recommendation to the Committee*. The CEO will present the recommended Incentive Payments to the Committee for review, amendment, if needed, and subsequent approval or denial.

4.6 *Committee Action*. The Committee will review the recommendations, amend as needed and either approve the request, deny the request or ask management to redo the request and resubmit. If the Committee approves the request, the Committee will decide whether the Incentive Payment will be in cash, stock or a combination of both cash and stock.

4.7 *Payment*. Once the Incentive Payments have been approved, the Incentive Payments must be made within 2 1/2 months of the following calendar year. All

payment will be net of any applicable taxes. The CFO will insure that the Company is within the new deferred compensation rules and regulation.

Section 5 – General Provision

5.1 *Immunity of Committee Members*. The members of the Committee may rely upon any information, report or opinion supplied to them by any officer of the Company or any legal counsel, independent public accountant or actuary, and shall be fully protected in relying upon any such information, report or opinion. No member of the Committee shall have any liability to the Company or any Participant, former Participant, designated beneficiary, person claiming under or through any Participant or designated beneficiary or other person interested or concerned in connection with any decision made by such member of the Committee pursuant to the Plan which was based upon any such information, report or opinion if such member of the Committee relied thereon in good faith, or for any other action or omission of the Committee member made in good faith in connection with the operation of this Plan.

5.2 *Plan Not to Affect Employment Relationship*. Neither the adoption of the Plan nor its operation shall in any way affect the right and power of the Company or its Subsidiaries or Affiliates to dismiss or otherwise terminate the employment or change the terms of the employment or amount of compensation of any Participant at any time for any reason or without cause. By accepting any payment under this Plan, each Participant, former Participant, designated beneficiary and each person claiming under or through such person, shall be conclusively bound by any action or decision taken or made under the Plan by the Committee so long as such action or decision was made in conformity with this Plan.

5.3 *No Effect on Other Agreements*. Nothing herein shall be deemed to amend, modify or otherwise alter any employment agreement, executive securities agreement or similar agreement between the Company and any Participant entered into prior to the date hereof, including.

5.4 *Assumption of Company Liability*. The obligations of the Company under the Plan may be assumed by any Affiliate of the Company, in which case such Affiliate shall be obligated to satisfy all of the Company's obligations under the Plan and the Company shall be released from any continuing obligation under the Plan. At the Company's request, a Participant or designated beneficiary shall sign such documents as the Company may reasonably require in order to effectuate the purposes of this Section 5.3.

5.5 *Notices*. Any notice required to be given by the Company or the Committee hereunder shall be in writing and shall be delivered in person, by registered or certified mail, return receipt requested or by reputable courier. Any notice given by registered mail shall be deemed to have been given upon the date of

registration or certification by the Post Office, correctly addressed to the last known address (as appearing in the records of the Committee or the Company) of the person to whom such notice is to be given.

5.6 *Controlling Law*. The Plan shall be construed in accordance with the laws of the State of Delaware, to the extent not preempted by any applicable federal law.

5.7 *Successors*. The Plan is binding on all persons entitled to benefits hereunder and their respective heirs and legal representatives, on the Committee and its successor and on the Company and its successor, whether by way of merger, consolidation, purchase or otherwise.

5.8 *Severability*. If any provision of the Plan shall be held illegal or invalid for any reason, such illegality or invalidity shall not affect the remaining provisions of the Plan, and the Plan shall be enforced as if the invalid provisions had never been set forth therein.

Exhibit 10.12

ARROWHEAD RESEARCH CORPORATION

Compensation Policy for Non-Employee Directors

(Revised December 12, 2006)

This policy governs the compensation of non-employee directors of Arrowhead Research Corporation (the "**Company**"). For purposes of this policy, a "non-employee director" means a director who (i) is not employed as an officer or other employee of the Company or any of its subsidiaries and (ii) does not receive more than $60,000 in compensation, directly or indirectly, in the relevant year from the Company or any of its subsidiaries for services as a consultant or in any other capacity other than as a director.

I. Board Fees.

A. Annual Retainer. Non-employee directors will receive an annual retainer of $4,000 per year provided the director attends at least 75% of the regular meetings of the Board. Attendance may be in person or by telephone, but attendance in person is encouraged. The Company will pay the retainer in quarterly installments of $1,000. To the extent the Company's Chairman of the Board is a non-employee director, he or she will receive an annual retainer of $6,000 per year.

B. Committee Service. The compensation for service on committees of the Board will consist entirely of stock option awards as specified below in Section II(C).

II. Stock Option Awards

A. Initial Grants. Non-employee directors will receive a stock option grant of 20,000 shares of common stock upon their initial election or appointment to the Board. The exercise price will be the closing price of the Company's common stock on the date of their appointment or election, as applicable. These options vest on the anniversary of the grant.

B. Annual Service Grants. Non-employee directors (other than the Chairman of the Board) who have served for at least six months will receive an annual stock option grant of 20,000 shares of common stock on the date of each annual meeting of stockholders at which they are re-elected. These subsequent options vest on the anniversary of the date of grant. A non-employee Chairman of the Board will receive an annual stock option grant of 15,000 shares of common stock on the same terms. The exercise price for the annual option grants will be the closing price of the common stock on the date of the annual stockholder meeting.

C. Grant Date and Duration. Unless otherwise specified in this policy, all stock options awarded to non-employee directors under this policy will (1) be non-qualified stock options, (2) have an effective grant date that is the same as the date used to determine the exercise price, and (3) have a duration of ten years from the date of grant.

III. Expense Reimbursement

Non-employee directors are entitled to reimbursement for all reasonable and customary out of pocket and travel expenses incurred in the normal course of Company business.

IV. Administration and Interpretation

The Board will have complete discretion to resolve any questions relating to the administration or interpretation of this policy, and their decision will be final and binding on all non-employee directors. Unless otherwise required by the context, all references in this policy to a "year" refer to the year between annual stockholder meetings.

V. Amendments

The Board has adopted this policy based on the business and economic conditions in existence at the time of adoption and intends to periodically review the policy in light of changes in those conditions. Therefore, the Board reserves the right to amend this policy at any time and in any manner that it deems necessary, appropriate or desirable to reflect the best interests of the Company. The Board also reserves the right to vary from the policy from time to time without amending it and shall do so by resolution of the Board.

/**/ = Portions of this exhibit are subject to a request for confidential treatment and have been redacted and filed separately with the Securities and Exchange Commission.

Exhibit 10.13

AMENDED AND RESTATED LICENSE AGREEMENT

THIS AGREEMENT is effective as of the 1st day of July, 2005 (the "Effective Date"), between **INSERT THERAPEUTICS, INC.**, 2585 Nina Street, Pasadena, CA 91107 ("Licensor") and Calando Pharmaceuticals ("Licensee"), a corporation having a place of business at 1710 Flower Avenue, Suite 100, Duarte, Ca 91010.

RECITALS

A. Licensee and Licensor have entered into a License Agreement, dated as of March 14, 2005 (the "Original License");

B. The Original License [**].

C. Licensor is desirous of modifying the Original License to provide for [**].

NOW, THEREFORE, in consideration of the transfer by Licensor to Licensee of 480,000 shares of Licensee common stock, the receipt of which is hereby acknowledged, the parties agree to amend and restate the Original License in its entirety to read as follows:

ARTICLE 1
DEFINITIONS

1.1 **"Affiliate"** means any corporation, limited liability company or other legal entity which directly or indirectly controls, is controlled by, or is under common control with Licensee as of the Effective Date of this Agreement. For the purpose of this Agreement, "control" shall mean the direct or indirect ownership of greater than 50 percent (>50%) of the outstanding shares on a fully diluted basis or other voting rights of the subject entity to elect directors, or if not meeting the preceding, any entity owned or controlled by or owning or controlling at the maximum control or ownership right permitted in the country where such entity exists. In addition, a party's status as an Affiliate of License shall terminate if and when such control ceases to exist.

1.2 **"Exclusively Licensed Patent Rights"** means Licensor's rights under: (a) all patents and patent applications listed in Exhibit A attached hereto; (b) any patents issuing

therefrom; and (c) any patents or patent applications claiming a right of priority thereto (including reissues, reexaminations, renewals, extensions, divisionals, continuations, continued prosecution applications, continuations-in-part and foreign counterparts of any of the foregoing).

1.3 **"Technology"** means all inventions, proprietary information, know-how, procedures, methods, prototypes, and designs owned or controlled by Licensor that exist as of the Effective Date or are developed thereafter during the term of this Agreement and which in each case are invented or created in the course of performing activities specifically directed to the research, discovery, analysis, characterization, optimization, development, manufacture, use or sale of compounds covered by, or made by a process covered by, any Valid Claim, that are necessary or convenient for the Licensee to develop, make, have made, use, import, offer to sell and sell Licensed Products.

1.4 **"Licensor Technology"** means the Exclusively Licensed Patent Rights, Improvement Patent Rights and the Technology.

1.5 **"Deductible Expenses"** means the following expenses incurred in connection with sales or licensing of Licensed Products to the extent actually paid by Licensee or an Affiliate in accordance with generally recognized principles of accounting: (a) sales, use or turnover taxes; (b) excise, value added or other, taxes or custom duties; (c) transportation, freight, and handling charges, and insurance on shipments to customers; (d) trade, cash or quantity discounts or rebates to the extent actually granted; (e) agent fees or commissions; and (f) rebates, refunds, and credits for any rejected or returned Licensed Products or because of retroactive price reductions, or rebates.

1.6 **"Effective Date"** has the meaning set forth in the preamble.

1.7 **"Field"** means the discovery, development, and commercialization of RNAi Therapeutics. The term "RNAi Therapeutic" refers to small interfering RNAs (siRNAs), hairpin RNAs or other nucleic acids or analogs thereof that are substrates of the enzyme Dicer and/or associates with intracellular proteins to form an assembly known as a RNA-induced silencing complex ("RISC"), and which causes sequence dependent gene silencing. RNAi Therapeutic also includes expression vectors capable of giving rise to transcripts which form siRNA, hairpin

RNAs or other RNA species that are substrates of the enzyme Dicer, and which can cause sequence dependent gene silencing.

1.7 **"Improvement Patent Rights"** means either Licensor's or License's rights, as the case may be, under: (a) all patents and patent applications with claims directed to Improvements; (b) any patents issuing therefrom; and (c) any patents or patent applications claiming a right of priority thereto (including reissues, reexaminations, renewals, extensions, divisionals, continuations, continued prosecution applications, continuations-in-part and foreign counterparts of any of the foregoing).

1.8 **"Improvements"** means any future invention that is (a) conceived and reduced to practice or otherwise developed by either Licensor or Licensee, as the case may be, and its employees or third parties working on its behalf, to the extent such inventions are owned and controlled by either Licensor or Licensee, as the case may be, and (b) dominated by a Valid Claim under Exclusively Licensed Patent Rights.

1.9 **"Licensed Product"** means any product, device, system, article of manufacture, composition of matter, or process or service that is covered by, or is made by a process covered by, any Valid Claim or that utilizes Technology in material part.

1.10 **"Net Revenues"** means all amounts, less Deductible Expenses, received by Licensee and/or its Affiliates from the sale or other distribution (whether commercial or not) of Licensed Products or the licensing of Exclusively Licensed Patent Rights. Any non-cash consideration received by Licensee for the sale or other distribution of Licensed Products or the licensing of Exclusively Licensed Patent Rights will be converted to a cash value based on the fair market value or a value mutually agreed upon.

1.11 **"Valid Claim"** means:

(a) a claim of an issued patent within the Exclusively Licensed Patent Rights or Improvement Patent Rights that has not:

(i) expired or been canceled,

(ii) been finally adjudicated to be invalid or unenforceable by a decision of a court or other appropriate body of competent jurisdiction (and from which no appeal is or can be taken),

(iii) been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise, or

(iv) been abandoned in accordance with or as permitted by the terms of this Agreement or by mutual written agreement; or

(b) a claim included in a pending patent application within the Exclusively Licensed Patent Rights or Improvement Patent Rights, which claim is being actively prosecuted in accordance with this Agreement and which has not been:

(i) canceled,

(ii) withdrawn from consideration,

(iii) finally determined to be unallowable by the applicable governmental authority (and from which no appeal is or can be taken), or

(iv) abandoned in accordance with or as permitted by the terms of this Agreement or by mutual written agreement.

ARTICLE 2

LICENSE GRANT

2.1 **Grant of Rights by Licensor**. Licensor hereby grants to Licensee the following licenses:

(a) an exclusive, royalty bearing license under the Exclusively Licensed Patent Rights and the Improvement Patent Rights owned or controlled by Licensor to make, have made, import, use, sell, and offer for sale Licensed Products in the Field throughout the world; and

(b) a nonexclusive, royalty bearing license under the Technology to make, have made, import, use, sell, offer for sale, reproduce, distribute, display, perform, create derivative works of, and otherwise exploit Licensed Products in the Field throughout the world.

These licenses are personal to and nontransferable by Licensee, except as provided in Section 14.9.

Rights not explicitly granted herein are reserved by Licensor.

2.2 **Grant of Rights by Licensee to Certain Improvements.** Licensee hereby grants to Licensor the following licenses:

(a) an exclusive, fully paid, non-royalty bearing license under the Improvement Patent Rights owned or controlled by Licensee to make, have made, import, use, sell, and offer for sale Licensed Products outside of the Field throughout the world; and

(b) a nonexclusive, fully paid, non-royalty bearing license under the Technology to make, have made, import, use, sell, offer for sale, reproduce, distribute, display, perform, create derivative works of, and otherwise exploit Licensed Products outside of the Field throughout the world.

Rights not explicitly granted herein are reserved by Licensee. The license granted under this Section 2.2 will be governed by the provisions of Sections 1, 2, 5, 8, 9, 12, 13 and 14 of this Agreement, as if Calando Pharmaceuticals Inc. were the Licensor and Insert Therapeutics, Inc. were the Licensee.

2.3 **Sublicensing**. Licensee has the right hereunder to grant sublicenses to third parties, but sublicensees shall not have the right to grant further sublicenses, and the sublicenses may be of no greater scope than the licenses under Sections 2.1.

Licensee shall not receive, or agree to receive, anything of value in lieu of cash or equity from a third party under a sublicense granted pursuant to this Section 2.3, without Licensor's express prior written permission which shall not be unreasonably withheld. Licensee shall furnish Licensor within thirty (30) days of the execution thereof a true and complete copy of

each sublicense and any changes or additions thereto.

Any sublicenses granted by Licensee shall survive termination of the licenses granted in Section 2.1, or of this Agreement, provided that the following conditions are met as of the date of such termination: (a) the written agreement between Licensee and sublicensee pursuant to which the sublicense was granted (i) obligates the sublicensee to thereafter render to Licensor all sublicense royalties or other sublicense-related consideration that the sublicensee would have owed to Licensee under the sublicense, (ii) names Licensor as a third party beneficiary, and (iii) affirms that Licensee shall remain responsible for all obligations to sublicensee (other than those requiring Licensee to hold a license under the Exclusively Licensed Patent Rights or Technology, unless Licensor (at its discretion) elects to assume such obligations; and (b) Licensee informs the sublicensee in writing (with a copy to Licensor) that the sublicensee's obligations pursuant to (a) are in effect as a result of the termination.

2.4 **No Other Rights Granted**. The parties agree that neither this Agreement, nor any action of the parties related hereto, may be interpreted as conferring by implication, estoppel or otherwise, any license or rights under any intellectual property rights of Licensor other than as expressly and specifically set forth in this Agreement, regardless of whether such other intellectual property rights are dominant or subordinate to the Exclusively Licensed Patent Rights.

2.5 **Preferential Purchaser Status**. Licensor shall be entitled to purchase Licensed Products from Licensee for educational, research or other noncommercial purposes on pricing terms that are at least as favorable as any commercial pricing made available by Licensee to any third party.

ARTICLE 3
DISCLOSURE AND DELIVERY

Exclusively Licensed Patent Rights. Within one month of the Effective Date, Licensor shall disclose and deliver to Licensee copies of all patent applications and issued patents within the Exclusively Licensed Patent Rights.

ARTICLE 4

PROSECUTION OF PATENT APPLICATIONS AND PAYMENT OF PATENT COSTS

4.1 **Prosecution by Licensor**. Licensor shall use reasonable efforts, consistent with its normal practices, to: (a) prosecute any and all patent application(s) in connection with the Exclusively Licensed Patent Rights; and (b) file and prosecute Improvement Patent Rights licensed hereunder for which Licensor or Licensee deems it beneficial to obtain additional coverage. Licensee may recommend patent counsel for this purpose. Licensor shall permit Licensee to review all patent applications and claims made therein, and Licensor shall make reasonable efforts to implement modifications thereto as may be requested by Licensee prior to filing. With respect to filings pursuant to Paragraph (b) herein above, Licensor shall promptly disclose such Improvements to Licensee and Licensee shall elect within thirty (30) days whether such Improvements shall be included within the Improvement Patent Rights, at its expense. Licensor will have no obligation to prosecute patent applications that may constitute Improvements that are not elected by Licensee. Upon written election by Licensee, the parties will amend Exhibit A hereto to include inventions within the Exclusively Licensed Patent Rights, in a timely manner.

4.2 **Prosecution by Licensee**. If Licensor declines to file, prosecute or maintain Exclusively Licensed Patent Rights or Improvement Patent Rights, then Licensee may elect to assume responsibility for such filing, prosecution or maintenance at its expense in Licensor's name. Licensor agrees to fully cooperate with Licensee in filing, prosecuting, and maintaining any such patent applications and patents, and Licensor agrees to execute any documents as shall be necessary for such purpose, and not to impair in any way the patentability of any of the foregoing.

4.3 **Patent Costs**. Except as specified in the next paragraph, Licensee shall reimburse Licensor for all reasonable expenses (including attorneys' fees) incurred by Licensor from and after the Effective Date for the filing, prosecution and maintenance, interference or reexamination proceedings, of Exclusively Licensed Patent Rights and Improvement Patent Rights that relate to or arise from [**]. All amounts owed by Licensee for the reimbursement of patent expenses shall be due within thirty (30) days following receipt by Licensee from Licensor of an invoice covering such fees.

Licensee may elect not to pay the foregoing patent costs and fees with respect to a particular patent application or patent. In the event that Licensee elects not to pay any of the forgoing costs and fees with respect to a particular application or patent, Licensor, may, at its option, continue such prosecution or maintenance, although any patent or patent application resulting from such prosecution or maintenance will thereafter no longer be subject to the licenses granted in Section 2.1 hereunder.

ARTICLE 5
ROYALTIES

5.1 **Timing and Computation**. All royalties hereunder shall be computed on a quarterly basis for the quarters ending March 31st, June 30th, September 30th, and December 31st of each calendar year. Royalties for each such quarter shall be due and payable within thirty (30) days after the end of such quarter.

5.2 **Valid Claims**. For any country in which the Exclusively Licensed Patent Rights or Improvement Patent Rights includes a Valid Claim, Licensee shall pay Licensor a royalty [**].

5.3 **Technology**. For any country in which the Exclusively Licensed Patent Rights or Improvement Patent Rights do not include a Valid Claim, Licensee shall pay Licensor a royalty of [**].

5.4 **Bundled Products and Services**. In the event that Licensed Products are sold, licensed, distributed or used in combination with one or more other products or services which are not Licensed Products, the Net Revenues for such combination products will be calculated [**].

5.5 **Sublicensing Royalties**. Licensee shall pay Licensor [**].

5.6 **Minimum Annual Royalties**. A minimum annual royalty of [**]. Any royalties paid under Sections 5.2, 5.3, 5.4 and 5.5 for the one-year period preceding the date of payment of the minimum annual royalty shall be creditable against the annual minimum. Licensor shall have the right to terminate this Agreement pursuant to Section 10.2 for failure to pay such minimum annual royalty.

5.7 **Third Party Royalty Offset**. If Licensee or an Affiliate is required to make any payment (including, but not limited to, royalties or other license fees) to one or more third parties to obtain a patent license in the absence of which it could not legally make, import, use, sell, or offer for sale Licensed Products in any country, and Licensee provides Licensor with reasonably satisfactory evidence of such third-party payments, such third-party payments shall be [**].

5.8 **Currency Conversion**. For the purpose of determining royalties payable under this Agreement, any royalties or other revenues Licensee receives from sublicensees in currencies other than U.S. dollars and any Net Revenues denominated in currencies other than U.S. dollars shall be converted into U.S. dollars according to the noon buying rate of the Federal Reserve Bank of New York on the last business day of the quarterly period for which such royalties are calculated.

5.9 **Recordkeeping and Audits**. Licensee shall keep complete and accurate production and accounting records relating to commercialization (including via sublicensing) of Licensed Products. Licensor shall be entitled to have an independent CPA periodically audit such records, during Licensee's normal business hours, to determine Licensee's compliance with the provisions of this Article 5. Licensee shall reimburse Licensor [**]% of any unpaid royalties resulting from any noncompliance discovered as a result of any such audit; and Licensee shall also pay Licensor an additional [**]% of the entire amount of any underpayment exceeding [**]% of the corresponding amount previously paid. Such audits shall be at Licensor's expense, and shall occur no more than once annually, except that in the case of any underpayment exceeding [**]% of the amount actually paid: (a) Licensee shall reimburse Licensor for the cost of such audit; and (b) Licensor shall be entitled to conduct additional quarterly audits, at Licensee's expense, until any such audit demonstrates that Licensee is in compliance with its obligations.

5.10 For so long as royalties are payable under this Agreement, Licensee shall report in writing to Licensor on or before April 30th, July 31st, October 31st, and January 31st, Net Revenues and the number of units of Licensed Products sold during the preceding calendar quarter by Licensee and Related Companies, and the royalties or other revenues Licensee received from sublicensees other than Related Companies during the preceding calendar quarter

for the sale of Licensed Products. Each such report shall also set forth an explanation of the calculation of the royalties payable hereunder and be accompanied by payment of the royalties shown by said report to be due Licensor.

ARTICLE 6

LICENSEE EQUITY INTEREST

6.1 **Common Stock Grant**. Licensee agrees to irrevocably issue to Licensor, in partial consideration of Licensee's receipt of the licenses granted under this Agreement, [**] .

6.2 **Transfer Restrictions**. Licensor agrees that, in the event of any underwritten or public offering of securities of Licensee or an Affiliate, Licensor shall comply with and agree to any legally required restriction on the transfer of its equity interest, or any part thereof, imposed by the underwriter, and shall perform all acts and sign all necessary documents required with respect thereto. [**].

6.3 **Permitted Assignment by Licensee.** Licensee may assign this Agreement [**].

6.4 **Any Other Assignment by Licensee.** Any other attempt to assign this Agreement by Licensee is null and void.

6.5 **Conditions of Assignment.** Prior to any assignment, the following conditions must be met:

(a) Licensee must give Licensor 30 days prior written notice of the assignment, including the new assignee's contact information; and

(b) the new assignee must agree in writing to Licensor to be bound by this Agreement.

6.6 **After the Assignment.** Upon a permitted assignment of this Agreement pursuant to this Section, Licensee will be released of liability under this Agreement and the term "Licensee" in this Agreement will mean the assignee.

ARTICLE 7
DUE DILIGENCE

7.1 **Commercialization**. Licensee agrees to use its best efforts to commercially introduce Licensed Products in the Field as soon as practicable. Licensee shall be deemed to have satisfied its obligations under this Section 6.1 if [**].

7.2 **Reporting**. On each yearly anniversary of the Effective Date, Licensee shall issue to Licensor a detailed written report on its progress in introducing commercial Licensed Product(s). Such report shall be considered confidential information of Licensee subject to Article 11.

7.3 **Failure to Commercialize**. If Licensee is not fulfilling its obligations under Section 7.1 with respect to the Field in any country, and Licensor so notifies Licensee in writing, [**].

ARTICLE 8
LITIGATION

8.1 **Enforcement**. Both Licensor and Licensee agree to promptly notify the other in writing should either party become aware of possible infringement by a third party of the Exclusively Licensed Patent Rights or Improvement Patent Rights. If Licensee has supplied Licensor with evidence of infringement of Exclusively Licensed Patent Rights or Improvement Patent Rights, Licensee may by notice request Licensor to take steps to enforce the Exclusively Licensed Patent Rights. If Licensor does not, within sixty (60) days of the receipt of such notice, initiate an action against the alleged infringer in the Field, Licensee may upon notice to Licensor initiate such an action at Licensee's expense, either in Licensee's name or in Licensor's name if so required by law. Licensee shall be entitled to control any such action initiated by it.

8.2 **Other Defensive Litigation**. If a declaratory judgment action alleging invalidity, unenforceability or noninfringement of any of the Exclusively Licensed Patent Rights is brought against Licensee and/or Licensor, Licensee may elect to control the defense of such action, and if Licensee so elects it shall bear all the costs of the action. If mutually agreed between the parties, Licensee may also undertake the defense of any interference, opposition or similar procedure

with respect to the Exclusively Licensed Patent Rights, providing that Licensee bears all the costs thereof.

8.3 **Cooperation**. In the event either party takes control of a legal action or defense pursuant to this Sections 8.1 or 8.2, (thus becoming the Controlling Party) the other party shall fully cooperate with and supply all assistance reasonably requested by the Controlling Party, including by: (a) using commercially reasonable efforts to have its employees consult and testify when requested; (b) making available relevant records, papers, information, samples, specimens, and the like; and (c) joining any such action in which it is an indispensable party. The Controlling Party shall bear the reasonable expenses (including salary and travel costs) incurred by the other party in providing such assistance and cooperation. Each party shall keep the other party reasonably informed of the progress of the action or defense, and the other party shall be entitled to participate in such action or defense at its own expense and using counsel of its choice. As a condition of controlling any action or defense involving the Exclusively Licensed Patent Rights pursuant to Sections 8.1 or 8.2, Licensee shall use its best efforts to preserve the validity and enforceability thereof.

8.4 **Settlement**. If Licensee controls any action or defense under Section 8.1 or 8.2, then Licensee shall have the right to settle any claims thereunder, but only upon terms and conditions that are reasonably acceptable to Licensor. Should Licensee elect to abandon such an action or defense other than pursuant to a settlement with the alleged infringer that is reasonably acceptable to Licensor, Licensee shall give timely advance notice to Licensor who, if it so desires, may continue the action or defense.

8.5 **Recoveries**. Any amounts paid to Licensee by third parties as the result of an action or defense pursuant to Sections 8.1 or 8.2 (including in satisfaction of a judgment or pursuant to a settlement) shall first be applied to reimbursement of the unreimbursed expenses (including attorneys' fees and expert fees) incurred by each party. Any remainder shall be divided between the parties as follows:

(a) To the extent the amount recovered reflects Licensee's lost profits or royalties, Licensee shall retain the remainder less the amount of any royalties that would have

been due Licensor under Article 5 on account of such lost profits or royalties, provided that [**]; and

(b) To the extent the amount recovered does not reflect [**].

8.6 **Infringement Defense**. If Licensee, its Affiliate or sublicensee, distributor or other customer is sued by a third party charging infringement of patent rights that cover a Licensed Product, Licensee will promptly notify Licensor. Licensee will be responsible for the expenses of, and will be entitled to control the defense or settlement of, any such action(s).

8.7 **Marking**. Licensee agrees to mark the Licensed Products with the numbers of applicable issued patents within the Exclusively Licensed Patent Rights, unless such marking is commercially infeasible in accordance with normal commercial practices in the Field, in which case the parties shall cooperate to devise a commercially reasonable alternative to such marking.

8.8 **Expiration or Abandonment**. In a case where one or more patents or particular claims thereof within the Exclusively Licensed Patent Rights expire, or are abandoned, or are declared invalid or unenforceable by a court of last resort or by a lower court from whose decree no appeal is taken, or certiorari is not granted within the period allowed therefore, then the effect thereof hereunder shall be:

(a) that such patents or particular claims shall, as of the date of expiration or abandonment or final decision as the case may be, cease to be included within the Exclusively Licensed Patent Rights for the purpose of this Agreement; and

(b) that such construction so placed upon the Exclusively Licensed Patent Rights by the court shall be followed from and after the date of entry of the decision, and royalties shall thereafter be payable by Licensee only in accordance with such construction.

In the event that Licensee challenges the validity of Licensed Patent Rights, Licensee may not cease paying royalties as of the date validity of the claims in issue are challenged, but rather may cease paying royalties as to those claims only after a final adjudication of invalidity of those claims.

8.9 **Adjustment**. In the event that any of the contingencies provided for in Section 8.8 occurs, [**].

ARTICLE 9
REPRESENTATIONS AND WARRANTIES; INDEMNIFICATION

9.1 **Representations and Warranties of Licensor**. Licensor hereby represents and warrants to Licensee that as of the Effective Date:

(a) there are no outstanding exclusive licenses, exclusive options or exclusive agreements of any kind relating to the Exclusively Licensed Patent Rights, other than pursuant to this Agreement herein;

(b) Licensor has the power to grant the rights, licenses and privileges granted herein and can perform as set forth in this Agreement without violating the terms of any agreement that Licensor has with any third party.

9.2 **Exclusions**. The parties agree that nothing in this Agreement shall be construed as, and LICENSOR HEREBY DISCLAIMS, ANY EXPRESS OR IMPLIED REPRESENTATION, WARRANTY, COVENANT, OR OTHER OBLIGATION:

(a) THAT ANY PRACTICE BY OR ON BEHALF OF LICENSEE OF ANY INTELLECTUAL PROPERTY LICENSED HEREUNDER IS OR WILL BE FREE FROM INFRINGEMENT OF RIGHTS OF THIRD PARTIES;

(b) AS TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT OF THIRD PARTY RIGHTS, WITH RESPECT TO ANY TECHNOLOGY PROVIDED BY LICENSOR TO LICENSEE HEREUNDER.

9.3 **Indemnification by Licensor**. Licensor shall indemnify, defend and hold harmless Licensee from and against any and all losses, damages, costs and expenses (including attorneys' fees) arising out of a material breach by Licensor of its representations and warranties ("Indemnification Claims"), except to the extent involving or relating to a material breach by Licensee of its representations and warranties, provided that: (a) Licensor is notified promptly of

any Indemnification Claims; (b) Licensor has the sole right to control and defend or settle any litigation within the scope of this indemnity; and (c) all indemnified parties cooperate to the extent necessary in the defense of any Indemnification Claims. The foregoing shall be the sole and exclusive remedy of Licensee for breach of Section 9.1.

9.4 **Indemnification by Licensee**. Licensee shall indemnify, defend and hold harmless Licensor, its trustees, officers, agents and employees from and against any and all losses, damages, costs and expenses (including reasonable attorneys' fees) arising out of third party claims brought against Licensor relating to the manufacture, sale, licensing, distribution or use of Licensed Products by or on behalf of Licensee or its Affiliates, except to the extent involving or relating to a material breach by Licensor of its representations and warranties.

9.5 **Certain Damages**. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES ARISING OUT OF THIS AGREEMENT, HOWEVER CAUSED, UNDER ANY THEORY OF LIABILITY.

ARTICLE 10

TERM AND TERMINATION

10.1 **Term**. This Agreement and the rights and licenses hereunder shall take effect on the Effective Date and continue until the expiration, revocation, invalidation, or unenforceability of the Exclusively Licensed Patent Rights licensed to Licensee hereunderor as long as royalties are due pursuant to Article 5 of this Agreement, unless earlier terminated pursuant to the terms of this Agreement.

10.2 **Termination for Monetary Breach**. Licensor shall have the right to terminate this Agreement and the rights and licenses hereunder if Licensee fails to make any payment due including patent expenses, minimum annual royalties or royalties hereunder and Licensee continues to fail to make the payment, (either to Licensor directly or by placing any disputed amount into an interest-bearing escrow account to be released when the dispute is resolved) for a period of [**] days after receiving written notice from Licensor specifying Licensee's failure. Upon any such termination, (a) Licensee shall have [**] to complete the manufacture of any

Licensed Products that are then works in progress for sale and to sell its inventory of Licensed Products, provided that Licensee pays the applicable royalties, and (b) any sublicenses shall survive termination in accordance with Section 2.3.

10.3 **Non-Monetary Termination for Breach**. Non-monetary breach shall include, but is not limited to, failure to fulfill the obligations in Article 6 and pursuit of exploitation of Exclusively Licensed Patent Rights outside the Field. If this Agreement is materially breached by either party, the non-breaching party may elect to give the breaching party written notice describing the alleged breach. If the breaching party has not cured such breach within thirty (30) days after receipt of such notice, the notifying party will be entitled, in addition to any other rights it may have under this Agreement, to terminate this Agreement and the rights and licenses hereunder.

10.4 **Other Termination**. This Agreement may also be terminated, in whole or in part, as set forth in Sections 5.6 and 7.3.

10.5 **Accrued Liabilities**. Termination of this Agreement for any reason shall not release any party hereto from any liability which, at the time of such termination, has already accrued to the other party or which is attributable to a period prior to such termination, nor preclude either party from pursuing any rights and remedies it may have hereunder or at law or in equity which accrued or are based upon any event occurring prior to such termination.

10.6 **Bankruptcy.** Calando agrees that as a part of its material inducement to Insert to enter into this License Agreement, it shall provide Calando at least ninety (90) days written notice hereunder of its intent to file a petition in Bankruptcy, whether it be for a Chapter 7, 11, 13, or any other such petition. Insert shall have the right to immediately terminate this License Agreement by giving written notice to Calando, in the event Calando does any of the following: (a) provides notice hereunder of its intent to file (or does actually file without providing said notice) a petition in bankruptcy, (b) attempt to make an assignment hereof for the benefit of creditors, (c) discontinues or dissolves its business, or (d) if a receiver is appointed for Calando.

10.7 **Survival**. The following shall survive any expiration or termination (in whole or in pat) of this Agreement: (a) any provision plainly indicating that it should survive; and (b) any

royalty due and payable on account of activity prior to the termination; and (c) Sections or Articles 6.2, 9.2, 9.3, 9.4, 9.5, 10.4, 11, 12, 13.1 & 14.

ARTICLE 11

CONFIDENTIALITY

11.1 **Nondisclosure and Nonuse**. Confidential Information is defined as the Technology, the specification of any unpublished patent application, except to the extent (if at all) the foregoing is inherently disclosed in the normal course of use of a Licensed Product, and the terms of this Agreement or any reports due thereunder. During the term of this Agreement, each party agrees not to disclose any confidential information of the other party to any third party without the prior written consent of the other party, or to use any such confidential information for any purpose other than as contemplated by this Agreement. Notwithstanding anything to the contrary, confidential information of a party shall not include any information which: (a) is independently developed, without access to that party's confidential information, by the other party; (b) is acquired by the other party from a third party who has the right to disclose such information; or (c) is or becomes part of the public domain (e.g., by publication of a patent or by any other means) except via an unauthorized act or omission by the other party.

11.2 **Permitted Disclosures**. Notwithstanding the foregoing, each party may disclose: (a) confidential information as required by securities or other applicable laws or pursuant to governmental proceedings, provided that the disclosing party gives advance written notice to the other party and reasonably cooperates therewith in limiting the disclosure to only those third parties having a need to know; (b) confidential information disclosed to a party's actual or prospective investors, corporate partners, or a party's accountants, attorneys or other professional advisors; and (c) the fact that Licensee has been granted a license under the Exclusively Licensed Patent Rights.

ARTICLE 12

DISPUTE RESOLUTION

12.1 No issue of the validity of any of the Licensed Patents, enforceability of any of the Licensed Patents, infringement of any of the Licensed Patents, the scope of any of the claims of

the Licensed Patents and/or any dispute that includes any such issue, shall be subject to arbitration under this Agreement unless otherwise agreed by the Parties in writing.

12.2 Except for those issues and/or disputes described in Section 10.2, any dispute between the Parties concerning the interpretation, construction or application of any terms, covenants or conditions of this Agreement shall be resolved by arbitration.

12.3 Arbitration shall be in accordance with the CPR Licensor For Dispute Resolution (CPR) Rules for Non-Administered Arbitration of Patent and Trade Secret Disputes or Rules for Non-Administered Arbitration, as appropriate, in effect on the Effective Date by a sole Arbitrator who shall be appointed in accordance with the applicable CPR rules. Any other choice of law clause to the contrary in this Agreement notwithstanding, the arbitration shall be governed by the United States Arbitration Act, 9 U.S.C. Section 1-16.

12.4 Any award made (i) shall be a bare award limited to a holding for or against a party and affording such remedy as is within the scope of the Agreement; (ii) shall be accompanied by a brief statement (not to exceed ten (10) pages) of the reasoning on which the award rests; (iii) shall be made within four (4) months of the appointment of the Arbitrator; (iv) may be entered in any court of competent jurisdiction; and (v) any award pertaining to a patent which is subsequently determined to be invalid or unenforceable or otherwise precluded from being enforced, in a judgment rendered by a court of competent jurisdiction from which no appeal can or has been taken, may be modified as it relates to such patent by any court of competent jurisdiction upon application by any party to the arbitration, however, under no circumstances shall Licensor be required to refund any monies paid, or forego any amounts accrued, under the terms of this Agreement.

12.5 The requirement for arbitration shall not be deemed a waiver of any right of termination under this Agreement and the Arbitrator is not empowered to act or make any award other than based solely on the rights and obligations of the Parties prior to any such termination.

12.6 Each party shall bear its own expenses incurred in connection with any attempt to resolve disputes hereunder, but the compensation and expenses of the Arbitrator shall be borne equally.

12.7 The Arbitrator shall not have authority to award punitive or other damages in excess of compensatory damages, and each party irrevocably waives any claim thereto.

ARTICLE 13
PRODUCT LIABILITY

13.1 **Indemnification.** Licensee agrees that Licensor [**].

13.2 **Insurance**. Prior to such time as Licensee begins to manufacture, sell, license, distribute or use Licensed Products, Licensee shall at its sole expense, procure and maintain policies of comprehensive general liability insurance in amounts not less than $[**] per incident and $[**] in annual aggregate, and naming those indemnified under Section 13.1 as additional insureds. Such comprehensive general liability insurance shall provide: (a) product liability coverage; and (b) broad form contractual liability coverage for Licensee's indemnification of Licensor under Section 13.1. In the event the aforesaid product liability coverage does not provide for occurrence liability, Licensee shall maintain such comprehensive general liability insurance for a reasonable period of not less than five (5) years after it has ceased commercial distribution or use of any Licensed Product. Licensee shall provide Licensor with written evidence of such insurance upon request of Licensor.

13.3 **Loss of Coverage**. Licensee shall provide Licensor with notice at least fifteen (15) days prior to any cancellation, non-renewal or material change in such insurance, to the extent Licensee receives advance notice of such matters from its insurer. If Licensee does not obtain replacement insurance providing comparable coverage within sixty (60) days following the date of such cancellation, non-renewal or material change, Licensor shall have the right to terminate this Agreement effective at the end of such sixty (60) day period without any additional waiting period; provided that if Licensee provides credible written evidence that is has used reasonable efforts, but is unable, to obtain the required insurance, Licensor shall not have the right to terminate this Agreement, and Licensor instead shall cooperate with Licensee to either (at Licensor's discretion) grant a limited waiver of Licensee's obligations under this Article or assist Licensee in identifying a carrier to provide such insurance or in developing a program for self-insurance or other alternative measures.

ARTICLE 14
MISCELLANEOUS

14.1 **Notices**. All notice, requests, demands and other communications hereunder shall be in English and shall be given in writing and shall be: (a) personally delivered; (b) sent by telecopier, facsimile transmission or other electronic means of transmitting written documents with confirmation of receipt; or (c) sent to the parties at their respective addresses indicated herein by registered or certified mail, return receipt requested and postage prepaid, or by private overnight mail courier services with confirmation of receipt. The respective addresses to be used for all such notices, demands or requests are as follows:

(a) If to LICENSOR, to:

Insert Therapeutics, Inc.
2585 Nina Street
Pasadena, CA 91107
ATTN: President
Phone No.: (626) 683-7200
Fax No.: (626) 683-7220

Or to such other person or address as Licensor shall furnish to Licensee in writing.

(b) If to LICENSEE, to:

Calando Pharmaceuticals
173 Highland Place
Monrovia, CA 91016
ATTN: John G. Petrovich, CEO
Phone No.: 626.808.3003
Fax No.: 253.669.2568

If personally delivered, such communication shall be deemed delivered upon actual receipt by the "attention" addressee or a person authorized to accept for such addressee; if transmitted by facsimile pursuant to this paragraph, such communication shall be deemed delivered the next business day after transmission, provided that sender has a transmission confirmation sheet indicating successful receipt at the receiving facsimile machine; if sent by overnight courier pursuant to this paragraph, such communication shall be deemed delivered upon receipt by the "attention" addressee or a person authorized to accept for such addressee; and if sent by mail pursuant to this paragraph, such communication shall be deemed delivered as of the date of delivery indicated on the receipt issued by the relevant postal service, or, if the addressee fails or refuses to accept delivery, as of the date of such failure or refusal. Any party to this Agreement may change its address for the purposes of this Agreement by giving notice thereof in accordance with this Section 14.1

14.2 **Entire Agreement**. This Agreement sets forth the complete agreement of the parties concerning the subject matter hereof. No claimed oral agreement in respect thereto shall be considered as any part hereof. No amendment or change in any of the terms hereof subsequent to the execution hereof shall have any force or effect unless agreed to in writing by duly authorized representatives of the parties.

14.3 **Waiver**. No waiver of any provision, of this Agreement shall be effective unless in writing. No waiver shall be deemed to be, or shall constitute, a waiver of a breach of any other provision of this Agreement, whether or not similar, nor shall such waiver constitute a continuing waiver of such breach unless otherwise expressly provided in such waiver.

14.4 **Severability**. Each provision contained in this Agreement is declared to constitute a separate and distinct covenant and provision and to be severable from all other separate, distinct covenants and provisions. It is agreed that should any clause, condition or term, or any part thereof, contained in this Agreement be unenforceable or prohibited by law or by any present or future legislation then: (a) such clause, condition, term or part thereof, shall be amended, and is hereby amended, so as to be in compliance therewith the legislation or law; but (b) if such clause, condition or term, or part thereof, cannot be amended so as to be in compliance with the legislation or law, then such clause, condition, term or part thereof shall be severed from

this Agreement all the rest of the clauses, terms and conditions or parts thereof contained in this Agreement shall remain unimpaired.

14.5 **Construction**. The headings in this Agreement are Licensored for convenience only and shall not constitute a part hereof. Unless expressly noted, the term "include" (including all variations thereof) shall be construed as merely exemplary rather than as a term of limitation.

14.6 **Counterparts/Facsimiles**. This Agreement may be executed in one or more counterparts, all of which taken together shall be deemed one original. Facsimile signatures shall be deemed original.

14.7 **Governing Law**. This Agreement, the legal relations between the parties and any action, whether contractual or non-contractual, instituted by any party with respect to matters arising under or growing out of or in connection with or in respect of this Agreement shall be governed by and construed in accordance with the internal laws of the State of California, excluding any conflict of law or choice of law rules that may direct the application of the laws of another jurisdiction.

14.8 **No Endorsement**. Licensee agrees that it shall not make any form of representation or statement which would constitute an express or implied endorsement by Licensor of any Licensed Product, and that it shall not authorize others to do so, without first having obtained written approval from Licensor, except as may be required by governmental law, rule or regulation.

14.9 **Transferability**. This Agreement shall be binding upon and inure to the benefit of any successor or assignee of Licensor. This Agreement is not transferable by Licensee without the prior written consent of Licensor, and any attempted transfer shall be void, except that Licensee may transfer this Agreement without the prior written consent of Licensor to any Affiliate or any successor of, or purchaser of substantially all of, the assets or operations of its business to which this Agreement pertains. Any permitted transferee shall succeed to all of the rights and obligations of Licensee under this Agreement. See paragraph 6.3.

14.10 **Export Regulations**. This Agreement is subject in all respects to the laws and

regulations of the United States of America, including the Export Administration Act of 1979, as amended, and any regulations thereunder. Licensee or its sublicensees will not in any form export, re-export, resell, ship, divert, or cause to be exported, re-exported, resold, shipped, or diverted, directly or indirectly, any product or technical data or software of the other party, or the direct product of such technical data or software, to any country for which the United States Government or any agency thereof requires an export license or other governmental approval without first obtaining such license or approval

14.11 **Force Majeure**. Neither party shall lose any rights hereunder or be liable to the other party for damages or losses (except for payment obligations) on account of failure of performance by the defaulting party if the failure is occasioned by war, strike, fire, Act of God, earthquake, flood, lockout, embargo, governmental acts or orders or restrictions, failure of suppliers, or any other reason where failure to perform is beyond the reasonable control and not caused by the negligence or intentional conduct or misconduct of the nonperforming party, and such party has exerted all reasonable efforts to avoid or remedy such force majeure; provided, however, that in no event shall a party be required to settle any labor dispute or disturbance.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed:

INSERT THERAPEUTICS, INC.

Date: July 1, 2005

By: /s/ Joseph T. Kingsley
Name: Joseph T. Kingsley
Title: Chief Financial Officer

Date: July 1, 2005

CALANDO PHARMACEUTICALS, INC.

By: /s/ John G. Petrovich
Name: John G. Petrovich
Title: CEO

Exhibit A

Exclusively Licensed Patent Rights

[**]

Exhibit B

Technology

Name	Description
[**]	**

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) OR RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934

I, R. Bruce Stewart, Chief Executive Officer of Arrowhead Research Corporation, certify that:

1. I have reviewed this Annual Report on Form 10-K of Arrowhead Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated Subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 14, 2006

/s/ R. BRUCE STEWART
R. Bruce Stewart, President
Chief Executive Officer

A signed original of these written statements required by 18 U.S.C. Section 1350 has been provided to Arrowhead Research Corporation and will be retained by Arrowhead Research Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) OR RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934

I, Joseph T. Kingsley, Chief Financial Officer of Arrowhead Research Corporation, certify that:

1. I have reviewed this Annual Report on Form 10-K of Arrowhead Research Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated Subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 14, 2006

/s/ JOSEPH T. KINGSLEY

Joseph T. Kingsley,
Interim President and Chief Financial Officer
(Principal Accounting Officer)

A signed original of these written statements required by 18 U.S.C. Section 1350 has been provided to Arrowhead Research Corporation and will be retained by Arrowhead Research Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(b) OR RULE 15d-14(b)
OF THE SECURITIES EXCHANGE ACT OF 1934
AND 18 U.S.C. SECTION 1350

I, R. Bruce Stewart, Chief Executive Officer of Arrowhead Research Corporation (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Annual Report on Form 10-K of the Company for the fiscal year ended September 30, 2006 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of the Company.

Date: December 14, 2006

/s/ R. BRUCE STEWART

R. Bruce Stewart
Chief Executive Officer

A signed original of these written statements required by 18 U.S.C. Section 1350 has been provided to Arrowhead Research Corporation and will be retained by Arrowhead Research Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(b) OR RULE 15d-14(b)
OF THE SECURITIES EXCHANGE ACT OF 1934
AND 18 U.S.C. SECTION 1350

I, Joseph T. Kingsley, President and Chief Financial Officer of Arrowhead Research Corporation (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Annual Report on Form 10-K of the Company for the fiscal year ended September 30, 2006 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of the Company.

Date: December 14, 2006

/s/ JOSEPH T. KINGSLEY

Joseph T. Kingsley
Interim President and Chief Financial Officer
(Principal Accounting Officer)

A signed original of these written statements required by 18 U.S.C. Section 1350 has been provided to Arrowhead Research Corporation and will be retained by Arrowhead Research Corporation and furnished to the Securities and Exchange Commission or its staff upon request.