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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-QSB/A

(Mark One)

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

For the quarterly period ended March 31, 2004.

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

Commission file number 000-21898

ARROWHEAD RESEARCH CORPORATION

(Name of small business issuer in its charter)

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

1118 East Green Street
Pasadena, California 91106
(626) 792-5549
(Address and telephone number of principal executive offices)

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 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 ☐

State the number of shares outstanding of each of the issuer's classes of common equity, as of the latest practicable date: 13,550,546 as of May 10, 2004.

Transitional Small Business Disclosure Format (Check one): Yes ☐ No ☒

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Arrowhead Research Corporation and Subsidiary
(A Development Stage Company)
Consolidated Balance Sheet
March 31, 2004

Assets	
Cash and cash equivalents	$ 10,330,701
Marketable securities	807,628
Other receivables	145
Prepaid expenses	360,855
Office equipment, net of accumulated depreciation of $616	9,602
Total assets	$ 11,508,931
Liabilities & Stockholders' Equity	
Liabilities	
Accounts payable	$ 31,552
Other accrued expenses	6,862
Total liabilities	38,414
Commitments and contingencies	—
Stockholders' equity	
Common stock, $0.001 par value, 50,000,000 shares authorized, 13,550,546 shares issued and outstanding	13,551
Additional paid-in capital	11,934,019
Accumulated deficit during the development stage	(477,053)
Total stockholders' equity	11,470,517
Total liabilities & stockholders' equity	$ 11,508,931

Arrowhead Research Corporation and Subsidiary
(A Development Stage Company)
Consolidated Statement of Operations
March 31, 2004

Costs and expenses	
Salaries	$ 25,000
Consulting	33,475
General and administrative expenses	331,323
Research and development	141,660
Total costs and expenses	531,458
Other income and (losses)	
Loss on disposition of building and equipment	(23,331)
Interest income	8,668
Unrealized gains on marketable securities	370,238
Total other income and (losses)	355,575
Net income (loss)	$ (175,883)
Earnings (losses) per share	$ (0.02)

Arrowhead Research Corporation and Subsidiary
(A Development Stage Company)
Consolidated Statement of Stockholders' Equity
For the quarter ended March 31, 2004

	Common Stock		Additional Paid-in Capital	Accumulated Deficit During the Development Stage	Totals
	Shares	Amount			
Balances as of December 31, 2003	5,730,000	$ 5,730	$ 2,402,770	$ (301,170)	$ 2,107,330
Common stock issued for cash at $1.50 per share	6,608,788	6,609	9,906,573	—	9,913,182
Common stock issued in a reverse acquisition of Interactive Group, Inc. (see Note 2)	705,529	706	(127,844)	—	(127,138)
Common stock issued as gifts at $1 per share	150,000	150	149,850		150,000
Common stock issued for services at $1.50 per share	356,229	356	533,988	—	534,344
Additional paid-in capital issued for services	—	—	60,000	—	60,000
Stock issuance costs charged to additional paid-in capital	—	—	(991,318)	—	(991,318)
Net income (loss)	—	—	—	(175,883)	(175,883)
Balances as of March 31, 2004	13,550,546	$ 13,551	$ 11,934,019	$ (477,053)	$ 11,470,517

Arrowhead Research Corporation and Subsidiary
(A Development Stage Company)
Consolidated Statement of Cash Flows
For the quarter ended March 31, 2004

Cash flows from operating activities	
Net income (loss)	$ (175,883)
Adjustments to reconcile net income (loss) to net cash used in operating activities:	
Depreciation	346
Unrealized gain (loss) on marketable securities	(370,238)
Common stock issued as gift	150,000
Change in assets and liabilities net of effects from acquisition of InterActive:	
Decrease in building and equipment	23,617
Decrease in account payable and accrued expenses	(150,755)
(Increase) decrease in:	
Other receivables	(145)
Prepaid expenses	(100,980)
(Decrease) increase in:	
Income taxes payable	(1,600)
Accounts payable and accrued expenses	19,683
Total adjustments	(430,072)
Net cash and cash equivalents used in operating activities	(605,955)
Cash flow from investing activities	
Purchase of equipment	(8,103)
Net cash and cash equivalents used in investing activities	(8,103)
Net cash flows from financing activities	
Additional paid-in capital issued for services	60,000
Proceeds from issuance of common stock	6,609
Proceeds from additional paid-in capital, net	9,449,599
Net cash and cash equivalents provided by financing activities	9,516,208
Net increase (decrease) in cash and cash equivalents	8,902,150
Cash and cash equivalents at the beginning of period	1,428,551
Cash and cash equivalents at the end of the period	$ 10,330,701
Supplemental disclosures of cash flow information	
Cash paid during the period for	
Interest	$ —
Income taxes	$ 1,600

Non-cash transactions

The Company issued 150,000 shares of Common Stock to the California Institute of Technology to further research and development.

The Company issued 75,000 options for services which were exercised at $0.20 each. The resulting difference between the exercise price and fair market value was recorded as outside services.

Arrowhead Research Corporation and Subsidiary
(A Development Stage Company)
Consolidated Statement of Cash Flows
For the quarter ended March 31, 2004

In connection with the reverse acquisition (see Note 2), the Company issued 705,529 shares of Common Stock and 658,583 Common Stock Purchase Warrants for the net assets valued at ($127,138) of InterActive Group, Inc. The Company also assumed $150,000 in liabilities, associated with this acquisition. The Company subsequently disposed of all the fixed assets of InterActive, recognizing a loss on disposition of $23,331.

ARROWHEAD RESEARCH CORPORATION
(A DEVELOPMENT STAGE COMPANY)
NOTES TO FINANCIAL STATEMENTS
MARCH 31, 2004

NOTE 1: ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

Basis of Consolidation

The consolidated financial statements include the accounts of Arrowhead Research Corporation (a Delaware Corporation), formally InterActive Group, Inc., and Arrowhead Research Corporation (a California Corporation), a wholly-owned subsidiary. All significant intercompany accounts and transactions have been eliminated in consolidation.

General

On January 12, 2004, the Company, a Delaware corporation then known as “InterActive Group, Inc.”, acquired all of the issued and outstanding securities of Arrowhead Research Corporation, a California corporation (the “California corporation”). As a result of this transaction, control of the Company was changed, with the former shareholders of the California corporation acquiring approximately 88.9% of the Company’s Common Stock outstanding immediately following the transaction. In addition, all of the officers and directors of the Company prior to the transaction were replaced by designees of the former shareholders of the California corporation, and the Company’s corporate name was changed to “Arrowhead Research Corporation.”

The Company currently is engaged in funding research at universities in pioneering scientific areas, primarily nanotechnology, in return for exclusive rights to commercialize technologies and associated intellectual property and patents developed as a result of this research. The Company has entered into agreements with the California Institute of Technology and three of its faculty, and is actively pursuing other potential partners at Caltech and other leading research institutions and universities. Commercial applications that arise from Company-sponsored research projects are expected to be developed and marketed by the Company through a series of diversified subsidiaries representing each product or application, or through third-party licensing. In that regard, the Company has recently formed, or entered into agreements to form, or make investments in what are, or expected to be, majority-owned subsidiaries.

Arrowhead Research Corporation is in the development stage as its operations principally involve research and development, and other business planning activities. The company has no revenue from product sales.

On January 31, 2004, the Company completed a private placement of 6,608,788 units at $1.50 per unit, with each unit consisting of one share of Common Stock and one Warrant exercisable to purchase an additional share of the Common Stock at any time prior to June 30, 2013. The securities were offered pursuant to an exemption provided by Regulation 504 of the Securities Exchange Act of 1933. The Company paid $991,318 of finder’s fees and issued 66,878 finder Warrants in connection with the sale of these securities.

The Company has a Stock Option Plan (the “Plan”) which provides for the granting of non-qualified Stock Options or incentive Stock Options. Under the Plan, 3,000,000 shares of the Company’s Common Stock are reserved for issuance upon exercise of Stock Options or Stock Purchase Warrants that may be granted by the Board of Directors to employees, consultants and others expected to provide significant services to the Company.

In connection with the formation of the company, two private placements of Common Stock, and the acquisition of Interactive Group, Inc., the Company issued 13,837,439 Common Stock Purchase Warrants. Each Warrant entitles the holder to purchase one share of Common Stock at a price of $1.50 any time following issuance and prior to June 30, 2013, on which date all unexercised Warrants will expire. The Warrants are redeemable by the Company at any time following issuance, upon 30 days prior written notice, provided that a public market for the underlying shares of Common Stock then exists and that the closing bid price for a share of the Company's Common Stock, for 20 consecutive trading days ending not more than 15 days prior to the date of the redemption notice, equals or exceeds $3.00 per share. Holders will be required to exercise their Warrants within 30 days or accept the $0.001 per Warrant redemption price.

Summary of Significant Accounting Policies

The presentation of consolidated 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 consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

The Company's securities investments consist of corporate stocks, and are held principally for the purpose of selling in the near term and are classified as trading securities. Trading securities are recorded at fair value on the balance sheet in current assets, with the change in fair value during the period reflected in earnings.

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

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.

Basic earnings (losses) per share is computed using the weighted-average number of common shares outstanding during the period. Diluted earnings (losses) 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 employee Stock Options and Warrants. For the quarter ended March 31, 2004, their effect is anti-dilutive.

In October 2003, in connection with an initial private placement of Common Stock, the Company accepted 80,255 shares of Acacia Research Corporation, valued at $500,000, and $500,000 cash in exchange for 1,000,000 units. The shares are carried on the financial statements as marketable securities. See Note 3.

Rent expense was $2,804 for the quarter ended March 31, 2004.

Prepaid expenses consist of $360,855 incurred under contract agreements with Caltech. See Note 5.

NOTE 2: BASIS OF CONSOLIDATION - REVERSE ACQUISITION ACCOUNTING

On January 12, 2004, the Company issued shares of Common Stock and Warrants in exchange for all of the issued and outstanding securities of Arrowhead Research Corporation, a California corporation (the

"California corporation"). As a result of this transaction, the California corporation became a wholly-owned subsidiary of the Company, and the former shareholders of the California corporation acquired approximately 88.9% of the Company's Common Stock outstanding immediately thereafter. In addition, all of the officers and directors of the Company prior to the transaction were replaced by designees of the former shareholders of the California corporation, and the Company's corporate name was changed to "Arrowhead Research Corporation." Since the transaction resulted in such a significant change in control of the Company, it has been accounted for as a "reverse acquisition," as though the California corporation acquired the Company, through a purchase of the net assets of the Company by the California corporation, with no goodwill being recognized. Therefore, the financial statements of the Company are deemed to be those of the California corporation from its inception, and reflect consolidated assets and operations of the two entities only from and after January 12, 2004.

The Company is subject to the reporting requirements of the Securities Exchange Act and, as of the date hereof, has filed all reports and other information required to be filed with the Securities and Exchange Commission (SEC) pursuant to the rules and regulations of the SEC under the Securities Exchange Act.

NOTE 3: MARKETABLE SECURITIES

Marketable securities consist of trading securities at quoted market values, as follows:

Corporate stocks	$807,628

The Company included $370,238 in unrealized gains on these securities in other income and losses at March 31, 2004.

NOTE 4: OFFICE EQUIPMENT, NET

The office equipment is recorded at cost.

		Depreciable Life Years
Office equipment	$ 10,218	3-7
	10,218	
Less accumulated depreciation	(616)	
Net office equipment	$ 9,602	

Depreciation expense for the quarter ended March 31, 2004 was $346.

NOTE 5: COMMITMENTS AND CONTINGENCIES

On September 24, 2003, the Company entered into a contract agreement to sponsor research in the laboratories of Dr. Charles Patrick Collier at the California Institute of Technology (Caltech). The research is to be conducted during the period of October 1, 2003 to September 30, 2008. The agreement originally called for the Company to pay Caltech $162,000 per year to subsidize all direct and indirect costs incurred in the performance of the research, with a total estimated project cost of $810,000 over the five year period. This agreement was subsequently modified on February 26, 2004, to increase the annual contract amount to $235,894 for the first year and $263,218 in each of the next four years. Total estimated project cost is not to exceed $1,288,764 over the five year period.

On November 12, 2003, the Company entered into a second contract agreement with Caltech, to sponsor research in the laboratories of Dr. Marc Bockrath. The research is to be conducted during the period of January 1, 2004 to December 31, 2008. The Company will pay Caltech $162,000 per year to subsidize all direct and indirect costs incurred in the performance of the research, with a total estimated project cost not to exceed $810,000 over the five year period.

On February 23, 2004, the Company entered into a third contract agreement with Caltech, to sponsor research in the laboratories of Dr. Harry Atwater. The research shall be conducted during the period of January 1, 2004 to December 31, 2008. The Company will pay Caltech $242,640 to subsidize all direct and indirect costs incurred in the performance of the research, and slightly lesser amounts in each of the next three years. Total estimated project cost will not exceed $870,793 over a four year period.

If any of these agreements are extended, the dollar value of costs that will be reimbursed may be modified by mutual agreement to cover additional work performed during the extension.

As of March 31, 2004, the Company had advanced Caltech a total of $566,640 for research and development costs. These costs are expensed as incurred and consist primarily of product development and application research. Research expense related to these costs was $141,660 for the quarter ended March 31, 2004. Financial accounting standards require the capitalization of certain software costs after technological feasibility is established. These costs are not applicable to the Company.

On April 20, 2004, the Company finalized the formation of Aonexx Technologies, Inc. and provided $2,000,000 in initial capitalization, and agreed to contribute up to an additional $3,000,000 over a two year period as certain milestones in the development of its business are met. See Note 6, “Subsequent Events.”

On April 13, 2004, the Company agreed to commit $5,000,000 to acquire a majority interest in Insert Therapeutics, Inc., of which $1,000,000 is to be provided initially at the time of acquisition with an additional $1,000,000 to be provided in six months, and an additional $3,000,000 based upon the attainment of certain milestones in the further development of its business. See Note 6, “Subsequent Events.”

On April 21, 2004, the Company agreed to form Nanokinetics, Inc. and to provide it with a total of $20,000,000 of equity capital, with $2,000,000 to be provided at the time of its formation and an additional $18,000,000 to be contributed to capital over an 18 month period as specified milestones in the development of its business are met. See Note 6, “Subsequent Events.”

The Company maintains several bank accounts at various financial institutions. These accounts are insured by the Federal Deposit Insurance Corporation (FDIC), up to $100,000. At March 31, 2004 the Company had deposits with these financial institutions with uninsured cash balances totaling $10,130,701. The Company has not experienced any losses in such accounts and management believes it places its cash on deposit with financial institutions which are financially stable.

NOTE 6: SUBSEQUENT EVENTS

On April 20, 2004, the formation and organization of Aonexx Technologies Inc. was completed, with the Company making its contribution of $2,000,000 to the capital of Aonexx in exchange for Preferred Stock representing 80% of the voting securities of the company, and committing to inject an additional $3,000,000 if certain milestones are met. If all options outstanding and available under an option pool were granted and exercised, the Company’s ownership of voting securities would decline but not below

50%. Moreover, as owner all of the outstanding Preferred Stock, the Company will have the right at all times to elect a majority of the members of the Board of Directors.

On April 13, 2004, the Company agreed to provide $2,000,000 to purchase shares of Preferred Stock that will represent approximately 64% of the voting securities of Insert Therapeutics, Inc. and to contribute up to $3,000,000 of additional capital as certain milestones in the further development of its business are met. In the event that options available under an option pool were granted and exercised, the ownership of the Company in the Insert Therapeutics would be reduced, but not below 50% of the then outstanding voting securities. Moreover, as owner all of the outstanding Preferred Stock, the Company will have the right at all time to elect a majority of the members of the Board of Directors.

On April 21, 2004, the Company entered into an agreement to form Nanokinetics, Inc. with Dr. Michael Roukes and the California Institute of Technology. The Company has agreed to provide $2,000,000 of initial funding to Nanokinetics to purchase shares of Preferred Stock, and to contribute up to $18,000,000 of additional capital as certain milestones in the development of its business are met. The Company initially will own 80% of the voting securities of the new company. In the event that all options outstanding or available under an option pool were granted and exercised, the Company's ownership would be reduced to approximately 45.5% of the then outstanding voting securities. However, as owner of all outstanding Preferred Stock, the Company at all times will have the right to elect a majority of the members of the Board of Directors.

NOTE 7: RECENTLY ISSUED ACCOUNTING STANDARDS

In January 2003, the FASB issued Interpretation 46, *Consolidation of Variable Interest Entities*. In general, a variable interest entity is a corporation, partnership, trust, or any legal structure used for business purposes that either (a) does not have interest entity investors with voting rights or (b) has equity investors that do not provide sufficient financial resources for the entity to support its activities. Interpretation 46 requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or entitled to receive a majority of the entity's residual returns or both. The consolidation requirements of Interpretation 46 apply immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to transactions entered into prior to February 1, 2003 in the first fiscal year or interim period beginning after June 15, 2003. Certain of the disclosure requirements apply in all financial statements issued after January 31, 2003, regardless of when the variable interest entity was established. The adoption of the Interpretation on July 1, 2003 did not have a material impact on the Company's consolidated financial statements.

In April 2003, the FASB issued SFAS 149, *Amendment of Statement 133 on Derivative Instruments and Hedging Activities*, which amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS 133. The Statement is effective for contracts entered into or modified after June 30, 2003. The adoption of this Statement did not have a material impact on the Company's consolidated financial statements.

In May 2003, The FASB issued SFAS 150, *Accounting for Certain Financial Instruments with Characteristic of both Liabilities and Equity*. The Statement establishes standards for how an issuer classifies and measure certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer clarify a financial instrument that is within its scope as a liability (or an asset in some circumstances). It is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. The adoption of this Statement did not have a material impact on the Company's consolidated financial statements.

NOTE 8: SEGMENT INFORMATION

Industry Segment Data

The Company is still in the development stage, and no revenues have been earned.

Geographic Area Data

No revenues have been earned.

ITEM 2. MANAGEMENTS DISCUSSION AND ANALYSIS AND PLAN OF OPERATION

General

Statements contained in this Quarterly Report on Form 10-QSB, which are not purely historical, are 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, including but not limited to statements regarding the Company's expectations, hopes, beliefs, intentions or strategies regarding the future. Actual results could differ materially from those projected in any forward-looking statements as a result of a number of factors, including those detailed in "Risk Factors" below and elsewhere in this Quarterly Report on Form 10-QSB. The forward-looking statements are made as of the date hereof, and the Company assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ materially from those projected in the forward-looking statements.

Plan of Operation

On January 12, 2004, the Company, a Delaware corporation then known as "InterActive Group, Inc.", acquired all of the issued and outstanding securities of Arrowhead Research Corporation, a California corporation (the "California corporation"), pursuant to the terms and conditions set forth in a "Stock Purchase and Exchange Agreement" originally entered into on December 10, 2003 (the "Exchange Agreement"). As a result of this transaction, control of the Company was changed, with the former shareholders of the California corporation acquiring approximately 88.9% of the Company's Common Stock outstanding immediately following the transaction. In addition, all of the officers and directors of the Company prior to the transaction were replaced by designees of the former shareholders of the California corporation, and the Company's corporate name was changed to "Arrowhead Research Corporation."

As a consequence of the change in control of the Company resulting from these transactions, all prior business activities of the Company were completely terminated, and the Company adopted the business and plan of operations that had been developed and was in the process of implementation by the California corporation prior to the transaction.

Consequently, the Company currently is engaged in funding research at universities in pioneering scientific areas, primarily nanotechnology, in return for exclusive right to license and commercialize technologies and associated intellectual property and patents developed as a result of this research. The goal of the Company in providing financing for research projects is to obtain the rights to patentable and other intellectual property that can be used for commercial purposes. Should one or more of the projects financed by the Company result in the discovery of a technology having commercial application, it is anticipated that the Company would either start a new company, as a majority-owned subsidiary, to pursue the commercial opportunity, or license one or more third parties to use the technology for commercial purposes, in exchange for the payment of royalties to the Company.

Commercial applications that arise from Company-sponsored research projects are expected to be developed and marketed by Arrowhead Research through a series of diversified subsidiaries representing each product or application, or through third-party licensing. The National Nanotechnology Initiative ("NNI") defines nanotechnology as "research and technology development at the atomic, molecular, or macromolecular levels, in the length scale of approximately 1 – 100 nanometer range[.]" Materials, devices, and systems at the nanoscale might be used in a variety of diverse applications across a range of different industries.

Through the end of March 2004, the Company had entered into three arrangements with the California Institute of Technology ("Caltech"), and three corresponding individual professors on the faculty of Caltech, Charles Patrick Collier, Marc W. Bockrath and Harry D. Atwater, with respect to the financing of research projects in various aspects of nanotechnology development. In each case, the Company has obtained the exclusive right and license to commercially exploit any technology developed as a result of the research, along with any patents that are awarded to Caltech and the researchers.

The three research agreements currently being financed at Caltech are:

- ***Nanoelectronics:*** Professor Marc Bockrath and his team of scientists at Caltech are investigating the behavior of electronic circuits comprised of nanoscale materials, and exploiting their unique properties for a variety of applications. The Bockrath group is researching the transport phenomena of nanometer scale systems to create devices such as memories and logic gates that operate on these new principles. In particular they are examining the nature of carbon nanotubes.

  Carbon nanotubes have several attractive qualities: they are chemically stable, have the electrical conductivity of copper, the thermal conductivity of diamond, and are mechanically flexible with an extremely high strength-to-weight ratio. Based on these remarkable properties, many potential applications have been proposed for carbon nanotubes. Research by the Bockrath group is focused on development of more powerful electromechanical devices, including faster memory chips, switches, and signal processors, and the creation of arrays of sensors that can be individually tailored to detect particular chemical species, enabling on-chip, artificial-nose chemical identification.

- ***Biomolecular Tools:*** Professor C. Patrick Collier's group is developing new technologies that will make possible the study and control of biomolecular materials at the nanometer scale. Specific tools and applications being developed include improvements to dip pen nanolithography and combinatorial chemical methods as well as the construction of molecule-specific switches and manipulators integrated onto AFM tips.

  Dip-pen nanolithography (DPN) involves the construction of nano-arrays of biologically active enzymes on glass surfaces and uses chemically modified AFM tips to pattern biological molecules on a surface of interest with nanoscale resolution and precision as well as control over biological activity of the resulting nanostructures. Molecule-specific switches have shown great promise in becoming powerful screening tools for genomics, proteomics and the pharmaceutical industry. Specific benefits include reduced and denser feature sizes. The Collier group's improvements to dip pen nanolithography involve the construction of nano-arrays of biologically active enzymes on glass surfaces, use of chemically modified AFM tips to pattern biological molecules on a surface of interest with nanoscale resolution and precision, and control over biological activity of the resulting nanostructures.

  The opportunity here is enormous; conventional structure-based pharmaceutical design is hampered by the lack of high-resolution structural information for most protein-coupled receptors.

- ***Nanofilms:*** Professor Harry A. Atwater's group is developing methods of engineering nanofilm materials. These ultra-thin films have properties that mirror those of larger, single-crystal bulk materials at the macroscopic level with the added advantage that they can be placed on inexpensive substrates and/or possibly integrated alongside different

materials in a single device. Nanofilms currently under investigation include high performance semiconductor materials (useful in such applications as LEDs, solar cells, and wireless communication devices) and so-called active oxides (useful for active optical devices and electro-optical integration).

The Atwater group is pursuing two approaches to creating these nanofilms. The first, thin-film growth, has the potential to create piezoelectric devices that approach the quality of single crystal devices, but at much lower manufacturing costs and greater potential for integration into MEMS-based devices. The second approach, wafer bonding and layer transfer, could enable the development of low-cost, high performance laminate substrates (e.g., InP on Si) that will reduce manufacturing costs, improve device performance, and enable the integration of multiple device types into a single chip – an industry trend termed system-on-a-chip (SoC). In addition, this latter process has, for the first time, yielded ferroelectric thin films with properties that are as good as those of bulk materials.

In addition to funding research, the Company has recently formed, or entered into agreements to form or acquire controlling interest in three companies that will operate as majority-owned subsidiaries of the Company:

- ***Aonex Technologies, Inc***. On April 20, 2004, the Company formed its first majority owned subsidiary, Aonex Technologies, Inc. with Dr. Harry A Atwater and members of his research group at Caltech. Aonex was formed to commercialize a patented method for transferring nano-layers of semiconductor materials (e.g., indium phosphide, germanium, and gallium arsenide) and oxides (e.g., barium titanate, lithium niobate, and PMNPT) onto low-cost substrates (e.g., silicon, sapphire, and glass), with no adhesives and with controlled stress. The Company has provided $2,000,000 of initial funding to Aonex, with a commitment to inject an additional $3,000,000 if certain milestones are met.

  Applications expected to be targeted by Aonex include the development of inexpensive laminate wafers (e.g., indium phosphide on silicon and germanium on silicon) that could replace expensive, homogenous compound semiconductor substrates. These ‘replacement’ wafers are expected to reduce manufacturing costs and improve performance for devices such as LEDs, power amplifiers for wireless communications, and high-efficiency solar cells. Aonex is currently scheduled to have limited samples available for evaluation purposes by qualified parties within three months.

  Aonex is also exploring the use of the technology to support the integration of different semiconductor materials onto a single substrate. Such a technology would enable optical, logical, and high frequency power amplification devices to be integrated into single dies – an industry trend termed ‘system on a chip’ (SoC) – and bring with it opportunities for significant cost savings and performance improvements. Ultimately, the company hopes to enable the optical and electrical properties of device active regions to be engineered independently of the underlying substrate’s thermal, dielectric, and mechanical properties.

- ***Nanotechnica (fka Nanokinetics, Inc.).*** On April 21, 2004, the Company entered into an agreement with Dr. Michael Roukes and Caltech to form a new corporation, Nanotechnica, that will focus on the development of the processes and devices needed to commercialize various nanotechnology applications. Pursuant to this agreement, Caltech would grant to Nanotechnica a fully-paid, worldwide, exclusive license to use for commercial purposes certain technology developed by Dr. Roukes and his research group

at Caltech. As payment in full for the technology license, Caltech will be granted a Warrant to purchase, for a nominal consideration, shares of the new company's Common Stock. The Company has committed to provide a total of $20,000,000 in capital to finance the operations of Nanotechnica as specified milestones are met over an initial 12-month period.

To date, nanoscience has been directed to the development of individual devices. Nanotechnica has been formed to build upon intellectual property developed by Dr. Roukes and his group at Caltech. Nanotechnica will focus on the incorporation of various nanoscience discoveries to produce integrated systems of nanotech devices that can provide the basis of products to be manufactured in commercial quantities. Nanotechnica intends to implement this technological base by establishing the facilities, processes, and techniques required for commercial production of one or more nanotech products to be developed by Nanotechnica for target markets. For example, one application under development by Dr Roukes and his team is a microfluidic-based electronic biosensor based upon BioNEMS (biofunctionalized nanoelectromechanical systems). In the near term, nanosystems such as this, with nanoscale sensor elements numbering in the hundreds and thousands, are expected to provide powerful new approaches to bio-threat detection, drug screening, and medical diagnostics — with sensitivity approaching the single molecule level.

- ***Insert Therapeutics, Inc***. The Company has also agreed to acquire a majority interest in Insert Therapeutics, Inc., a Pasadena-based company focused on designing, developing and commercializing delivery-enhanced therapeutics using its patented class of polymeric delivery systems. Pursuant to this Agreement, the Company initially would provide $1,000,000 to Insert Therapeutics, and a second $1,000,000 six months later, with up to $3,000,000 of additional capital if specified milestones are met.

  Under the direction of Dr. Mark Davis, a professor of chemical engineering at Caltech, Insert Therapeutics is currently expanding and leveraging its platform technology, Cyclosert™, through an internal small-molecule drug development program, a gene-therapy collaboration with San Diego-based Canji, Inc., a subsidiary of Schering-Plough, and grants in both areas from the National Cancer Institute. Insert has designed a novel class of nanoscale cyclodextrin polymers that incorporate optimal properties for intracellular systemic delivery of a broad range of therapeutics. These polymers can be designed to fit the size of the molecule or drug to be delivered. Cyclosert's linear cyclodextrin-containing polymers can be designed to be neutral, positively charged or negatively charged. This feature is unique to Cyclosert technology and provides great flexibility for formulation and delivery. Cyclosert polymers have been synthesized at molecular weights ranging up to 150 kD, allowing for systemic drug delivery with the potential to slow renal clearance, enhance circulation time and improve passive accumulation of active drug at the target tissue.

As is the case with any research and development undertaking, it is possible that no commercially viable technology will be developed as a result of any one or more of the projects and/or subsidiaries that the Company has agreed to finance to date or may finance in the future. This is particularly true in the case of the projects that the Company typically will finance, since most of these projects are in the very early stages of research, well before they have generated sufficient results to attract the interest of traditional venture capital firms that focus in the high tech arena. Consequently, the Company is engaged in negotiations with Caltech and additional members of its faculty pertaining to additional research agreements, and it is anticipated that the Company will enter into comparable arrangements with a

number of researchers in the nanotechnology field, both at Caltech and at other universities. The Company also may seek to identify and finance the research and development activities of other entrepreneurs who are working in the nanotechnology arena outside of a university setting.

In connection with the transactions that resulted in the change in the Company's ownership and business, the Company acquired certain technology from San Diego Magnetics, Inc. ("SDM"), whose principal shareholder, TPR Group, Inc., owned approximately 90% of the Company's Common Stock prior to January 12, 2004. There were no pre-existing relationships between the California corporation or its management and either SDM or TPR Group, Inc. SDM was formed in 1998 to purchase from Eastman Kodak Company ("Kodak") the assets and properties then employed by Kodak in the ownership and activities of the Kodak San Diego Laboratories, a research and development operation in San Diego, California. The intellectual property acquired by the Company from SDM includes all know-how developed by SDM relating to thin film fabrication and design of thin film devices for magnetic sensing, nanoscale optical coatings and other thin film sensors (excluding know-how related to the sensing of currency or other documents containing stored monetary value). It also includes SDM's rights under a non-exclusive license from Kodak to use a total of 71 patents relating to thin film coatings, magnetic detectors, systems and other devices fabricated using thin film fabrication technologies. Management of the Company is continuing to evaluate, in consultation with members of its Scientific Advisory Board, whether any of the SDM technology may prove to have any meaningful value to the Company.

Given its strategy of financing new, as yet unproved technology research, it should be expected that the Company would not realize significant revenue in the foreseeable future, if at all. For this reason, it is anticipated that the Company will generate the funds needed to finance a growing number of research projects through future sales of securities, rather than out of profits generated internally. It is possible that the Company will not be successful in the future in raising the level of additional capital sought, or on terms currently contemplated, if at all. Should the Company prove successful in selling securities to raise the additional capital sought to finance additional research, the current stockholders of the Company will experience dilution in their percentage ownership of the Company's outstanding securities.

Although the risks taken by the Company in financing leading edge technology research may be considered to be great, management of the Company believes that the rewards to the Company and its stockholders also have the potential to be great. That is, it is anticipated that the early-stage investments to be made by the Company should enable the Company to obtain the right, at a relatively low cost per research project, to exploit one or more technologies that could have commercial potential well beyond that of a company that is financed by a traditional venture capitalist. However, as is the case with any research project, it is possible that no commercially viable technology will be developed as a result of any one or more of the projects that the Company has agreed to finance to date or may finance in the future.

Financial Resources

To date, the Company has completed two private placements in which it issued and sold Units, each consisting of one share of Common Stock and a Warrant to purchase an additional share of Common Stock for the price of $1.50. The aggregate net proceeds from the two private placements totaled $11,302,363. See Part II, Item 2, “Changes in Securities.”

As of May 10, 2004, the Company had used approximately $564,000 of its cash resources to fund the three research projects it has already undertaken, and an additional $2,600,000 has been committed to meet the Company’s future obligations under the three research projects over 4-5 year periods.

In connection with the formation of Aonex Technologies, Inc., the Company has provided $2,000,000 in initial capitalization, and has agreed to contribute up to an additional $3,000,000 over a two year period as certain milestones in the development of its business are met.

The Company has agreed to provide a total of $20,000,000 of equity capital to Nanotechnica, with $2,000,000 to be provided at the time of its formation and an additional $18,000,000 to be contributed to capital over an 18-month period as specified milestones in the development of its business are met.

An additional $5,000,000 has been committed by the Company to acquire a majority interest in Insert Therapeutics, Inc., of which $1,000,000 is to be provided initially at the time of acquisition with an additional $1,000,000 to be provided in six months, and an additional $3,000,000 based upon the attainment of certain milestones in the further development of its business.

As of May 10, 2004, the Company retained approximately $8,800,000 of the $11,302,363 net proceeds from the two private placements which could be used to meet the Company’s commitments under its existing agreements to fund research projects and provide capital to majority owned subsidiaries. Since the Company has committed a total of approximately $30,600,000 for these purposes over the next two years, the Company will be required to raise substantial additional capital over this period to meet its funding obligations. It is anticipated that the Company will seek to raise the additional capital required to meet its commitments through the sale of additional equity securities.

For these reasons, it should be anticipated that the Company may call the outstanding Warrants for redemption in the near term, in the expectation that the holders of the Warrants would exercise them prior to redemption at a nominal price per Warrant. If the Warrants were called for redemption, and all of the Warrants were exercised rather than redeemed, the Company would realize an additional $20,756,624 in gross proceeds.

In addition, the Company may seek to raise additional capital through the sale of Common Stock and/or Warrants in one or more private placements, or in a registered public offering. Assuming that the Company’s pending application for the listing of its Common Stock and Warrants on The NASDAQ Small Cap Market is approved, the Company will be subject to a NASDAQ rule that would require approval of the Company’s stockholders before the Company could raise additional capital by conducting further private placements if additional Common Stock were to be offered at a price below the prevailing market price for the Common Stock.

Risk Factors

An investment in the Company should be considered speculative, and to involve a high degree of risk. In addition to the other information contained in this Quarterly Report on Form 10-QSB, prospective investors should carefully consider the following risk and speculative factors:

Unproven Plan of Operations. As a consequence of the change in the control of the Company on January 12, 2004, all efforts that were previously initiated by prior management in an attempt to develop a viable business plan have been abandoned. In place thereof, the Company has adopted as a new plan of operations the strategy that was only recently formulated by the California corporation following its formation in May 2003. To date, implementation of this strategy is still in the development stage, with only a limited number of research projects having been selected for funding. Accordingly, the Company's business and operations should be considered to be in the development stage, subject to all of the risks inherent in the establishment of a new business venture. For this reason, the intended business and operations of the Company may not prove to be successful. Any future success that the Company might enjoy will depend upon many factors including factors which may be beyond the control of the Company, or which cannot be predicted at this time. The Company may encounter unforeseen difficulties or delays in the implementation of its plan of operations which 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 value of an investment in the Company can also be adversely affected by a number of external factors, such as conditions prevailing in the securities markets and/or the economy generally. Consequently, an investment in the Company is highly speculative and no assurance can be given that purchasers of the Company's securities will realize any return on their investment or that purchasers will not lose their entire investment.

Risks Inherent in Research Projects. As is the case with any research project, it is possible that no commercially viable technology will be developed as a result of any one or more of the projects that the Company has agreed to finance to date or may finance in the future. This is particularly true in the case of the projects that the Company typically will finance, since most of these projects are in the very early stage of research, well before they have generated sufficient results to attract the interest of traditional venture capital firms that focus in the high tech arena.

Lack of Revenue; No Assurance of Profitability. To date, the Company has not generated any revenue as a result of its current plan of operations. Moreover, given its strategy of financing new, as yet unproven technology research, it should be expected that the Company would not realize significant revenue in the foreseeable future, if at all.

Need for Additional Capital. The Company has entered into agreements pursuant to which it is committed to provide substantial amounts of research project funding and financial support for majority owned subsidiaries over an extended period of time. As of May 10, 2004, these commitments, including approximately $28,600,000 that will be required over the next two years, exceed the Company's available cash resources by more than $21,000,000. Accordingly, the Company will need to raise additional capital in the near term, and may seek to do so by calling the outstanding Warrants for redemption, 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 which the Company may need will be available to the Company as and when required, or on terms that will be acceptable to the Company. If the Company is unable to raise the capital required on a timely basis, it would not be able to fulfill its obligations to fund research projects and the development of the businesses of its majority owned subsidiaries. In such event, the Company would be required to renegotiate the terms upon which it has agreed to provide research funding and capital to its subsidiaries, and may be required to delay or reduce implementation of certain aspects of its plan of operations. Even if the necessary funding were available, the issuance of additional securities would dilute the equity interests of its existing stockholders, perhaps substantially.

Dilution Through Sales of Additional Securities. The Company is authorized to issue an aggregate of 50,000,000 shares of Common Stock without approval of the Company's stockholders, on such terms and at such prices as the Board of Directors of the Company may determine. Of these shares, an aggregate of 13,550,546 shares of Common Stock have been issued, 13,837,749 are reserved for issuance upon exercise of outstanding Stock Purchase Warrants, and 3,000,000 shares of Common Stock are reserved for issuance upon exercise of Stock Options that have been granted or may be granted under the Company's 2000 Stock Option Plan to employees, consultants and others expected to provide significant services to the Company. Approximately 20,000,000 shares of Common Stock remain available for issuance by the Company to raise additional capital, in connection with prospective acquisitions, upon exercise of future Stock Option grants, or for other corporate purposes. Issuances of additional shares of Common Stock would result in dilution of the percentage interest in the Company's Common Stock of all stockholders ratably, and might result in dilution in the tangible net book value of a share of the Company's Common Stock, depending upon the price and other terms on which the additional shares are issued. In addition, the issuance of additional shares of Common Stock upon exercise of the Warrants, or even the prospect of such issuance, may be expected to have an effect on the market for the Common Stock, and may have an adverse impact on the price at which shares of Common Stock trade.

Reliance on Key Personnel. The Company's future success will depend to a significant extent on the continued services of its key employees, particularly R. Bruce Stewart, who conceived the Company plan of operation and has been most instrumental in assisting the Company in raising the capital that it needs to implement the plan of operation. The Company's ability to manage growth will also depend on its ability to attract and retain qualified technical, sales, marketing, finance and managerial personnel. If the Company is unable to find, hire and retain qualified individuals, it may have difficulty implementing portions of its business strategy in a timely manner, or at all.

Possibility of Competition. Management believes that the Company's success to date in raising capital to finance nanotechnology research and commercialization projects is attributable, in large part, to the belief that the plan of operations adopted by the Company is a novel one. If the Company continues to be successful in attracting funding for research and commercialization projects, it is possible that competitors could emerge compete for financing. Should that occur, the Company could encounter difficulty in raising funds to finance its future operations and further research and commercialization projects. Some companies with large research and development budgets fund early-stage, scientific research at universities and venture capital funds invest in companies seeking to commercialize technology. It is possible that these companies and venture funds, as well as possible additional competitors, will emerge to finance similar research projects. Should that occur, the Company could encounter difficulty in obtaining the opportunity to finance research and commercialization projects that management believes could have significant potential for commercial returns to the Company. Furthermore, should any commercial undertaking by the Company, with respect to a particular product or technology, prove to be successful, there can no assurance that competitors with greater financial resources than the Company will not emerge that offer similar, and thus competitive, products and/or technologies.

Limited Public Market for and Extreme Fluctuations in the Market Price of the Common Stock; Effect of Registration Statement on Market Prices. Although application has been made for listing on The NASDAQ SmallCap Market, the Company's Common Stock currently is traded in the over-the-counter market and quoted on the OTC Bulletin Board under the symbol "ARWR." Prior to the change in control of the Company on January 12, 2004, trading in the Common Stock was very sporadic. Since January 12, 2004, there have been extreme fluctuations in the price at which the Company's Common Stock has sold, which may be attributable, in large part, to the limited number of shares of Common Stock available for public sale resulting from the 65-for-1 "reverse split" of the Common Stock on January 12, 2004. The Company has filed a registration statement with the Securities and Exchange Commission, for the purpose of registering for resale under the Securities Act, all of the Common Stock that was issued without such registration in connection with the transaction contemplated by the Exchange Agreement. Upon effectiveness of this pending registration, the number of shares of the Company's Common Stock in the public "float" will increase dramatically. Sales of a number of the shares of Common Stock

pursuant to the registration statement, or even the possibility of such sales, could have a significant depressing effect on the market price for the Company's Common Stock and Warrants.

Market Overhang - Warrants. The pending registration statement that the Company has filed with the Securities and Exchange Commission also covers all the Warrants issued in connection with the transactions contemplated by the Exchange Agreement, along with all of the shares of Common Stock issuable upon exercise of the Warrants. The issuance of shares of Common Stock upon exercise of the Warrants, or the prospect of such issuance, may be expected to have an effect on the market for the Common Stock, and may have an adverse impact on the price at which shares of the Company's Common Stock trade.

Possible Volatility of Market Prices. The public markets for securities such as the Company's Common Stock and Warrants historically have experienced extreme price and volume fluctuations during recent periods. These broad market fluctuations, and other factors such as general economic conditions and trends in the investment markets, may adversely affect the market price of the Company's Common Stock and Warrants for reasons unrelated to the Company or its operating performance.

Early Call of Warrants for Redemption. The Warrants may be redeemed by the Company at any time following issuance, upon 30 day's prior written notice to the holders thereof, provided that a public market for the underlying shares of Common Stock then exists and the closing bid price for a share of the Company's Common Stock for 20 consecutive trading days ending not more than 15 days prior to the date of the redemption notice equals or exceeds $3.00 per share. Redemption of the Warrants prior to their stated expiration would deprive purchasers of the opportunity to hold the Warrants to profit from a possible increase in the market price of the Company's Common Stock. In that event, the holders could be forced to exercise the Warrants and pay the exercise price at a time when it might be disadvantageous for the holders to do so, to sell the Warrants when they might otherwise wish to hold them, or to accept the redemption price, which may be substantially less than the market value of the Warrants at the time of redemption. Warrant holders who fail to exercise their Warrants will experience a corresponding decrease in their interest in the Company relative to the ownership interest of those Warrant holders who do exercise their Warrants.

Possible Issuance of Preferred Stock Having Preferences over the Common Stock; Possible Change in Control Provisions. Although no shares of Preferred Stock currently are outstanding, and the Company has no present plan to issue any shares of Preferred Stock, the issuance of Preferred Stock in the future could provide voting or conversion rights that would adversely affect the voting power or other rights of the holders of Common Stock and thereby reduce the value of the Common Stock. In addition, the issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change in control of the Company. In particular, specific rights granted to future holders of Preferred Stock could be used to restrict the Company's ability to merge with or sell its assets to a third party, or otherwise delay, discourage or prevent a change in control of the Company.

No Dividends. The Company does not anticipate that it will pay dividends in the foreseeable future. Instead, the Company intends to apply any earnings to the development and expansion of its business.

ITEM 3. CONTROLS AND PROCEDURES.

As of the end of the period covered by this Quarterly Report on Form 10-QSB, the chief executive and financial officer of the Company conducted an evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Rules 13a-14 and 3a-15 under the Securities Exchange Act of 1934, as amended. Based upon that evaluation, the executive officers concluded that the Company's disclosure controls and procedures are effective, as of the end of the period covered by this Report, in timely alerting them to material information relating to the Company that is required to be included in its filings with the Securities and Exchange Commission, so that such information can be accumulated and communicated to management and recorded, processed, summarized and reported with the time period prescribed by the Securities and Exchange Commission. There have been no significant changes in the Company's internal controls or in other factors that have materially affected, or are reasonably likely to materially affect, these controls subsequent to the date this evaluation was carried out.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

Prior to the change in control on January 12, 2004, the Company was delinquent on its interest payments on its secured note and a portion of its trade accounts payable, and had several judgments against it as a result of its inability to pay its obligations to its unsecured trade creditors. In connection with the reduction of its debt as required by the terms and conditions of the Exchange Agreement, the Company has obtained releases or otherwise extinguished all claims and liens against it, except for those that total, in the aggregate, not more than $150,000. These remaining claims and liens have been or will be paid or otherwise satisfied in full using cash that became available to the Company as a result of the change in control transactions.

ITEM 2. CHANGES IN SECURITIES.

Pursuant to the Exchange Agreement, an aggregate of 5,730,000 shares of the Company's Common Stock were issued to acquire, in exchange therefor, all of the 5,730,000 shares of the Common Stock of the California corporation then outstanding. In addition, Warrants to purchase 5,909,500 additional shares of the Company's Common Stock, at the price of $1.50 per share, were issued by the Company in exchange for Warrants to purchase, at the same price per share, the same number of shares of the California corporation's Common Stock.

Prior to the issuance of these shares and Warrants under the Exchange Agreement, the Company effected a 1-for-65 "reverse split" of its outstanding Common Stock and a 1-for-6.5 conversion of its Series A Preferred Stock into shares of Common Stock. As a result of the "reverse split" of the Common Stock and conversion of the Series A Preferred Stock, a total of 389,197 shares of Common Stock were then outstanding. An additional 316,332 shares of the Company's Common Stock, and Warrants to purchase up to an additional 658,583 shares of Common Stock at $1.50 per share, were issued in connection with a program to reduce the total debt of the Company to not more than $150,000, and to acquire certain technology from San Diego Magnetics, Inc., a research and development operation in San Diego, California involved in the areas of thin film, specialty micro and nano devices and detectors.

In October 2003, the predecessor California corporation completed a private placement in which it raised net proceeds of approximately $2,380,000 from the sale of Units, each consisting of one share of Common Stock and a Warrant to purchase an additional share of Common Stock at the price of $1.50.

The Units were issued and sold without registration under the Securities Act of 1933, as amended (the "Securities Act", in reliance upon the exemptions from such registration afforded by Section 4(2) of the Securities Act and Regulation D promulgated by the Securities and Exchange Commission under the Securities Act. All of the purchasers of the Units were "accredited investors", as that term is defined in the rules and regulations of the Securities and Exchange Commission under the Securities Act.

A second private placement, conducted pursuant to the same exemptions from registration under the Securities Act, was consummated on January 31, 2004, following the end of the period covered by this Current Report on Form 10-QSB. In the second private placement, the Company raised net proceeds of approximately $8,922,000 from the sale of Units, each consisting of one share of Common Stock and a Warrant to purchase an additional share of Common Stock at the price of $1.50.

Pursuant to the Exchange Agreement, the Company agreed to register for resale under the Securities Act of 1933, as amended (the "Securities Act"), at the Company's cost and expense, all of the shares of the Company's Common Stock, and all of the Warrants to purchase shares of the Company's Common Stock, that were issued in connection with the transactions contemplated by the Exchange Agreement, including the shares and Warrants issued to the former shareholders of the California corporation in the two private placements, the shares and Warrants issued in connection with the Company's debt reduction program, and the shares and Warrants issued to acquire the San Diego Magnetics technology.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

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

At a special meeting held on January 12, 2004, the Company's stockholders approved amendments to the Company's Certificate of Incorporation to (i) effect the 1-for-65 "reverse split" of the Company's outstanding Common Stock and the 1-for-6.5 conversion of the Company's outstanding Series A Preferred Stock into shares of the Company's Common Stock, and (ii) change the Company's corporate name from "InterActive Group, Inc." to "Arrowhead Research Corporation." All of the directors and officers of the Company, who together possessed, directly or through one or more affiliates, the power to vote at least a majority of all classes of the issued and outstanding voting securities of the Company as of the record date for the special meeting, had indicated that they would vote, or cause to be voted, all of the securities over which they have voting control in favor of the approval of the proposed amendments. Therefore, approval of the proposed amendments by the stockholders of the Company was assured, no additional votes in favor of approval of the amendments were required, and no proxies were solicited. However, all of the stockholders of record as of the record date for the special meeting were furnished a copy of the Information Statement on Schedule 14C dated December 22, 2003, that the Company filed with the U.S. Securities and Exchange Commission.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits.

The following additional exhibits to the Quarterly Report on Form 10-QSB are filed with the Amendment on Form 10Q-SB/A:

10.4	Research Agreement between California Institute of Technology pertaining to research in Harry Atwater's laboratory
10.5	Letter Agreement among the Company, California Institute of Technology and Harry Atwater pertaining to the formation of Aonexx Corporation
10.6	Series B Stock Purchase Agreement pertaining to acquisition of majority interest in Insert Therapeutics, Inc.
10.7	Letter Agreement among the Company, California Institute of Technology and Michael Roukes pertaining to the formation of Nanotechnica (fka Nanokinetics)
31.1	Section 302 Certification
32.1	Section 906 Certification

(b) Reports on Form 8-K.

A Current Report on Form 8-K was filed by the Company on January 9, 2004 to report a change in certifying accountants resulting from the change in control of the Company as a consequence of the transactions contemplated by the Exchange Agreement. A second Current Report on Form 8-K was filed by Company on March 10, 2004 to report that it entered into an agreement with Dr. Harry A. Atwater and Caltech to form a new corporation to commercialize an ultrathin crystal film (nanofilm) technology that has been developed by Dr. Atwater and his research group at Caltech. On April 6, 2004, the Company filed a Current Report on Form 8-K to report that an application was being submitted to The NASDAQ Stock Market for the approval of the Company's Common Stock and Stock Purchase Warrants for quotation on The NASDAQ SmallCap Market, and that steps were being taken to meet the listing requirements. A fourth Current Report on Form 8-K was filed by the Company on April 23, 2004 to report the Company's commitments and/or investments in its three subsidiaries, Nanokinetics, Inc., Insert Therapeutics, Inc. and Aonexx Technologies, Inc.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Issuer has caused this amendment to the Issuer's Quarterly Report on Form 10-QSB, on Form 10-QSB/A, to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: July 7, 2004

ARROWHEAD RESEARCH CORPORATION.

BY: /s/ R. BRUCE STEWART, President

R. Bruce Stewart, President
Chief executive, financial and accounting officer

EXHIBIT 10.4

RESEARCH AGREEMENT

RESEARCH AGREEMENT between the CALIFORNIA INSTITUTE OF TECHNOLOGY, of Pasadena, California, U.S.A., hereinafter referred to as “Institute”, and Arrowhead Research Corporation, hereinafter referred to as “Sponsor”.

WHEREAS, the research program relating to the works of Dr. Harry Atwater, hereinafter referred to as “Investigator”, and the Sponsor, and will further the instructional and research objectives of the Institute in a manner consistent with its status as a nonprofit, tax-exempt, educational institution.

NOW, THEREFORE, the parties hereto agree as follows:

I. STATEMENT OF WORK. The Institute agrees to use its best effort to carry out the work defined in the Statement of Work attached as Exhibit I.

2. PRINCIPAL INVESTIGATOR. The research will be supervised by Dr. Harry Atwater. If for any reason, he/she is unable to continue to serve as Principal Investigator, and a successor acceptable to both the Institute and the Sponsor is not available, this Agreement shall be terminated as provided in Article 11

3. PERIOD OF PERFORMANCE. The research shall be conducted during the period of 1/1/04 through 12/31/07. This Agreement and the period of performance may be extended by mutual agreement of the parties.

4. REIMBURSEMENT OF COSTS. In consideration of the foregoing, the Sponsor will reimburse the Institute for all direct and indirect costs incurred in the performance of the research which shall not exceed a total estimated project cost of $870,793, without written authorization from the Sponsor. If the Agreement is extended, the dollar value of costs to be reimbursed may be increased by mutual agreement to cover additional work performed during the extension.

5. PAYMENT. Payment shall be made as follows:

Year 1: $242,640 Year 2: $205,907 Year 3: $209,501 Year 4: $212,744

Full payment for the first year shall be made within thirty (30) days of execution of this Agreement. Subsequent annual payments shall be made within thirty (30) days of the anniversary of the commencement date of this Agreement. All payments to the Institute shall be net, and free and clear of all taxes, duties and levies.

6. ACCOUNTS AND RECORDS. The Institute agrees to maintain books, records, documents, and other evidence pertaining to all costs and expenses to the extent and in such detail as will properly reflect all net costs, direct and indirect, of labor, materials, equipment, supplies and services, and other costs, and expenses of whatever nature incurred in the performance of this research.

7. TRAVEL. Travel costs shall be paid in accordance with applicable Institute policies.

8. PERSONAL PROPERTY. Title to all personal property to be used in the performance of this research and purchased with funds supplied under this Agreement, shall vest in the Institute upon delivery.

9. TECHNICAL DATA.

a. Ownership of, and the right to register copyright to documents related to computer hardware and software and associated documentation (hereinafter "Documents") shall remain in the Institute, The Sponsor shall be granted a nonexclusive, nontransferable, royalty-free license to use Documents, but only for Sponsor's own internal purposes. The Sponsor further agrees not to provide or otherwise make available Documents, or any copy of modification thereof in any form to any third party, except as may be permitted in writing by the Institute. As used herein "modification" shall mean any source tapes, listings or other documentation remains essentially the same in both form and function as when originally provided by the Institute to the Sponsor.

b. All technical data other than Documents resulting from the research program under this Agreement shall be the property of the Institute; however, a copy of all such technical data shall be provided to the Sponsor upon request, and, subject to Article 12 hereof, Sponsor shall have the right to use and disclose all such technical data as it sees fit.

10. PUBLICATIONS. It is anticipated that the Principal Investigator may publish information regarding technical developments and/or research findings made by Institute employees under this Agreement. For such publication Principal Investigator agrees to submit a copy of the proposed publication to the Sponsor, preferably at least (30) days prior to, but in no case later than simultaneously with submission for publication. Sponsor may request reasonable changes and/or deletions be made in any proposed publication. The Principal Investigator will consider such changes but retains the sole right to determine whether such changes or deletions will be made. If Sponsor believes that the subject matter to be published warrants patent protection, it will identify the subject matter requiring protection and notify the Institute. Institute agrees to use its best efforts to file a U.S. patent application prior to any date that would result in preventing the obtaining of a valid patent rights throughout the world when the Sponsor so identifies subject matter requiring patent rights throughout the world when the Sponsor so identifies subject matter requiring patent protection from a review of the planned publication. Notwithstanding any other provisions of this Article 10, if the Institute is unable to file a U.S. nonprovisional patent application, at its expense, prior to any date that would result in preventing the obtaining of valid patent right throughout the world when Sponsor so identifies subject matter requiring patent protection from a review of a planned publication.

11. TERMINATION. The Principal Investigator or the Sponsor shall have the right to terminate this Agreement upon sixty (60) calendar days' written notice. In the even of termination by the Sponsor, the Institute shall make no further commitments and must take all reasonable action to cancel outstanding obligations. The Institute shall be entitled to reimbursement for all costs incurred including reasonable cancellation charges for any purchase orders, subcontracts or other commitments made prior to notice of termination. The Office of Management and Budget Circular A-21 shall be used in determining the allowable costs.

In the event the Institute employs personnel specifically for this work, it shall be entitled to full reimbursement for the salaries, benefits and overhead for such personnel for a period of 60 days.

12. USE OF NAME. The Sponsor agrees that it will not use the name of the California Institute of Technology in any advertising or publicity material, or make any form of presentation or statement in relation to research or testing done at the Institute which would constitute an express or implied endorsement by the Institute of any commercial product or service, and it will not authorize other to do so, without first having obtained written approval from the Institute. Similarly, the Institute agrees that it will not use Sponsor's Corporate name without its prior written concurrence.

13. PATENTS.

a. Definition: “Subject Invention” means any invention or discovery, whether or not patentable, conceived or first actually reduced to practice in the course of, or under this Agreement. “Joint Subject Invention” means any invention or discovery, whether or not patentable, (a) conceived or first actually reduced to practice in the course of, or under this Agreement, jointly by the Institute and Sponsor Employees, (b) first actually reduced to practice by Institute Employees using Sponsor’s facilities and equipment, or (c) first actually reduced to practice by Sponsor Employees using Institute facilities and equipment. The term “Subject Invention” includes, but is not limited to, any art, method, process, machine, manufacture, design or composition or matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws of the United States of America.

b. Reporting of Inventions. The Institute shall report each Subject Invention to the Sponsor as soon as possible after becoming aware of the conception or reduction to practice thereof.

c. Filing of Applications.

1. The Institute shall retain title to each Institute Subject Invention. As to each such Institute Subject Invention, Sponsor can request Institute to file a patent application and Institute agrees to do so provided Sponsor covers the cost of filing and maintaining the patent application, patents issuing therefrom and foreign counterparts, if any. The Institute shall have the right thereafter to elect whether of not it will file a patent application covering Subject Invention. Patent applications relating to such Subject Invention(s) shall be filed by the Institute in its name.

2. Joint Subject Inventions shall be jointly owned by Institute and Sponsor. Patent applications relating to a Subject Invention made jointly by Institute personnel and other persons participating in the work supported by this Agreement shall be filed as mutually agreed by the parties, at Sponsor’s expense unless Sponsor has not initiated the filing of such patent applications, and Institute and Sponsor shall together select independent patent counsel satisfactory to both parties to prepare and prosecute any such applications. Patent applications relating to Joint Subject Inventions shall be filed in the names of Institute and the Sponsor.

3. Subject Inventions made solely by person(s) who are not Institute personnel shall be owned by Sponsor provided such personnel do not first actually reduce to practice a Subject Invention shall be a Joint Subject Invention as defined above. Patent applications owned by Sponsor shall be filed by Sponsor.

4. As regards 13.c.1 and 13.c.2., both parties shall have the right to review and comment upon applications and correspondence with the Patent Office and shall be provided with drafts thereof sufficiently in advance to reasonably allow for such review and comment.

5. Institute agrees that it will cause to be signed by concerned Institute personnel all documents necessary to obtain patent as set forth above, and that Institute will do whatever Sponsor reasonably requests to obtain and maintain such patent rights, at the expense of Sponsor.

6. If Sponsor is not interested in having a patent application filed with respect to a particular Subject Invention made solely by Institute personnel or jointly, Sponsor shall advise Institute of such fact within sixty (60) days from the date the Subject Invention was disclosed to Sponsor by Institute, or sooner if necessary to avoid loss of patent rights. Institute may then at its own expense, file and prosecute such patent application, and patent application and any patents

issuing therefrom shall not be included within the rights licensed to Sponsor pursuant to this Agreement, and Institute shall be free to license its rights in such patent to any party.

d. Licenses.

1. For any Subject Invention for which Institute has any right, Sponsor shall receive a nonexclusive, royalty-free, irrevocable license to use the invention covered by the license for its own internal purposes. However, such a nonexclusive license will not include the right to sublicense and is nontransferable, except in the event of the transfer or sale of all or substantially all of Sponsor's assets to a third party.

2. Sponsor shall have the option to acquire, upon mutually agreeable terms, a royalty bearing, exclusive or nonexclusive, world-wide license in the Field, including the right to sublicense, to make, have made, use, lease and sell products embodying or produce through the use of any Subject Invention. Said option must be exercised by written notice to Institute within six (6) months after receiving from Institute written notice of the filing of a patent application. If Sponsor elects to exercise its option to acquire a license on mutually agreeable terms within the prescribed time period, both parties agree to negotiate license terms in good faith but not to exceed 2%. All such negotiations including the execution of a license agreement shall be completed within six (6) months of written notice to Institute of Sponsor's exercise of said option. If Sponsor fails to agree to terms waived said option, and the Institute shall be free to license a third party; provided, however, that for a period of three (3) years after written notice of Sponsor's exercise of its option to Subject Invention(s), the Institute shall not agree to license a third party on more favorable terms than were offered to Sponsor without first offering Sponsor a license on those more favorable terms and providing Sponsor with ninety (90) days in which to accept such offer. If Sponsor fails to notify Institute within the ninety (90) days that is has accepted such terms, Sponsor shall be deemed to have rejected the offer, and Institute shall, thereafter, be free to license its rights in the Subject Invention(s) to other parties. If Sponsor notifies Institute within ninety (90) days that it accepts such an offer, Institute shall be deemed to have entered into a binding license agreement with respect to such terms.

3. Any license granted to Sponsor pursuant to paragraph l3.d.2. shall be subject to the California Institute of Technology Patent Policy and Institute's prior agreements with other sponsors and shall provide: (a) for a reasonable royalty on net sales of products utilizing the licensed technology to be paid to the Institute; (b) for Institute to retain a nonexclusive license, with the right to grant sublicenses, for research purposes only; (c) if and to the extent applicable to the licensed Subject Invention, that the rights of the Unites States of America as set forth in Public Laws 96-517 and 98-620 (codified at 35 U.S.C. 200 et seq.) are especially reserved, and that Sponsor shall comply with the provision of 35 U.S.C. 204, as amended from time to time; and (d) that nothing contained in this clause shall imply a license to the Sponsor under any patent, patent application or other invention other than a Subject Invention as defined herein.

e. Government Rights. Under certain circumstances, it is possible that the research may be supported in part by one or more agencies of the U.S. Government. If this should occur, the reporting of inventions or discoveries and the disposition of title to patent applications or patents resulting therefrom will be subject to the terms and conditions of the Institute's contractual agreement with any such agency or agencies. If such a circumstance develops and if the Sponsor desires to acquire rights, the Institute agrees to make every possible effort to acquire title to such inventions and to offer the Sponsor the option for acquisition of rights as outlined in the preceding paragraph, subject to the prior rights of, or conditions imposed thereon by, the U.S. Government.

14. CONFIDENTIALITY OF SPONSOR'S INFORMATION. Sponsor may wish, from time to time, in connection with work contemplated under this Agreement, to disclose confidential information to Institute personnel. To protect the confidentiality of such information, Sponsor may request the Principal Investigator, who has the right to refuse to accept such information, to sign a confidentiality agreement with Sponsor, in the form of Exhibit 2 hereto. Such a request shall not extend to other research personnel. Institute will not be responsible for any failure of individual performance under such confidentiality agreement.

15. LIABILITY.

a. Indemnification. Sponsor shall defend, indemnify and hold harmless Institute, and its trustees, officers, employees and agents and their respective successors, heirs and assigns (the "Indemnitees"), against any and all liability, damage, loss or expense (including attorneys' fees and expenses of litigation) that may be incurred by or imposed upon the Indemnitees, or any of them, in connection with any claim, suit, demand, action or judgment arising out of the following:

1. the design, production, manufacture, sale, use in commerce, lease or promotion by Sponsor or by and Affiliate or sublicensee of the Sponsor or any product, process or service relating to or developed pursuant to this Agreement; or

2. any other activities to be carried out pursuant to this Agreement.

Sponsor's indemnity under 1. shall apply to any liability, damage, or loss or expense whether or not it is attributable to the negligent activities of the Indemnitees. Sponsor's indemnification under 2. shall not apply to any liability damage, loss or expense to the extent that it is attributable to the negligence or willful misconduct of the Indemnitees.

b. Warranties. Institute makes no warranties, express or implied, as to any matter whatsoever, including, without limitation, the condition of the research or any invention(s) or product(s), whether tangible, conceived, discovered, or developed under this Agreement; or the merchantability, or fitness for particular purpose of the research or any such invention or product. Institute shall not be liable for any direct, consequential, or other damages suffered by Sponsor, any licensee, or any other resulting from the use of the research or any such invention or product.

16. INDEPENDENT CONTRACTOR. For the purpose of this Agreement and all services to be provided hereinunder, the parties shall be, and shall be deemed to be, independent contractors and not agents or employees of the other part. Neither party shall have authority to make any statement, representations or commitments or any kind, or to take any action that shall be binding on the other party, except as may be explicitly provided for herein or authorized in writing.

17. GENERAL.

a. This Agreement may not be assigned by either party without the prior written consent of the other party.

b. This Agreement constitutes the entire and only agreement between the parties relating to the work that is covered by the attached Statement of Work and supported with funds provided by this Agreement, and all prior negotiations, representations, agreement and understandings are superseded hereby. No agreements altering or supplementing the terms hereof may be made except by means of a written document signed by the duly authorized representatives of the parties.

18. NOTICES. All notices or other administrative documents shall be directed as follows:

To: R. Bruce Stewart
Arrowhead Research Corporation
Suite 480
150 South Los Robles Avenue
Pasadena, CA 91101
Phone (626) 792-5549
FAX (626 (449-6299

To: David S. Mayo
Office of Sponsored Research (MC 201-15)
California Institute of Technology
1200 E. California Blvd.
Pasadena, CA 91125
Phone (626) 395-6219
FAX (626) 795-4571

ARROWHEAD RESEARCH CORPORATION

BY /S/ R BRUCE STEWART
R. Bruce Stewart

DATE 2-23-04

CALIFORNIA INSTITUTE OF TECHNOLOGY

By: /S/ DAVID J. MAYO
David J. Mayo

DATE February 23, 2004

High performance micro- and nano-electromechanical materials and devices in ferroelectric thin films

Harry A. Atwater
Thomas J. Watson Laboratory of Applied Physics
California Institute of Technology, Pasadena, CA 91125
(626) 395-2197
haa@caltech.edu

We propose a four-year- research program which will exploit new ferroelectric film synthesis capabilities developed recently in the Atwater Group to make thin film piezoelectric devices with very high work output that are suitable for integration into microelectromechanical devices on silicon substrates. The work will focus on:

- **Growth** of high quality **biaxially-textured ferroelectric thin films** on biaxially-textured MgO templates deposited on amorphous films on Si.
- **Synthesis** of **single-crystal ferroelectric thin films** via wafer bonding and layer transfer techniques.
- **Fabrication** of high performance **piezoelectric microelectromechanical devices** in biaxially-textured ferroelectric thin films and single-crystal ferroelectric thin films.

Until now, ferroelectric thin films have been widely explored for applications as capacitor dielectrics and memory elements in non-volatile random access memory devices, but much less effort has been devoted to applications in microelectromechanical systems (MEMS). This is in part due to poor quality of thin film materials that have been available for MEMS actuators. In most cases, the ferroelectric thin films had polycrystalline microstructures that degrade domain switching, and piezoeleotric coefficients and also result in time-dependent fatigue, which has adversely affected device reliability.

We have recently identified two broad synthetic strategies that have promise for high work/volume piezoelectric actuators in micro-electromechanical systems (MEMS) applications. First is growth of **biaxially-textured ferroelectric thin films** that have potential to create piezoelectric devices that approach the quality of single crystal devices at modest cost. Second is the **fabrication** of **single crystal ferroelectric thin films** for devices by wafer bonding and layer transfer techniques, which has yielded, for the first time, *ferroelectric thin films whose properties are as good as those* of *bulk materials and whose mechanical reliability is superior to that of bulk crystals.* Both of these approaches exploit 90° domain switching which has the potential for **“high strain ferroelectric”** devices with very high work/volume and reasonable cycling frequencies, as compared with other technologies for MEMS devices. A comparison of the work output of high strain ferroelectrics with other device technologies is given in Fig. 1.

Biaxially-textured ferroelectric film growth. The biaxially-textured ferroelectric film growth process enables greater process flexibility and latitude for MEMS integration on silicon since integration of MEMS rnicroactuator devices can be achieved during or after the “back end”

of a silicon integrated circuit process, i.e. after the silicon electronic devices and interconnects have been fabricated and protected from contamination by deposition of amorphous dielectric overcoat layers. This route for ferroelectric/silicon integration uses very thin (~ 10 nm) biaxially textured MgO films as epitaxial templates for ferroelectric film growth. Biaxially textured materials are highly-oriented polycrystalline films with a narrow range of in-plane and out-of-plane crystallographic orientations. We have also demonstrated epitaxy of $BaTiO_3$ and $PbTiO_3$ on biaxially-textured MgO templates. The out-of-plane orientation was defined by $[001]_{ferroelectric}$ parallel to $[001]_{MgO}$ and the in-plane orientation by $[001]_{ferroelectric}$ parallel to $[100]_{MgO}$. Biaxially textured MgO films were grown on amorphous Si_3N_4/Si substrates using ion beam-assisted deposition (IBAD. The MgO biaxial texture was controlled by varying the ion/MgO molecule flux ratio during deposition. The IBAD MgO film is either directly used as a heteroepitaxial template for PBT or was first coated with a 20 nm layer of homoepitaxial MgO grown at 600° C. Molecular beam epitaxy (MBE) will be used to grow $Ba_xPb_{1-x}TiO_3$ co-evaporation of Pb (99.999% pure) and Ba (99% pure) from effusion cells, and Ti from a Varian Ti-ball sublimation source. The oxygen source is an Oxford Applied Research HD25 RF atom source with O_2 introduced into the back of the source. The RF atom source has an O_2-to-atomic-O cracking efficiency of 30% at 500W.

Ferroelectric films via layer transfer fabrication. Layer transfer fabrication is one of the most promising methods to realize single crystal properties in thin films, and to overcome substrate-film lattice mismatch effects. Crystal ion slicing processes have been reported for layer transfer of silicon, InP, Ge and diamond. Recently, we have successfully employed this technology for layer splitting and transfer of the ferroelectric materials $LiNbO_3$ and $BaTiO_3$. We transferred single crystal $BaTiO_3$ (400 nm thick) films onto Pt-coated Si and Si_3N_4/Si substrates by ion implantation-induced layer transfer used H^+/He^+ ion co-implantation and subsequent heat treatment. The transferred $BaTiO_3$ films are single crystalline with surface RMS roughness of 17 nm. Polarized optical and piezoresponse force microscopy (see Fig. 2) indicated that — remarkably— $BaTiO_3$ film domain structure closely resembles that of bulk $BaTiO_3$ and clearly shows 90^o a-c domain structure with tetragonal angle of.0.5~0.6°. Micro-Raman spectroscopy indicated that local vibrational modes in the ion implanted $BaTiO_3$ layer fully recovered during the transfer process annealed above Curie temperature and the transferred layer shows typical single crystal tetragonal $BaTiO_3$ structure. From the piezoresponse force microscopy, the piezoelectric constant, d_{33}, value is found to be 80-100 pm/V and the coercive electric field (Ec) is 12-20 kV/cm, *values almost identical to those seen in single crystal $BaTiO_3$*. These results imply that now ferroeleotric thin films can be made with properties rivaling those of bulk crystals.

Device Fabrication. The proposed program will apply the film synthesis techniques described above to make simple piezoelectric thin film devices using facilities in the Atwater lab and also the Micro/Nano Fabrication Lab, a newly created laboratory for microfabrication and nanofabrication located on the first floor of Watson Laboratory at Caltech. These laboratories have conventional optical lithography with a 1.5 µm resolution mask aligner suitable for up to 3” substrates, positive photoresist processing, wet chemical etching, CVD for silicon nitride and silicon dioxide, metal evaporation, polymer layer fabrication, optical inspection and metal thin film evaporation. Device characterization by I-V, C-V, Hall mobility and carrier density and spreading resistance can be performed from 25-150 C. An electrical measurement probe station

is available for current-voltage and capacitance voltage characterization using Keithley Instruments ICS-based 236 source-measurement units. Surface profilometry and piezoresponse force microscopy is available using a Thermomicroscope AutoProbe CF atomic force microscope.

Statement of Work

Year 1

1. We will fabricate biaxially-textured $BaTiO_3$ and $PbTiO_3$ films on Si substrates, and characterize their structural and piezoelectric properties.
2. We will fabricate single crystal $BaTiO_3$ and $PbTiO_3$ films on Si substrates, and characterize their structural and piezoelectric properties.

Year 2

3. We will fabricate biaxially-textured $BaTiO_3$ and $PbTiO_3$ films on Si substrates, and characterize their structural and piezoelectric properties as free-standing membranes suitable for piezoactuator devices.
4. We will fabricate single crystal $BaTiO_3$ and $PbTiO_3$ films on Si substrates, and characterize their structural and piezoelectric properties as free-standing membranes suitable for piezoactuator devices.

Year 3

5. We will relate the $BaTiO_3$ and $PbTiO_3$ biaxially-textured film piezoelectric properties to their performance as piezoactuator device active materials.
6. We will relate the single crystal $BaTiO_3$ and $PbTiO_3$ film piezoelectric properties to their performance as piezoactuator device active materials.

Year 4

7. We will fabricate simple piezoelectric devices (micro-mirrors, micropumps) using $BaTiO_3$ and $PbTiO_3$ biaxially-textured films as piezoactuator device active materials.
8. We will fabricate simple piezoelectric devices (micro-mirrors, micropumps) using single crystal $BaTiO_3$ and $PbTiO_3$ films as piezoactuator device active materials.

EXHIBIT 10.5

ARROWHEAD RESEARCH CORPORATION
150 S. Los Robles Avenue, Suite 480
Pasadena, California 91101

March 5, 2004

Dr. Harry A. Atwater, Jr.
246 Watson MC 128-95
California Institute of Technology
Pasadena, California 91125

Richmond Wolf
Office of Technology Transfer
California Institute of Technology
1200 E. California Blvd M/C 210-85
Pasadena, CA 91125

By Fax to: (626) 356-2486

Re: Aonex Corporation

Gentlemen:

In accordance with our recent discussions, this is to confirm the terms and conditions upon which Arrowhead Research Corporation, a Delaware corporation ("Arrowhead Research"), and Dr. Harry A. Atwater, Jr. ("Dr. Atwater"), Howard Hughes Professor and Professor of Applied Physics and Materials Science at the California Institute of Technology in Pasadena, California ("CalTech"), will jointly form a new corporation (the "Corporation") to be known as "Aonex Corporation".

1. The Corporation will be formed under the laws of the State of California, and will have an authorized capital structure consisting of 50,000,000 shares of Common Stock, $.001 par value, and 5,000,000 shares of preferred stock, $.001 par value.

2. In connection with the initial organization of the Corporation, an aggregate of 1,250,000 shares of common stock will be issued and sold, at the price of $.001 per share, with Dr. Atwater to purchase 500,000 shares, two additional scientists to be designated by Dr. Atwater to purchase 250,000 shares each, a candidate mutually acceptable to serve as chief executive officer of the Corporation to purchase 250,000 shares. All of the shares of common stock purchased by Dr. Atwater, the two scientists and the chief executive officer would be subject to a mutually acceptable vesting schedule of 4 years to be set forth in the applicable stock purchase documentation, pursuant to which the Corporation would be entitled to repurchase the shares, at the original purchase price per share, upon the occurrence of specified events relating to the service of such persons with the Corporation.

3. Arrowhead Research would also purchase shares of an initial series of preferred stock in connection with the initial organization of the Corporation, for a purchase price of $2,000,000. These shares of preferred stock would be convertible into 5,000,000 shares of common stock, be entitled to one vote for each share of common stock into which they are convertible voting together with the common stock (on all matters other than the election of directors), have a liquidation preference of $2,000,000 (plus such additional amounts as have been contributed to the capital of the Corporation pursuant to paragraph 6 below), and be entitled to elect a majority of the number of directors authorized at any given time (for example, 3 of 5), with the remaining directors to be elected by the holders of the common stock of the Corporation. The balance of the authorized shares of preferred stock would be issuable from time to time in one or more additional series having such rights, preferences and privileges as shall be set forth in resolutions to be adopted by the Board of Directors of the Corporation.

4. In addition to the common stock to be issued as provided in paragraph 2 above, options to purchase shares of common stock, at the price of $.001 per share, would be granted in connection with the initial organization of the Corporation, with Dr. Atwater to be granted an option to purchase 500,000 shares, each of the two designated scientists to be granted an option to purchase 250,000 shares, and the agreed upon chief executive officer to be granted an option to purchase 250,000 shares. All of these options would be subject to a mutually acceptable vesting schedule of 4 years to be agreed upon and set forth in the applicable option documentation. The options would not be exercisable before the end of the vesting period except in the case of an initial public offering (or comparable transaction) or a sale of all or substantially all of the Corporation’s assets. The options will be granted under a stock option plan to be adopted by the Board of Directors of the Corporation, pursuant to which options may be granted to purchase up to 3,050,000 shares of common stock, including the 1,250,000 shares subject to the options to be granted at the time of initial organization of the Corporation as provided in this paragraph 4, leaving 1,800,000 shares available for the grant of additional options. Future option grants under the stock option plan would be determined by the Corporation’s Board of Directors.

5. In connection with the initial organization of the corporation, the Corporation will issue to CalTech a warrant to purchase, at the price of $.001 per share, up to 700,000 shares of the Corporation’s common stock, as payment in full for an exclusive, world-wide license in and to certain intellectual property and technology to be more particularly described in mutually acceptable license documentation. It is understood that, in the event of a change in control of the Corporation (as defined in the license documentation), CalTech would be entitled to re-negotiate the terms of the license.

6. In addition to the amounts to be paid by Arrowhead Research as the purchase price of preferred stock specified above, it is understood and agreed that Arrowhead Research would make additional contributions to the capital of the Corporation, totaling $3,000,000, in accordance with a schedule of performance milestones to be mutually agreed upon. In the event that Arrowhead Research fails to make an additional contribution to the capital of the Corporation when required, up to 60% of the shares of preferred stock owned by Arrowhead would be forfeited to the Corporation, leaving Arrowhead only with preferred stock that would be convertible into 2,000,000 shares of common stock (if no additional capital contributions were made).

7. The Corporation's Articles of Incorporation shall require the unanimous approval of the Corporation's directors for (i) merger of the Corporation with or into another entity; (ii) sale of all or substantially all of the assets of the Corporation, (iii) the issuance of common stock or preferred stock to raise additional capital, (iv) any "going public" transaction, (vi) the liquidation, dissolution or filing for bankruptcy of the Corporation, and (vi) any amendment to the articles of incorporation to change or delete any of the foregoing.

8. In addition to the stock of the Corporation and options to purchase stock of the Corporation, Arrowhead shall grant to Dr. Atwater an option to purchase, at $1.00 per share, 50,000 shares of the common stock of Arrowhead, and each of the two designated scientists and the agreed upon chief executive officer shall be granted an option to purchase, at $1.00 per share, 25,000 shares of the Common Stock of Arrowhead.

If the foregoing accurately sets forth your understandings as to our mutual agreements on the subject matter hereof, please so signify where indicated below, and return the executed copy of this letter to the undersigned, retaining a copy for your files. We will then proceed to incorporate and organize the Corporation on the foregoing terms and conditions, and prepare and finalize the additional documentation contemplated above, as quickly as is practicable.

Very truly yours,

/s/ R. BRUCE STEWART

R. Bruce Stewart, President
Arrowhead Research Corporation

AGREED TO AND ACCEPTED,
this 5th day of March, 2004:

/s/ HARRY A. ATWATER

Dr. Harry A. Atwater, Jr.

CALIFORNIA INSTITUTE OF TECHNOLOGY

By: /s/ RICHMOND WOLF

Richmond Wolf, Director
Office of Technology Transfer

SERIES B PREFERRED STOCK PURCHASE AGREEMENT

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SERIES B PREFERRED STOCK PURCHASE AGREEMENT

This Series B Preferred Stock Purchase Agreement (the "**Agreement**") is made as of the 4th day of June 2004 by and among **INSERT THERAPEUTICS, INC.**, a Delaware corporation (the "**Company**"), the investors listed on Exhibit A attached to this Agreement (each a "**Purchaser**" and together the "**Purchasers**").

The parties hereby agree as follows:

1. Purchase and Sale of Preferred Stock.

1.1. Sale and Issuance of Series B Preferred Stock.

(a) The Company shall adopt and file with the Secretary of State of the State of Delaware on or before the Closing (as defined below) the Amended and Restated Certificate of Incorporation in the form of Exhibit B attached to this Agreement (the "**Restated Certificate**").

(b) Subject to the terms and conditions of this Agreement, each Purchaser agrees to purchase at the Closing and the Company agrees to sell and issue to each Purchaser at the Closing that number of shares of Series B Preferred Stock set forth opposite each Purchaser's name on Exhibit A, at an aggregate purchase price of One Million Two Hundred Fifty Thousand Dollars ($1,250,000.00). The shares of Series B Preferred Stock issued to the Purchasers pursuant to this Agreement shall be referred to in this Agreement as the "**Shares**."

1.2. Closing; Delivery.

(a) The purchase and sale of the Shares shall take place remotely via the exchange of documents and signatures, at 10:00 AM, Pasadena time, on June 3, 2004, or at such other time and place as the Company and the Purchasers mutually agree upon, orally or in writing (which time and place are designated as the "**Closing**").

(b) At the Closing, the Company shall deliver to each Purchaser a certificate representing the Shares being purchased by such Purchaser at such Closing against payment of the purchase price therefore by check payable to the Company, by wire transfer to a bank account designated by the Company, by cancellation or conversion of indebtedness of the Company to Purchaser, including interest, or by any combination of such methods.

1.3. Defined Terms Used in this Agreement. In addition to the terms defined above, the following terms used in this Agreement shall be construed to have the meanings set forth or referenced below.

"**Affiliate**" means with respect to any person or entity (a "**Person**") any Person which, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any partner, officer, director, or member of such Person and any venture capital fund now or hereafter existing which is controlled by or under common control with one or more general partners or shares the same management company with such Person.

"**Agreement to Provide Additional Capital**" means that certain Agreement to Provide Additional Capital by and between the corporation and Arrowhead Research Corporation, a Delaware corporation ("Arrowhead") dated as of June __, 2004.

"**Code**" means the Internal Revenue Code of 1986, as amended.

"**Investors' Rights Agreement**" means the Amended and Restated Investor Rights Agreement between the Company, the Purchasers and other holders of equity securities of the Company named therein, dated as of the date of the Closing, in the form of Exhibit E attached to this Agreement.

"**Key Employee**" means any executive-level employee (including division director and Vice President level positions, and also including non-employee contractors holding such key positions through consulting arrangements) as well as any employee who either alone or in concert with others develops, invents, programs or designs any Company Intellectual Property (as defined in Section 2.8).

"**Material Adverse Effect**" means a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property or results of operations of the Company.

"**Purchaser**" means each of the Purchasers who is initially a party to this Agreement and any Additional Purchaser who becomes a party to this Agreement at a subsequent Closing under Section 1.3.

"**Right of First Refusal and Co-Sale Agreement**" means the agreement among the Company, certain Purchasers, and certain other stockholders of the Company, dated as of the date of the Closing, in the form of Exhibit F attached to this Agreement.

"**Securities Act**" means the Securities Act of 1933, as amended.

"**Shares**" means the shares of Series B Preferred Stock issued at the Closing.

"**Transaction Agreements**" means this Agreement, the Investors' Rights Agreement, the Right of First Refusal and Co-Sale Agreement and the Voting Agreement.

"Voting Agreement" means the agreement between the Company, the Purchasers and certain other stockholders of the Company, dated as of the date of the Closing, in the form of Exhibit G attached to this Agreement.

2. Representations and Warranties of the Company**.** The Company hereby represents and warrants to each Purchaser that, except as set forth on the Disclosure Schedule attached as Exhibit C to this Agreement which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true and complete as of the date of the Closing, except as otherwise indicated. The Disclosure Schedule shall be arranged in sections corresponding to the numbered and lettered sections and subsections contained in this Section 2, and the disclosures in any section or subsection of the Disclosure Schedule shall qualify other sections and subsections in this Section 2 only to the extent it is readily apparent from a reading of the disclosure that such disclosure is applicable to such other sections and subsections.

For purposes of these representations and warranties, the phrase "to the Company's knowledge" shall mean the actual knowledge of the following officers: John Petrovich and Mark Davis.

2.1. Organization, Good Standing, Corporate Power and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as presently conducted and as proposed to be conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a Material Adverse Effect.

2.2. Capitalization. The authorized capital of the Company consists, immediately prior to the Closing, of:

(a) 15,000,000 shares of Common Stock, 6,161,522 shares of which are issued and outstanding immediately prior to the Closing. All of the outstanding shares of Common Stock have been duly authorized, are fully paid and nonassessable and were issued in compliance with all applicable federal and state securities laws.

(b) 6,000,000 shares of Preferred Stock, of which 3,375,000 shares have been designated Series A Preferred Stock, all of which are issued and outstanding immediately prior to the Closing. All issued and outstanding shares of Series A Preferred Stock shall have been converted into a like number of shares of Common Stock of the Company concurrently with the Closing.

(c) The Company has reserved 1,200,000 shares of Common Stock for issuance to officers, directors, employees and consultants of the Company pursuant to its 2000 Stock Incentive Plan, duly adopted by the Board of Directors and approved by the Company

stockholders (the "**Stock Plan**"). Of such reserved shares of Common Stock, 49,022 shares have been issued pursuant to restricted stock purchase agreements, options to purchase 406,042 shares have been granted and are currently outstanding, and 744,936 shares of Common Stock remain available for issuance to officers, directors, employees and consultants pursuant to the Stock Plan.

(d) Section 2.2(d) of the Disclosure Schedule sets forth the capitalization of the Company immediately following the Closing including the number of shares of the following: (i) issued and outstanding Common Stock; (ii) issued stock options; (iii) stock options not yet issued but reserved for issuance; (iv) each series of Preferred Stock; and (v) warrants or stock purchase rights, if any. Except for (A) the conversion privileges of the Shares to be issued under this Agreement, (B) the rights provided in Section 2.4 of the Investors' Rights Agreement, and (C) the securities and rights described in Section 2.2(c) of this Agreement and Section 2.2(d) of the Disclosure Schedule, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from the Company any shares of Common Stock or Series B Preferred Stock, or any securities convertible into or exchangeable for shares of Common Stock or Series B Preferred Stock.

(e) All outstanding shares of the Company's Common Stock and all shares of the Company's Common Stock underlying outstanding options are subject to (i) a right of first refusal in favor of the Company upon any proposed transfer (other than transfers for estate planning purposes); and (ii) a lock-up or market standoff agreement of not less than 180 days following the Company's initial public offering pursuant to a registration statement filed with the Securities and Exchange Commission under the Securities Act.

2.3. Subsidiaries. The Company does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company, association, or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement.

2.4. Authorization. All corporate action required to be taken by the Company's Board of Directors and stockholders in order to authorize the Company to enter into the Transaction Agreements, and to issue the Shares at the Closing and the Common Stock issuable upon conversion of the Shares, has been taken or will be taken prior to the Closing. All action on the part of the officers of the Company necessary for the execution and delivery of the Transaction Agreements, the performance of all obligations of the Company under the Transaction Agreements to be performed as of the Closing, and the issuance and delivery of the Shares has been taken or will be taken prior to the Closing. The Transaction Agreements, when executed and delivered by the Company, shall constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, or (iii) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

2.5. Valid Issuance of Shares. The Shares, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under this Agreement, the Investors' Rights Agreement, the Voting Agreement, applicable state and federal securities laws and liens or encumbrances created by or imposed by a Purchaser. Assuming the accuracy of the representations of the Purchasers in Section 3 of this Agreement and subject to the filings described in Section 2.6(ii) below, the Shares will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Shares has been duly reserved for issuance, and upon issuance in accordance with the terms of the Restated Certificate, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable federal and state securities laws and liens or encumbrances created by or imposed by a Purchaser. Based in part upon the representations of the Purchasers in Section 4 of this Agreement, and subject to Section 2.6 below, the Common Stock issuable upon conversion of the Shares will be issued in compliance with all applicable federal and state securities laws.

2.6. Governmental Consents and Filings. Assuming the accuracy of the representations made by the Purchasers in Section 4 of this Agreement, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of the Company in connection with the consummation of the transactions contemplated by this Agreement, except for (i) the filing of the Restated Certificate, which will have been filed as of the Closing, and (ii) filings pursuant to Regulation D of the Securities Act, and applicable state securities laws, which have been made or will be made in a timely manner.

2.7. Litigation. There is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation pending or to the Company's knowledge, currently threatened (i) against the Company or any officer, director or Key Employee of the Company; or (ii) to the Company's knowledge, that questions the validity of the Transaction Agreements or the right of the Company to enter into them, or to consummate the transactions contemplated by the Transaction Agreements; or (iii) to the Company's knowledge, that would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect.

2.8. Intellectual Property. The Company owns or possesses sufficient legal rights to (i) all trademarks, service marks, tradenames, copyrights, trade secrets, licenses, information and proprietary rights and processes and (ii) to the Company's knowledge, all patents and patent right, (such rights are collectively referred to herein as the "**Company Intellectual Property**") as are necessary to the conduct of the Company's business as now conducted and as presently proposed to be conducted**,** without any known conflict with, or infringement of, the rights of others. To the Company's knowledge, no product or service marketed or sold (or proposed to be marketed or sold) by the Company violates or will violate any license or infringe any intellectual property rights of any other party. Other than with respect

to commercially available software products under standard end-user object code license agreements, there are no outstanding options, licenses, agreements, claims, encumbrances or shared ownership interests of any kind relating to the foregoing, nor is the Company bound by or a party to any options, licenses or agreements of any kind with respect to the patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, proprietary rights and processes of any other person or entity. The Company has not received any communications alleging that the Company has violated or, by conducting its business, would violate any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets or other proprietary rights or processes of any other person or entity. To the Company's knowledge, it will not be necessary to use any inventions of any of its employees (or persons it currently intends to hire) made prior to their employment by the Company. Each Key Employee has assigned to the Company all intellectual property rights he or she owns that are related to the Company's business as now conducted. Section 2.8 of the Disclosure Schedule lists all patents, patent applications, registered trademarks, trademark applications, registered service marks, service mark applications, registered copyrights and domain names of the Company. For purposes of this Section 2.8, the Company shall be deemed to have knowledge of a patent right if the Company has actual knowledge of the patent right or would be found to be on notice of such patent right as determine by reference to United States patent laws.

2.9. Compliance with Other Instruments. The Company is not in violation or default (i) of any provisions of its Restated Certificate or Bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound that is required to be listed on the Disclosure Schedule, or, to its knowledge, of any provision of federal or state statute, rule or regulation applicable to the Company, the violation of which would have a Material Adverse Effect. The execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated by the Transaction Agreements will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event which results in the creation of any lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to the Company.

2.10. Agreements; Actions.

(a) Except for the Transaction Agreements, there are no agreements, understandings, instruments, contracts or proposed transactions to which the Company is a party or by which it is bound that involve (i) obligations (contingent or otherwise) of, or payments to, the Company in excess of $25,000, (ii) the license of any patent, copyright, trade secret or other proprietary right to or from the Company, (iii) the grant of rights to manufacture, produce, assemble, license, market, or sell its products to any other person or affect the Company's exclusive right to develop, manufacture, assemble, distribute, market or sell its products, or (iv) indemnification by the Company with respect to infringements of proprietary rights.

(b) The Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or incurred any other liabilities individually in excess of $100,000 or in excess of $250,000 in the aggregate, (iii) made any loans or advances to any person, other than ordinary advances for travel expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the sale of its inventory in the ordinary course of business. For the purposes of subsections (b) and (c) of this Section 2.10, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same person or entity (including persons or entities the Company has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(c) The Company is not a guarantor or indemnitor of any indebtedness of any other person, firm or corporation.

2.11. Conflicts of Interest.

(a) Other than (i) standard employee benefits generally made available to all employees, (ii) standard director and officer indemnification agreements approved by the Board of Directors, and (iii) the purchase of shares of the Company's capital stock and the issuance of options to purchase shares of the Company's Common Stock, in each instance, approved by the Board of Directors, there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, or Key Employees, or any Affiliate thereof.

(b) The Company is not indebted, directly or indirectly, to any of its directors, officers or employees or to their respective spouses or children or to any Affiliate of any of the foregoing, other than in connection with expenses or advances of expenses incurred in the ordinary course of business or employee relocation expenses. None of the Company's directors, officers or employees, or any members of their immediate families, or any Affiliate of the foregoing (i) are, directly or indirectly, indebted to the Company or, (ii) to the Company's knowledge, have any direct or indirect ownership interest in any firm or corporation with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company except that directors, officers or employees or stockholders of the Company may own stock in (but not exceeding two percent of the outstanding capital stock of) publicly traded companies that may compete with the Company. To the Company's knowledge, none of the Company's directors, officers or employees or any members of their immediate families or any Affiliate of any of the foregoing are, directly or indirectly, interested in any material contract with the Company. None of the directors or officers, or any members of their immediate families, has any material commercial, industrial, banking, consulting, legal, accounting, charitable or familial relationship with any of the Company's major business relationship partners, service providers, joint venture partners, licensees and competitors.

2.12. Rights of Registration and Voting Rights. Except as provided in the Investors' Rights Agreement, the Company is not under any obligation to register under the

Securities Act any of its currently outstanding securities or any securities issuable upon exercise or conversion of its currently outstanding securities. To the Company's knowledge, except as contemplated in the Voting Agreement, no stockholder of the Company has entered into any agreements with respect to the voting of capital shares of the Company.

2.13. Absence of Liens. The property and assets that the Company owns are free and clear of all mortgages, deeds of trust, liens, loans and encumbrances, except for statutory liens for the payment of current taxes that are not yet delinquent and encumbrances and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets. With respect to the property and assets it leases, the Company is in compliance with such leases and, to its knowledge, holds a valid leasehold interest free of any liens, claims or encumbrances other than those of the lessors of such property or assets.

2.14. Financial Statements. The Company has delivered to each Purchaser its unaudited financial statements as of December 31, 2003 and for the fiscal year ended December 31, 2003 and its unaudited financial statements (including balance sheet, income statement and statement of cash flows) as of June __, 2004 (the "Balance Sheet Date") and for the year-to-date period ended on the Balance Sheet Date (collectively, the "**Financial Statements**"). The Financial Statements fairly present in all material respects the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject in the case of the unaudited financial statements to normal year-end audit adjustments. Except as set forth in the Financial Statements and in Section 2.14 of the Disclosure Schedule, the Company has no material liabilities or obligations, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to the Balance Sheet Date, and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually and in the aggregate would not have a Material Adverse Effect. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with generally accepted accounting principles.

2.15. Changes. To the Company's knowledge, since the Balance Sheet Date, there have been no events or circumstances of any kind that have had or could reasonably be expected to result in a Material Adverse Effect.

2.16. Employee Matters.

(a) As of the date hereof, the Company employs four (4) full-time employees and engages 2 consultants or independent contractors on a regular basis.

(b) To the Company's knowledge, none of its employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with such employee's ability to promote the interest of the Company or that would conflict with the Company's business. Neither the execution or delivery of the Transaction Agreements, nor the carrying on of the Company's business by the employees of the Company, nor the conduct of the Company's business as now conducted and as presently

proposed to be conducted, will, to the Company's knowledge, conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated.

(c) The Company is not delinquent in payments to any of its employees, consultants, or independent contractors for any wages, salaries, commissions, bonuses, or other direct compensation for any service performed for it to the date hereof or amounts required to be reimbursed to such employees, consultants, or independent contractors. The Company has complied with all applicable state and federal equal employment opportunity laws and with other laws related to employment, including those related to wages, hours, worker classification, collective bargaining, and the payment and withholding of taxes and other sums as required by law except where noncompliance with any applicable law would not result in a Material Adverse Effect. The Company has withheld and paid to the appropriate governmental entity or is holding for payment not yet due to such governmental entity all amounts required to be withheld from employees of the Company and is not liable for any arrears of wages, taxes, penalties, or other sums for failure to comply with any of the foregoing.

(d) To the Company's knowledge, no Key Employee intends to terminate employment with the Company or is otherwise likely to become unavailable to continue as a Key Employee, nor does the Company have a present intention to terminate the employment of any of the foregoing. The employment of each employee of the Company is terminable at the will of the Company. Except as set forth in Section 2.16 of the Disclosure Schedule or as required by law, upon termination of the employment of any such employees, no severance or other payments will become due. Except as set forth in Section 2.16 of the Disclosure Schedule, the Company has no policy, practice, plan, or program of paying severance pay or any form of severance compensation in connection with the termination of employment services.

(e) The Company has not made any representations regarding equity incentives to any officer, employees, director or consultant that are inconsistent with the share amounts and terms set forth in the Company's board minutes.

(f) Section 2.16 of the Disclosure Schedule sets forth each employee benefit plan maintained, established or sponsored by the Company, or which the Company participates in or contributes to, which is subject to the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"). The Company has made all required contributions and has no liability to any such employee benefit plan, other than liability for health plan continuation coverage described in Part 6 of Title I(B) of ERISA, and has complied in all material respects with all applicable laws for any such employee benefit plan.

2.17. Tax Returns and Payments. There are no federal, state, county, local or foreign taxes dues and payable by the Company which have not been timely paid. There are no accrued and unpaid federal, state, county, local or foreign taxes of the Company which are due, whether or not assessed or disputed. There have been no examinations or audits of any tax returns or reports by any applicable federal, state, local or foreign governmental agency. The Company has duly and timely filed all federal, state, county, local and foreign tax returns required to have been filed by it and there are in effect no waivers of applicable statutes of limitations with respect to taxes for any year.

2.18. Insurance. Section 2.18 of the Disclosure Schedule provides a complete list of the Company's fire and casualty insurance policies currently in effect.

2.19. Confidential Information and Invention Assignment Agreements. Each current and former Key Employee, consultant and officer of the Company has executed an agreement with the Company regarding confidentiality and proprietary information substantially in the form or forms delivered to the counsel for the Purchasers (the "**Confidential Information Agreements**"). No current or former Key Employee, consultant or officer of the Company has excluded works or inventions from his or her assignment of inventions pursuant to such Key Employee's, consultant's or officer's Confidential Information Agreements. The Company is not aware that any of its Key Employees, consultants or officers is in violation thereof.

2.20. Permits. The Company and each of its subsidiaries has all franchises, permits, licenses and any similar authority necessary for the conduct of its business, the lack of which could reasonably be expected to have a Material Adverse Effect. The Company is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

2.21. Corporate Documents. The Restated Certificate and Bylaws of the Company are in the form provided to the Purchasers. The copy of the minute books of the Company provided to the Purchasers contains minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since the date of incorporation and accurately reflects in all material respects all actions by the directors (and any committee of directors) and stockholders with respect to all transactions referred to in such minutes.

2.22. [Intentionally Omitted].

2.23. Environmental and Safety Laws. Except as could not reasonably be expected to have a Material Adverse Effect (a) the Company is and has been in compliance with all Environmental Laws; (b) there has been no release or to the Company's knowledge threatened release of any pollutant, contaminant or toxic or hazardous material, substance or waste, or petroleum or any fraction thereof, (each a "**Hazardous Substance**") on, upon, into or from any site currently or heretofore owned, leased or otherwise used by the Company; (c) there have been no Hazardous Substances generated by the Company that have been disposed of or come to rest at any site that has been included in any published U.S. federal, state or local "superfund" site list or any other similar list of hazardous or toxic waste sites published by any governmental authority in the United States; and (d) there are no underground storage tanks located on, no polychlorinated biphenyls ("**PCBs**") or PCB-containing equipment used or stored on, and no hazardous waste as defined by the Resource Conservation and Recovery Act, as amended, stored on, any site owned or operated by the Company, except for the storage of hazardous waste in compliance with Environmental Laws. The Company has made available to the Purchasers true and complete copies of all material environmental records, reports, notifications, certificates of need, permits, pending permit applications, correspondence, engineering studies, and environmental studies or assessments.

For purposes of this Section 2.24, "Environmental Laws" means any law, regulation, or other applicable requirement relating to (a) releases or threatened release of Hazardous Substance; (b) pollution or protection of employee health or safety, public health or the environment; or (c) the manufacture, handling, transport, use, treatment, storage, or disposal of Hazardous Substances.

2.24. [Intentionally Omitted]

2.25. Disclosure. The Company has made available to the Purchasers all the information reasonably available to the Company that the Purchasers have requested for deciding whether to acquire the Shares, including certain of the Company's projections describing its proposed business plan (the "**Business Plan**"). To the Company's knowledge, no representation or warranty of the Company contained in this Agreement, as qualified by the Disclosure Schedule, and no certificate furnished or to be furnished to Purchasers at the Closing contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made. The Business Plan was prepared in good faith; however, the Company does not warrant that it will achieve any results projected in the Business Plan. It is understood that this representation is qualified by the fact that the Company has not delivered to the Purchasers, and has not been requested to deliver, a private placement or similar memorandum or any written disclosure of the types of information customarily furnished to purchasers of securities.

3. [Intentionally Omitted]**.**

4. Representations and Warranties of the Purchasers. Each Purchaser hereby represents and warrants to the Company, severally and not jointly, that:

4.1. Authorization. The Purchaser has full power and authority to enter into the Transaction Agreements. The Transaction Agreements to which such Purchaser is a party, when executed and delivered by the Purchaser, will constitute valid and legally binding obligations of the Purchaser, enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, and any other laws of general application affecting enforcement of creditors' rights generally, and as limited by laws relating to the availability of a specific performance, injunctive relief, or other equitable remedies, or (b) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

4.2. Purchase Entirely for Own Account. This Agreement is made with the Purchaser in reliance upon the Purchaser's representation to the Company, which by the Purchaser's execution of this Agreement, the Purchaser hereby confirms, that the Securities to be acquired by the Purchaser will be acquired for investment for the Purchaser's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that

the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Purchaser further represents that the Purchaser does not presently have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Shares. The Purchaser has not been formed for the specific purpose of acquiring the Shares.

4.3. Disclosure of Information. The Purchaser has had an opportunity to discuss the Company's business, management, financial affairs and the terms and conditions of the offering of the Stock with the Company's management and has had an opportunity to review the Company's facilities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Purchasers to rely thereon.

4.4. Restricted Securities. The Purchaser understands that the Shares have not been, and will not be, registered under the Securities Act, by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Purchaser's representations as expressed herein. The Purchaser understands that the Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Purchaser must hold the Shares indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Purchaser acknowledges that the Company has no obligation to register or qualify the Shares, or the Common Stock into which it may be converted, for resale except as set forth in the Investors' Rights Agreement. The Purchaser further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Shares, and on requirements relating to the Company which are outside of the Purchaser's control, and which the Company is under no obligation and may not be able to satisfy.

4.5. No Public Market. The Purchaser understands that no public market now exists for the Shares, and that the Company has made no assurances that a public market will ever exist for the Shares.

4.6. Legends. The Purchaser understands that the Shares and any securities issued in respect of or exchange for the Shares, may bear one or all of the following legends:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933."

(b) Any legend set forth in, or required by, the other Transaction Agreements.

(c) Any legend required by the securities laws of any state to the extent such laws are applicable to the Shares represented by the certificate so legended.

4.7. Accredited Investor. The Purchaser is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

4.8 No General Solicitation. Neither the Purchaser, nor any of its officers, directors, employees, agents, stockholders or partners has either directly or indirectly, including through a broker or finder (a) engaged in any general solicitation, or (b) published any advertisement in connection with the offer and sale of the Shares.

4.9. Exculpation Among Purchasers. Each Purchaser acknowledges that it is not relying upon any person, firm or corporation, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. Each Purchaser agrees that no Purchaser nor the respective controlling persons, officers, directors, partners, agents, or employees of any Purchaser shall be liable to any other Purchaser for any action heretofore or hereafter taken or omitted to be taken by any of them in connection with the purchase of the Shares.

4.10. Residence. If the Purchaser is an individual, then the Purchaser resides in the state or province identified in the address of the Purchaser set forth on Exhibit A; if the Purchaser is a partnership, corporation, limited liability company or other entity, then the office or offices of the Purchaser in which its principal place of business is located at the address or addresses of the Purchaser set forth on Exhibit A.

5. Conditions to the Purchasers' Obligations at Closing. The obligations of each Purchaser to purchase Shares at the Closing or any subsequent Closing are subject to the fulfillment, on or before such Closing, of each of the following conditions, unless otherwise waived:

5.1. Representations and Warranties. The representations and warranties of the Company contained in Section 2 shall be true and correct in all material respects as of such Closing, except that any such representations and warranties shall be true and correct in all respects where such representation and warranty is qualified with respect to materiality in Section 2.

5.2. Performance. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before such Closing.

5.3. Compliance Certificate. The President of the Company shall deliver to the Purchasers at such Closing a certificate certifying that the conditions specified in Sections 5.1 and 5.2 have been fulfilled.

5.4. Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of such Closing.

5.5. [Intentionally Omitted].

5.6. Board of Directors. As of the Closing, the authorized size of the Board shall be three (3), and the Board shall be comprised of Bruce Stewart, Edward Frykman and Mark Davis.

5.7. Investors' Rights Agreement. The Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder) and each other signatory thereto shall have executed and delivered the Investors' Rights Agreement.

5.8. Right of First Refusal and Co-Sale Agreement. The Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder), and the other stockholders of the Company named as parties thereto shall have executed and delivered the Right of First Refusal and Co-Sale Agreement.

5.9. Voting Agreement. The Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder), and the other stockholders of the Company named as parties thereto shall have executed and delivered the Voting Agreement.

5.10. Restated Certificate. The Company shall have filed the Restated Certificate with the Secretary of State of Delaware on or prior to the Closing, which shall continue to be in full force and effect as of the Closing.

5.11. Secretary's Certificate. The Secretary of the Company shall have delivered to the Purchaser at the Closing a certificate certifying (i) the Bylaws of the Company, (ii) resolutions of the Board of Directors of the Company approving the Transaction Agreements and the transactions contemplated under the Transaction Agreements, and (iii) resolutions of the stockholders of Company approving the Restated Certificate.

5.12. Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to Purchaser, and Purchaser (or its counsel) shall have received all such counterpart original and certified or other copies of such documents as reasonably requested. Such documents may include good standing certificates.

5.13. Conversion of Series A Preferred Stock. The holders of all shares of Series A Preferred Stock of the Company that are outstanding immediately prior to the Closing shall have converted such shares into Common Stock of the Company at a ratio of 1 share of Common Stock for each share of Series A Preferred Stock so converted.

5.14. Termination of Warrants. The holders of those certain Preferred Stock Purchase Warrants of the Company, dated as of September 18, 2002, will have executed and delivered documents acceptable to the Purchaser evidencing the termination of said warrants without exercise.

5.15. Convertible Promissory Notes. All amounts owing under certain Convertible Preferred Notes of the Company in the aggregate principal amount of $2,000,000, plus accrued but unpaid interest, issued to California Technology Partners LP and JJ Jacobs Enterprises, LLC will, notwithstanding the terms of said notes, be converted into shares of Common Stock of the Company at a conversion price of $.50 per share. All security agreements in assets of the Company relating to said notes (including without limitation those set forth in the Disclosure Schedule) will be terminated.

5.16. Agreement to Provide Additional Capital. The Company and Arrowhead shall have executed and delivered the Agreement to Provide Additional Capital.

6. Conditions of the Company's Obligations at Closing. The obligations of the Company to sell Shares to the Purchasers at the Closing or any subsequent Closing are subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

6.1. Representations and Warranties**.** The representations and warranties of each Purchaser contained in Section 3 shall be true and correct in all material respects as of such Closing.

6.2. Performance. The Purchasers shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by them on or before such Closing.

6.3. Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Stock pursuant to this Agreement shall be obtained and effective as of the Closing.

6.4. Investors' Rights Agreement. Each Purchaser shall have executed and delivered the Investors' Rights Agreement.

6.5. Right of First Refusal and Co-Sale Agreement. Each Purchaser shall have executed and delivered the Right of First Refusal and Co-Sale Agreement.

6.6. Voting Agreement. Each Purchaser shall have executed and delivered the Voting Agreement.

6.7. Agreement to Provide Additional Capital. The Company and Arrowhead shall have executed and delivered the Agreement to Provide Additional Capital.

7. Miscellaneous.

7.1. Survival of Warranties. Unless otherwise set forth in this Agreement, the representations and warrants of the Company and the Purchasers contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation of the subject matter thereof made by or on behalf of the Purchasers or the Company.

7.2. Transfer; Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

7.3. Governing Law. This Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the California, without regard to its principles of conflicts of laws.

7.4. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

7.5. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

7.6. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on the signature page or Exhibit A, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 7.6.

7.7. No Finder's Fees. Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. Each Purchaser agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which each Purchaser or any of its officers, employees, or representatives is responsible. The Company agrees to indemnify and hold harmless each Purchaser from any liability for any commission or compensation in the

nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

7.9. Attorney's Fees. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of the Transaction Agreements, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

7.10. Amendments and Waivers. Except as set forth in Section 1.3 of this Agreement, any term of this Agreement may be amended, terminated or waived only with the written consent of the Company and (i) the holders of at least seventy-five percent (75%) of the then-outstanding Shares or (ii) for an amendment, termination or waiver effected prior to the Closing, Purchasers obligated to purchase seventy-five percent (75%) of the Shares to be issued at the Closing. Any amendment or waiver effected in accordance with this Section 7.10 shall be binding upon the Purchasers and each transferee of the Shares (or the Common Stock issuable upon conversion thereof), each future holder of all such securities, and the Company.

7.11. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

7.12. Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

7.13. Entire Agreement. This Agreement (including the Exhibits hereto, if any), the Restated Certificate and the other Transaction Agreements (as defined in the Stock Purchase Agreement) constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled.

7.14 Corporate Securities Law. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM THE QUALIFICATION BY

SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED UNLESS THE SALE IS SO EXEMPT.

[Remainder of Page Intentionally Left Blank]

The parties have executed this Series B Preferred Stock Purchase Agreement as of the date first written above.

COMPANY:

By: /s/ John G. Petrovich

Name: John G. Petrovich
(print)

Title: President

Address:

PURCHASERS:

ARROWHEAD RESEARCH CORPORATION

By: /s/ R. Bruce Stewart

Name: R. Bruce Stewart
(print)

Title: President

Address:

CALIFORNIA INSTITUTE OF TECHNOLOGY

By: /s/ Albert G. Horvath

Name: Albert G. Horvath

(print)

Title: Vice President, Business Finance

Address: Office of Technology Transfer
1200 E. California Blvd.
Mail Code 210-85
Pasadena, CA 91125

AGREEMENT TO PROVIDE ADDITIONAL CAPITAL

THIS AGREEMENT TO PROVIDE ADDITIONAL CAPITAL (this "Agreement") is made and entered into as of June 4, 2004, by and between Arrowhead Research Corporation, a Delaware corporation ("Arrowhead"), and Insert Therapeutics, Inc., a California corporation (the "Company").

A. Concurrent with the execution and delivery hereof, Arrowhead has entered into a Stock Purchase Agreement dated June 4, 2004 (the "Purchase Agreement"), pursuant to which, among other things, Arrowhead has agreed to purchase 24,496,553 shares of Series B Preferred Stock of the Company (the "Series B Preferred Stock").

B. The Purchase Agreement has been entered into in contemplation of and in consideration of this Agreement, whereby Arrowhead agrees to contribute up to $4,000,000 of additional capital to the Company on the terms and conditions set forth herein, provided the Company meets certain milestones relating to the development of the Company's business, and also agrees that a portion of the Series B Preferred Stock purchased by Arrowhead pursuant to the Purchase Agreement will be forfeited by Arrowhead to the Company in the event that Arrowhead fails to provide the agreed upon additional capital despite the attainment by the Company of the specified milestones,

C. This Agreement is being executed and delivered by the parties hereto as contemplated by the Purchase Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants and agreements set forth below, the parties hereto agree as follows:

1. Commitment to Provide Additional Capital. Arrowhead agrees to provide up to $4,000,000 of additional capital to the Company, on the following terms and subject to the following conditions:

(a) Attached hereto as Appendix I is a schedule setting forth specified milestones in the development of its business (the "Milestones"). The date upon which each such Milestone shall have been met or accomplished is hereinafter referred to as a "Milestone Date."

(b) Within ten (10) business days following each successive Milestone Date specified in Appendix I, the Company shall deliver to Arrowhead a certificate of the President and the Chief Technical Officer of the Company setting forth, in reasonable detail, sufficient information for Arrowhead to evaluate whether the Company has achieved the specific Milestone to be achieved by the Milestone Date in question.

(c) Arrowhead will have a period of twenty (20) business days following receipt of the certificate specified in subparagraph 1(b) to evaluate the information provided to Arrowhead by the Company in the certificate. In the event that Arrowhead determines, to its reasonable satisfaction, that the Milestone in question was achieved by the Company by the applicable Milestone Date, Arrowhead shall, within such 20-day period, provide to the Company, in cash, by corporate check(s) or wire transfer, the amount of additional capital set forth on Appendix I opposite the Milestone and Milestone Date in question.

(d) Any and all amounts provided by Arrowhead to the Company pursuant to this Agreement shall be deemed contributions to the capital of the Company by Arrowhead, as an existing holder of capital stock of the Company. It is understood and agreed that no capital stock or other security of the Company shall be issued to Arrowhead in consideration or on account of any additional capital provided by Arrowhead to the Company pursuant to the provisions of this Agreement, and that none of such funds shall be considered a loan by Arrowhead to the Company, or otherwise be repayable by the Company to Arrowhead. However, the liquidation preference to which Arrowhead is entitled as holder of the Company's Series B Preferred Stock will be increased, as provided in the Amended and Restated Certificate of Incorporation of Insert Therapeutics, Inc. (the "Restated Certificate of Incorporation"), by the full amount of any and all amounts so contributed by Arrowhead to the capital of the Company, but the number of shares of Common Stock into which each share of Series B Preferred Stock may be converted shall not be affected by any such contribution.

2. Failure of Arrowhead to Make a Required Contribution. In the event that Arrowhead fails to provide, on a timely basis, any amount of additional funding that Arrowhead is obligated to provide pursuant to the provisions of paragraph 1 above, then in addition to any consequences of such failure provided in the Restated Certificate of Incorporation or By-Laws of the Company, Arrowhead shall forfeit to the Company that number of shares of the Series B Preferred Stock of the Company then owned by Arrowhead (or any shares of Common Stock into which such shares of Series B Preferred Stock may have been converted) which is calculated by dividing by five (5) the sum of (i) the amount of additional capital which Arrowhead failed to provide with respect to the Milestone Date in question and (ii) the total amount of capital which would be due on satisfaction of Milestones on any future Milestone Dates. For example, if Arrowhead failed to provide $1,000,000 of additional capital which it was obligated to provide pursuant to the provisions of paragraph 1 above, Arrowhead would forfeit twenty percent (20%) of its shares of Series B Preferred Stock.

3. Miscellaneous.

(a) Subject to the terms and conditions of this Agreement, each of the parties hereto shall use its best efforts to take, or cause to be taken, all action, and to do, or cause to be done, all things necessary, proper or advisable under applicable laws, rules and regulations to consummate and make effective the transactions contemplated by this Agreement.

(b) This Agreement shall be binding upon and inure to the benefit of the parties hereto, the heirs, personal representatives, successors and permitted assigns of each of the parties hereto, but shall not confer, expressly or by implication, any rights or remedies upon any other party. Neither this Agreement nor any of the rights, interests or obligations of either party hereunder may be assigned without the prior written consent of the other party.

(c) This Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of the California, without regard to its principles of conflicts of laws.

(d) All notices, requests or demands and other communications hereunder must be in writing and shall be deemed to have been duly made if personally delivered or mailed, postage prepaid, to the parties at their respective addresses set forth on the signature page hereof. Any party hereto may change its address by written notice to the other party given in accordance with this subsection 3(d).

(e) This Agreement, together with the exhibits attached hereto, contains the entire agreement between the parties and supersedes all prior agreements, understandings and writings between the parties with respect to the subject matter hereof and thereof. Each party hereto acknowledges that no representations, inducements, promises or agreements, oral or otherwise, have been made by any party, or anyone acting with authority on behalf of any party, which are not embodied herein or in an exhibit hereto, and that no other agreement, statement or promise may be relied upon or shall be valid or binding. Neither this Agreement nor any term hereof may be changed, waived, discharged or terminated orally. This Agreement may be amended or any term hereof may be changed, waived, discharged or terminated only by an agreement in writing signed by each of the parties hereto.

(f) The captions and headings used herein are for convenience only and shall not be construed as a part of this Agreement.

(g) In the event of any litigation between the parties hereto, the non-prevailing party shall pay the reasonable expenses, including the attorneys' fees, of the prevailing party in connection therewith.

(h) This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which taken together shall constitute but one and the same document.

[The next page is the signature page]

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of the day and year first above written.

"The Company"

INSERT THERAPEUTICS, INC.

By: John Petrovich

Title: President

"Arrowhead"

ARROWHEAD RESEARCH CORPORATION

By: R. Bruce Stewart

Title: President

Appendix I

To

Agreement to Contribute Capital

	Description	Capital to be Contributed
Milestone 1	December 1, 2004	$ 1,000,000.00
Milestone 2	FDA approval to commence Phase 1 clinical trials for Cyclosert-Camptothecin conjugate	$ 1,500,000.00
Milestone 3	FDA approval to commence Phase 2 clinical trials for Cyclosert-Camptothecin conjugate	$ 1,500,000.00

EXHIBIT 10.7

ARROWHEAD RESEARCH CORPORATION
150 S. Los Robles Avenue, Suite 480
Pasadena, California 91101

April 21, 2004

Dr. Michael L. Roukes
California Institute of Technology 114-36
Pasadena, California 91125

Richmond Wolf
Office of Technology Transfer
California Institute of Technology
1200 E. California Blvd M/C 210-85
Pasadena, CA 91125

Re: Nanokinetics Corporation

Gentlemen:

In accordance with our recent discussions, this is to confirm the terms and conditions upon which Arrowhead Research Corporation, a Delaware corporation ("Arrowhead Research"), and Dr. Michael L. Roukes ("Dr. Roukes"), Professor of Physics, Applied Physics and Bioengineering at The California Institute of Technology in Pasadena, California ("Caltech"), will jointly form a new corporation (the "Corporation") to be known as "Nanokinetics Corporation."

1. The Corporation will be formed under the laws of the State of California, and will have an authorized capital structure consisting of 50,000,000 shares of Common Stock, $.001 par value, and 5,000,000 shares of preferred stock, $.001 par value. The articles of incorporation of the Corporation will require the unanimous approval of the Corporation's directors for (i) any reorganization, merger or consolidated of the Corporation with or into another entity; (ii) the sale of all or substantially all of the assets of the Corporation, (iii) the issuance of common stock or preferred stock to raise additional capital, (iv) any "going public" transaction, (v) the filing for bankruptcy of the Corporation, and (vi) any amendment to the articles of incorporation to change or delete any of the foregoing, and (vii) selection of the initial CEO.

2. In connection with the initial organization of the Corporation, an aggregate of 2,000,000 shares of common stock will be issued and sold, at the price of $.001 per share, to Dr. Roukes and such additional designees of Dr. Roukes (including a prospective chief executive officer) as the parties shall mutually agree upon. All of these shares common stock will be subject to repurchase by the Corporation, at the price of $.001 per share, in the event that the service of such persons with the Corporation ceased prior to the end of a 4-year term. However, the shares would "vest", or no longer be subject to repurchase, in 40 equal monthly installments commencing at the end of the 9th calendar month following issuance. This common stock would

not be fully vested before the end of the vesting period except in the case of an initial public offering (or comparable transaction) or a sale of all or substantially all of the Corporation's assets, in which case the "vesting" would be accelerated so that all of the common stock would thereafter not be subject to repurchase.

3. Arrowhead Research will purchase shares of an initial series of preferred stock for $2,000,000. The preferred shares will be convertible into 5,000,000 shares of common stock, be entitled to one vote for each share of common stock into which they are convertible, voting together with the common stock on all matters other than the election of directors, have a liquidation preference of $2,000,000 (plus such additional amounts as have been contributed to the capital of the Corporation pursuant to paragraph 6 below), and be entitled to elect a majority of the number of directors authorized at any given time (for example, 3 of 5), with the remaining directors to be elected by the holders of the common stock. The balance of the authorized shares of preferred stock would be issuable from time to time in one or more additional series having such rights, preferences and privileges as shall be set forth in resolutions to be adopted by the Board of Directors of the Corporation.

4. Options to purchase an aggregate of 3,000,000 shares of common stock, at the price of $.001 per share, will be also granted to Dr. Roukes and his approved designees, with these options to be allocated in the discretion of Dr. Roukes, subject to the reasonable approval of Arrowhead Research. All of these options would be subject to the same 4-year "vesting schedule" that applies to the shares of common stock as provided in paragraph 2 above. Future option grants under any stock option plan to be adopted by the Corporation would be determined by the Corporation's Board of Directors.

5. The Corporation will issue to Caltech a warrant to purchase, at the price of $.001 per share, up to 1,000,000 shares of the Corporation's common stock, as payment in full for an exclusive, world wide license in and to certain nanoscience intellectual property and technology developed in the laboratory of Dr. Roukes to be more particularly described in a mutually acceptable license agreement to be prepared by Caltech. It is understood that, in the event of a substantial acquisition of the assets or shares of the Corporation (as defined in the license documentation), Caltech would be entitled to an assignment fee or a renegotiated license agreement to include royalty payments made by the acquirer.

6. In addition to the amounts to be paid by Arrowhead Research as the purchase price of preferred stock specified above, it is understood and agreed that Arrowhead Research would make additional contributions to the capital of the Corporation, totaling up to $18,000,000, in accordance with the schedule of milestones attached hereto. No additional securities would be issued to Arrowhead Research on account of any such capital contributions. In the event that Arrowhead Research fails to make an additional contribution to the capital of the Corporation when required, up to 90% of the shares of preferred stock owned by Arrowhead would be forfeited to the Corporation, with the percentage of preferred stock to be forfeited would be determined with reference to the aggregate liquidation preference of the preferred stock at the applicable point in time in relation to the total of $20,000,000 of capital provided and to be provided by Arrowhead Research. For example, if Arrowhead Research made additional capital contributions of $8,000,000, but failed to make any further capital contributions, the liquidation

preference of the preferred stock would be $10,000,000, Arrowhead Research would have provided half of the total required capital, and 50% of the preferred stock would be forfeited. In that instance, Arrowhead Research would retain preferred stock that would be convertible into 2,500,000 shares of common stock, or half of the 5,000,000 shares into which the preferred stock originally was convertible.

If the foregoing accurately sets forth your understandings as to our mutual agreements on the subject matter hereof, please so signify where indicated below, and return the executed copy of this letter to the undersigned, retaining a copy for your files. We will then proceed to incorporate and organize the Corporation on the foregoing terms and conditions, and prepare and finalize the additional documentation on terms that are mutually agreeable to all parties as contemplated above, as quickly as is practicable.

Very truly yours,

/s/ R. BRUCE STEWART

R. Bruce Stewart, President
Arrowhead Research Corporation

AGREED TO AND ACCEPTED,
this 21 day of April, 2004:

/s/ MICHAEL L. ROUKES

Dr. Michael L. Roukes

CALIFORNIA INSTITUTE OF TECHNOLOGY

By: /s/ RICHMOND WOLF

Richmond Wolf, Director
Office of Technology Transfer

NANOKINETICS
CAP TABLE

	Shares*	Options*	Total
Common Stock @ $ 0.001			
Founders	2,000,000	1,000,000	3,000,000
Option Pool		2,000,000	2,000,000
Warrants @ $ 0.001			
Caltech			1,000,000
Preferred Stock			
Arrowhead Research			5,000,000
Total			11,000,000

* Vesting over 4 years

NANOKINETICS CORPORATION
ATTACHMENT: Milestones and Timetable for Staged Capital Contributions

Time from "Closure"	Arrowhead Investment	Nanokinetics Goals
0 Months (at closure)	$2,000,000	• Agreement achieved between ARC, NK and Caltech • Initiate search for CEO • Initiate search for (~6) initial staff members
3-4 Months	$13,000,000 (*i.e.* additional 11M$ capital contribution)	• CEO hired • First members of tech staff hired • Administrative staff person hired • Layout of laboratory/production facilities designed • Initial product planning finalized • Initial market analysis for full spectrum of potential near-term products • Acquire for office/meeting space • Search for/Identify lab/production space • Major equipment orders placed
12-15 Months	$20,000,000 (*i.e.* additional 7M$ capital contribution)	• Prototypes for 2 product designs completed • Complete market analysis for spectrum of potential Nanokinetics products • Construction of initial production facilities • Construction of cleanroom & service infrastructure • Equipment installation
15-18 Months	-	• Production infrastructure completed • Equipment installation completed • Prototypes sent to customers for validation

Exhibit 31.1

SECTION 302 CERTIFICATION

I, R. Bruce Stewart, certify that:

1. I have reviewed this Quarterly Report on Form 10-QSB/A of Arrowhead Research Corporation;

2. Based on my knowledge, this Quarterly 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 Quarterly Report;

3. Based on my knowledge, the financial statements, and other financial information included in this Quarterly 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 Quarterly Report;

4. The registrant's other certifying officers 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)), for the registrant and we 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 Quarterly Report is being prepared;

(b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Quarterly 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

(c) disclosed in this Quarterly 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 officers 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 registrant's board of directors (or persons performing the equivalent functions):

(a) all significant deficiencies in the design or operation of internal controls 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: July 7, 2004

/s/ R. BRUCE STEWART

R. Bruce Stewart, President
Chief executive, financial and accounting officer

EXHIBIT 32.1

SECTION 906 CERTIFICATION

In connection with the Quarterly Report on Form 10-QSB/A of Arrowhead Research Corporation (the "Company") for the quarter ended March 31, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, R. Bruce Stewart, the chief executive officer and chief financial officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 7, 2004

/s/ R. BRUCE STEWART

R. Bruce Stewart, President
Chief executive, financial and accounting officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.