

ARROWHEAD RESEARCH CORP  
Form 10-Q  
August 11, 2008

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

**FORM 10-Q**

(Mark One)

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

For the quarterly period ended June 30, 2008.

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

Commission file number 000-21898

**ARROWHEAD RESEARCH CORPORATION**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State of incorporation)

201 S. Lake Avenue, Suite 703

Pasadena, California 91101

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

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

(626) 304-3400

(Address and telephone number of principal executive offices)

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated

Accelerated filer

Non-accelerated filer  Do not check if a smaller reporting company

Smaller reporting company

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

As of August 7, 2008, 38,956,373 shares of the registrant's common stock, \$.001 par value per share, were outstanding.

	Page(s)
<b>PART I FINANCIAL INFORMATION</b>	
<b>ITEM 1. FINANCIAL STATEMENTS</b>	
<u>Consolidated Balance Sheets as of June 30, 2008 (unaudited) and September 30, 2007</u>	1
<u>Consolidated Statements of Operations for the three-month and nine-month periods ended June 30, 2008 and 2007 and from inception through June 30, 2008 (unaudited)</u>	2
<u>Consolidated Statements of Stockholders' Equity for the period from inception through June 30, 2008 (unaudited)</u>	3
<u>Consolidated Statements of Cash Flows for the nine-month periods ended June 30, 2008 and 2007 and from inception through June 30, 2008 (unaudited)</u>	4
<u>Notes to Consolidated Financial Statements (unaudited)</u>	5
<b><u>ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u></b>	19
<b><u>ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u></b>	32
<b><u>ITEM 4. CONTROLS AND PROCEDURES</u></b>	32
<b>PART II OTHER INFORMATION</b>	
<b><u>ITEM 1. LEGAL PROCEEDINGS</u></b>	32
<b><u>ITEM 1A. RISK FACTORS</u></b>	33
<b><u>ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS</u></b>	34
<b><u>ITEM 3. DEFAULTS UPON SENIOR SECURITIES</u></b>	34
<b><u>ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS</u></b>	34
<b><u>ITEM 5. OTHER INFORMATION</u></b>	34
<b><u>ITEM 6. EXHIBITS</u></b>	34
<b><u>SIGNATURES</u></b>	35

## Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

## Consolidated Balance Sheets

As of June 30, 2008 and September 30, 2007

(unaudited)

	(unaudited) June 30, 2008	September 30, 2007
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 13,823,480	\$ 24,120,097
Trade receivable, net of allowance for doubtful account of \$56,031	94,427	273,864
Grant receivable, net of allowance for doubtful account of \$0	37,929	
Other receivables	25,000	
Prepaid sponsored research, <i>Note 8</i> .	25,006	221,053
Other prepaid research		278,558
Other prepaid expenses	535,325	383,729
Current assets of discontinued operations, <i>Note 5</i> .		28,127
<b>TOTAL CURRENT ASSETS</b>	<b>14,541,167</b>	<b>25,305,428</b>
<b>PROPERTY AND EQUIPMENT</b>		
Computers, office equipment and furniture	531,453	515,744
Research equipment	1,863,405	1,429,602
Software	155,315	104,625
Leasehold improvements	121,717	112,983
Property and equipment of discontinued operations		952,503
	2,671,890	3,115,457
Less: Accumulated depreciation and amortization	(1,412,188)	(934,876)
Accumulated depreciation and amortization of discontinued operation		(741,122)
<b>NET PROPERTY AND EQUIPMENT</b>	<b>1,259,702</b>	<b>1,439,459</b>
<b>INTANGIBLE AND OTHER ASSETS</b>		
Rent deposit	137,358	157,534
Patents, <i>Note 1</i> .	2,627,930	2,938,513
Minority investment in private company	560,000	
Non-current assets of discontinued operations		12,018
<b>TOTAL OTHER ASSETS</b>	<b>3,325,288</b>	<b>3,108,065</b>
<b>TOTAL ASSETS</b>	<b>\$ 19,126,157</b>	<b>\$ 29,852,952</b>
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 1,083,560	\$ 1,346,678
Accrued expenses	612,844	530,052
Payroll liabilities	609,051	392,554
Accrued severance	250,000	495,000
Deferred revenue		98,570
Current liabilities of discontinued operations		33,521
<b>TOTAL CURRENT LIABILITIES</b>	<b>2,555,455</b>	<b>2,896,375</b>

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

<b>LONG-TERM LIABILITIES</b>		
Accrued severance, <i>Note 8.</i>	500,000	500,000
Minority interests	2,970,483	152,609
Commitment and contingencies, <i>Note 8.</i>		
<b>STOCKHOLDERS EQUITY, <i>Note 6.</i></b>		
Common stock	38,954	38,622
Preferred stock		
Additional paid-in capital	89,899,453	84,672,783
Accumulated deficit during the development stage	(76,838,188)	(58,407,437)
<b>TOTAL STOCKHOLDERS EQUITY</b>	<b>13,100,219</b>	<b>26,303,968</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS EQUITY</b>	<b>\$ 19,126,157</b>	<b>\$ 29,852,952</b>

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

## Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

## Consolidated Statements of Operations

(unaudited)

	Three Months Ended June 30, 2008	Three Months Ended June 30, 2007	Nine Months Ended June 30, 2008	Nine Months Ended June 30, 2007	May 7, 2003 (Inception) to June 30, 2008
<b>REVENUE, Note 1</b>	\$ 235,372	\$ 622,599	\$ 1,362,999	\$ 629,994	\$ 3,809,290
COST OF GOODS SOLD	160,742	347,601	882,766	347,601	1,606,854
<b>GROSS PROFIT ON SALES</b>	<b>74,630</b>	<b>274,998</b>	<b>480,233</b>	<b>282,393</b>	<b>2,202,436</b>
<b>OPERATING EXPENSES</b>					
Salaries	3,896,950	2,583,712	10,028,895	6,118,938	28,177,348
Consulting	902,031	637,052	2,172,230	1,241,033	5,596,434
General and administrative expenses	1,720,206	1,525,163	4,897,218	3,853,569	16,714,266
Research and development	3,349,423	12,816,916	6,514,896	17,596,583	38,920,347
Patent amortization	102,602	103,991	310,584	311,973	1,299,547
<b>TOTAL OPERATING EXPENSES</b>	<b>9,971,212</b>	<b>17,666,834</b>	<b>23,923,823</b>	<b>29,122,096</b>	<b>90,707,942</b>
<b>OPERATING LOSS</b>	<b>(9,896,582)</b>	<b>(17,391,836)</b>	<b>(23,443,590)</b>	<b>(28,839,703)</b>	<b>(88,505,506)</b>
<b>OTHER INCOME (EXPENSES)</b>					
Gain on sale of stock in subsidiary					2,292,800
Realized and unrealized gain (loss) in marketable securities					382,264
Interest income	115,158	238,239	691,385	879,135	2,971,979
Other income					3,637
<b>TOTAL OTHER INCOME (EXPENSES)</b>	<b>115,158</b>	<b>238,239</b>	<b>691,385</b>	<b>879,135</b>	<b>5,650,680</b>
<b>LOSS BEFORE MINORITY INTERESTS</b>	<b>(9,781,424)</b>	<b>(17,153,597)</b>	<b>(22,752,205)</b>	<b>(27,960,568)</b>	<b>(82,854,826)</b>
Minority interests	1,994,088	4,881,466	4,475,059	6,279,853	13,317,443
<b>LOSS FROM CONTINUING OPERATIONS</b>	<b>(7,787,336)</b>	<b>(12,272,131)</b>	<b>(18,277,146)</b>	<b>(21,680,715)</b>	<b>(69,537,383)</b>
Loss from discontinued operations Nanotechnica, Inc.					(1,342,505)
Loss on disposal of Nanotechnica, Inc. (July 2005 - September 2005)					(73,797)
Loss from discontinued operations Aonex Technologies, Inc.	(21,170)	(205,417)	(459,949)	(677,813)	(6,189,247)
Gain on sale of Aonex Technologies, Inc.	306,344		306,344		306,344
<b>GAIN (LOSS) FROM DISCONTINUED OPERATIONS</b>	<b>285,174</b>	<b>(205,417)</b>	<b>(153,605)</b>	<b>(677,813)</b>	<b>(7,299,205)</b>
Provision for income taxes					(1,600)
<b>NET LOSS</b>	<b>\$ (7,502,162)</b>	<b>\$ (12,477,548)</b>	<b>\$ (18,430,751)</b>	<b>\$ (22,358,528)</b>	<b>\$ (76,838,188)</b>
Income (loss) from continuing operations per share, basic & diluted	\$ (0.20)	\$ (0.34)	\$ (0.47)	\$ (0.62)	
Income (loss) from discontinued operations per share, basic & diluted	\$ 0.01	\$ (0.01)	\$ (0.01)	\$ (0.02)	

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

Net income (loss) per share, basic and diluted	\$	(0.19)	\$	(0.35)	\$	(0.48)	\$	(0.64)
Weighted average shares outstanding, basic & diluted		38,891,995		36,422,464		38,756,939		34,945,152

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

## Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

## Consolidated Statement of Stockholders Equity

from inception to June 30, 2008

(unaudited)

	Shares	Amount	Additional Paid-in-Capital	Accumulated Deficit during the Development Stage	Totals
<b>Initial Issuance of Stock:</b>					
Common stock & warrants issued for cash @ \$0.001 per unit	3,000,000	\$ 3,000	\$	\$	\$ 3,000
Common stock & warrants issued for cash @ \$1.00 per unit	1,680,000	1,680	1,678,320		1,680,000
Stock issuance cost charged to additional paid-in capital			(168,000)		(168,000)
Net loss for period from inception to September 30, 2003				(95,238)	(95,238)
<b>Balance at September 30, 2003</b>	<b>4,680,000</b>	<b>4,680</b>	<b>1,510,320</b>	<b>(95,238)</b>	<b>1,419,762</b>
Exercise of stock options @ \$0.20 per share	75,000	75	14,925		15,000
Common stock & warrants issued for cash @ \$1.00 per unit	475,000	475	474,525		475,000
Common stock & warrants issued for marketable securities @ \$1.00 per unit	500,000	500	499,500		500,000
Stock issuance cost charged to additional paid-in capital			(96,500)		(96,500)
Common stock and warrants issued for cash @ \$1.50 per unit	6,608,788	6,609	9,906,573		9,913,182
Common stock issued in reverse acquisition	705,529	706	(151,175)		(150,469)
Common stock issued as a gift for \$1.09 per share	150,000	163	162,587		162,750
Common stock and warrants issued as stock issuance cost @ \$1.50 per unit	356,229	356	533,988		534,344
Stock issuance cost charged to additional paid-in capital			(991,318)		(991,318)
Exercise of stock option @ \$0.20 per share	75,000	75	14,925		15,000
Exercise of stock options @ \$1.00 per share	6,000	6	5,994		6,000
Stock-based compensation			175,653		175,653
Net loss for the year ended September 30, 2004				(2,528,954)	(2,528,954)
<b>Balance at September 30, 2004</b>	<b>13,631,546</b>	<b>13,645</b>	<b>12,059,997</b>	<b>(2,624,192)</b>	<b>9,449,450</b>
Exercise of warrants @ \$1.50 per share	13,812,888	13,813	20,705,522		20,719,335
Exercise of stock options @ \$1.00 per share	25,000	25	24,975		25,000
Purchase of Insert Therapeutics shares @ \$0.28/share	502,260	502	1,999,498		2,000,000
Common stock issued for services	12,500	12	49,988		50,000
Stock-based compensation			508,513		508,513
Change in percentage of ownership in subsidiary			230,087		230,087
Net loss for the year ended September 30, 2005				(6,854,918)	(6,854,918)
<b>Balance at September 30, 2005</b>	<b>27,984,194</b>	<b>27,997</b>	<b>35,578,580</b>	<b>(9,479,110)</b>	<b>26,127,467</b>
Exercise of stock options	115,794	116	341,421		341,537
Common stock issued @ \$4.88 per share	204,854	205	999,795		1,000,000
Common stock issued @ \$3.84 per share to Dr. M. Moskovits as payment for application of patents	15,000	15	57,585		57,600
Common stock issued @ \$3.50 per share	5,590,000	5,590	19,539,410		19,545,000
Common stock issued to Caltech as payment for legal fees	25,364	25	149,975		150,000
Purchase of Calando Pharmaceuticals, Inc. @ \$5.17/share	208,382	208	1,077,125		1,077,333
Stock-based compensation			1,270,339		1,270,339
Accelerated stock options			99,139		99,139
Net loss for the year ended September 30, 2006				(18,997,209)	(18,997,209)
<b>Balance at September 30, 2006</b>	<b>34,143,588</b>	<b>34,156</b>	<b>59,113,369</b>	<b>(28,476,319)</b>	<b>30,671,206</b>
Exercise of stock options	186,164	186	434,541		434,727
Common stock issued, net	2,849,446	2,849	15,149,366		15,152,215



Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

Arrowhead's increase in proportionate share of Insert Therapeutics' equity				2,401,394	2,401,394
Common stock issued for purchase of Carbon Nanotechnologies, Inc.	1,431,222	1,431		5,398,569	5,400,000
Stock-based compensation				2,175,544	2,175,544
Net loss for the year ended September 30, 2007				(29,931,118)	(29,931,118)
<b>Balance at September 30, 2007</b>	<b>38,610,420</b>	<b>\$ 38,622</b>	<b>\$ 84,672,783</b>	<b>\$ (58,407,437)</b>	<b>\$ 26,303,968</b>
Exercise of stock options	105,357	106		289,921	290,027
Arrowhead's increase in proportionate share of Uniym's equity				1,720,962	1,720,962
Stock-based compensation				689,590	689,590
Net loss for the three months ended December 31, 2007				(5,233,774)	(5,233,774)
<b>Balance at December 31, 2007</b>	<b>38,715,777</b>	<b>38,728</b>	<b>87,373,256</b>	<b>(63,641,211)</b>	<b>23,770,773</b>
Common stock issued @ \$2.72 per share to Rice University as a gift	50,000	50		135,950	136,000
Stock-based compensation				851,906	851,906
Net loss for the period ended March 31, 2008				(5,694,815)	(5,694,815)
<b>Balance at March 31, 2008</b>	<b>38,765,777</b>	<b>38,778</b>	<b>88,361,112</b>	<b>(69,336,026)</b>	<b>19,063,864</b>
Common stock issued to purchase shares of Unidym, Inc.	70,547	\$ 71	\$	199,929	200,000
Common stock issued to purchase MASA Energy, LLC	105,049	\$ 105	\$	309,895	310,000
Stock-based compensation				1,028,517	1,028,517
Net loss for the period ended June 30, 2008				(7,502,162)	(7,502,162)
<b>Balance at June 30, 2008</b>	<b>38,941,373</b>	<b>38,954</b>	<b>89,899,453</b>	<b>(76,838,188)</b>	<b>13,100,219</b>

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

## Arrowhead Research Corporation and Subsidiaries

(A Development Stage Company)

## Consolidated Statements of Cash Flows

For the nine months ended June 30, 2008 and 2007 and from inception through June 30, 2008

(Unaudited)

	Nine months ended June 30, 2008	Nine months ended June 30, 2007	Period from May 7, 2003 (Date of inception) to June 30, 2008
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net Loss	\$ (18,430,752)	\$ (22,358,527)	\$ (76,838,189)
Realized and unrealized (gain) loss on investment			(382,263)
Gain from sale of subsidiary	(306,344)		(306,344)
Stock issued as gift to Caltech			162,750
Stock issued as gift to Rice University	136,000		136,000
Stock issued for professional services			200,000
Stock issued for in-process research and development	200,000	9,597,005	10,874,338
Stock-based compensation	2,570,013	1,491,827	6,799,201
Depreciation and amortization	849,736	717,689	3,459,396
Gain on sale of stock in subsidiary			(2,292,800)
Minority interests	(4,475,059)	(6,306,201)	(13,317,443)
Decrease/increase in:			
Receivables	114,759	(311,047)	(161,305)
Prepaid research expense	474,605	26,029	(25,007)
Other prepaid expenses	(129,881)	(268,320)	(539,536)
Deposits	20,176	22,282	(139,418)
Accounts payable	(234,055)	607,258	913,282
Accrued expenses	137,838	(221,577)	650,438
Deferred revenue	(98,570)	378,645	
Preferred stock liability		(1,162,000)	
Other liabilities	(29,446)	417,563	1,376,240
<b>NET CASH PROVIDED (USED) IN OPERATING ACTIVITIES</b>	<b>(19,200,980)</b>	<b>(17,369,374)</b>	<b>(69,430,660)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Purchase of marketable securities US Treasury Bills			(18,575,915)
Purchase of property and equipment	(508,936)	(563,713)	(3,335,098)
Purchase of MASA Energy, LLC	(250,000)		(250,000)
Cash paid for interest in Nanotechnica			(4,000,000)
Cash paid for interest in Aonex			(5,000,000)
Cash paid for interest in Insert		(5,150,000)	(10,150,000)
Cash paid for interest in Calando			(8,000,000)
Cash paid for interest in Unidym	(5,000,000)		(12,001,000)
Cash paid for interest in Tego	(2,400,000)		(2,501,000)
Cash obtained from interest in Nanotechnica			4,000,000
Cash obtained from interest in Aonex			5,001,250
Cash obtained from interest in Insert		5,150,000	10,529,594
Cash obtained from interest in Calando			8,000,000
Cash obtained from interest in Unidym	5,000,000		12,001,000
Cash obtained from interest in Tego	2,400,000		2,501,000
Proceeds from sale of marketable securities US Treasury Bills			18,888,265
Proceeds from sale of stock in subsidiary	9,013,897	5,136,346	16,575,167
Proceeds from sale of investments			569,913
Proceeds from sale of subsidiary (net)	359,375		359,375
Payment for patents			(303,440)
Restricted cash			50,773
<b>NET CASH USED IN INVESTING ACTIVITIES</b>	<b>8,614,336</b>	<b>4,572,633</b>	<b>14,359,884</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			

## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

Proceeds from issuance of common stock and warrants, net	290,027	15,570,317	68,894,256
<b>NET CASH PROVIDED BY FINANCING ACTIVITIES</b>	<b>290,027</b>	<b>15,570,317</b>	<b>68,894,256</b>
NET INCREASE (DECREASE) IN CASH	(10,296,617)	2,773,576	13,823,480
<b>CASH AT BEGINNING OF PERIOD</b>	<b>24,120,097</b>	<b>28,020,304</b>	
<b>CASH AT END OF PERIOD</b>	<b>\$ 13,823,480</b>	<b>\$ 30,793,880</b>	<b>\$ 13,823,480</b>
<b>Supplementary disclosures:</b>			
Interest paid	\$	\$	
Income tax paid	\$ 4,800	\$ 4,000	
<b>SUPPLEMENTAL NON-CASH TRANSACTIONS</b>			

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

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

On April 20, 2007, Arrowhead purchased the Series E Preferred Stock of Carbon Nanotechnologies, Inc. in exchange for 1,431,222 shares of Arrowhead Common Stock with an estimated fair market value of \$5,400,000 based on the average closing price of Arrowhead's Common Stock on NASDAQ the ten trading days immediately prior to March 24, 2007, as set forth in the Agreement and Plan of Merger among Unidym, Carbon Nanotechnologies, Inc., the Company, and others.

On April 23, 2008, Arrowhead purchased 200,000 shares of the Common Stock of Unidym Inc., in exchange for 70,547 shares of Arrowhead Common Stock with an estimated fair market value of \$200,000 based on the average closing price of Arrowhead's Common Stock on NASDAQ the ten trading days immediately prior to the date of the closing.

On April 29, 2008, Arrowhead purchased all of the membership units of MASA Energy, LLC for \$560,000. The purchase price consisted of 105,049 shares of Arrowhead Common Stock with an estimated fair market value of \$310,000 based on the average closing price of Arrowhead's Common Stock on NASDAQ the ten trading days immediately prior to the date of the closing, plus \$250,000 in cash.

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

**Arrowhead Research Corporation**

**Notes to Consolidated Financial Statements**

**June 30, 2008**

*Unless otherwise noted, (1) the term Arrowhead Research refers to Arrowhead Research Corporation, a Delaware corporation, (2) the terms Arrowhead, the Company, we, us and our refer to the ongoing business operations of Arrowhead and its subsidiaries, whether conducted through Arrowhead Research or a subsidiary of the Company, (3) the term Common Stock refers to Arrowhead Research's Common Stock, (4) the term Warrant refers to warrants to purchase Company Common Stock, and (5) the term stockholder(s) refers to the holders of Common Stock, Warrants and any other security convertible into Common Stock.*

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

*Nature of Business*

Arrowhead is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics and energy. Arrowhead's mission is to build value through the identification, development and commercialization of nanotechnology-related products and applications. The Company works closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. Arrowhead takes a portfolio approach by operating multiple subsidiaries which allows the pursuit of multiple opportunities and diversifies risk. At June 30, 2008, Arrowhead owned three majority-owned subsidiaries (the Subsidiaries) and minority positions in two other companies (the Minority Positions) focused on developing and commercializing nanotechnology products and applications and has funded a number of prototype development efforts in leading university labs in exchange for the right to license the technology developed in such labs.

Arrowhead owns a majority interest in each of its three operating Subsidiaries, securing substantial participation in any success. Each subsidiary is staffed with its own technical and business team that focuses on its specific technology and markets, while Arrowhead provides financial, strategic and administrative resources. The Company's majority-owned Subsidiaries are focused on developing and commercializing nanotechnology products and applications, including anti-cancer drugs, RNAi therapeutics, carbon-based electronics and fullerene anti-oxidants. The two companies in which Arrowhead owns minority interest are focused on developing advanced nanomaterials for spinal cord injury and wound healing and drug delivery technology. Arrowhead's business plan includes adding to its portfolio through selective acquisition and formation of new companies.

In exchange for the right to license the resultant technology developed in sponsored laboratories, Arrowhead sponsors university research. Arrowhead has worked with some of the most highly-regarded academic institutions in the country, including the California Institute of Technology (Caltech), Stanford University, Duke University and the University of Florida, in critical areas such as stem cell research, carbon electronics and molecular diagnostics.

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

Arrowhead and its Subsidiaries fund research and operations from cash on hand, government grants and license royalties. Neither Arrowhead nor its Subsidiaries have derived revenue from product sales from its inception until the acquisition of Carbon Nanotechnologies, Inc. (CNI) in April 2007 by its consolidated subsidiary, Unidym, Inc. Since the acquisition, Unidym has manufactured carbon nanotubes for the primary purpose of using them in research and development activities and derives minimal revenues from the sale of carbon nanotubes for research and commercial applications.

*Summary of Significant Accounting Policies*

**Basis of Presentation** This report on Form 10-Q for the quarter ended June 30, 2008, should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended September 30, 2007, filed with the SEC on December 14, 2007. The accompanying unaudited consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial statements and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all the information and footnotes required by generally accepted accounting principles for complete financial statements. Certain prior period amounts have been reclassified to conform to the current period's presentation. In the opinion of management, all normal recurring adjustments considered necessary for a fair presentation have been included. Operating results for the three-month and nine-month periods ended June 30, 2008 are not necessarily indicative of the results that might be expected for the year ending September 30, 2008.



**Principles of Consolidation** The consolidated financial statements of the Company include the accounts of Arrowhead and its Subsidiaries. Arrowhead's subsidiaries include Insert Therapeutics, Inc. ( Insert ) and Calando Pharmaceuticals, Inc. ( Calando ), which merged in April 2008. The merged entity continues to operate under the name of Calando. Other operating subsidiaries include Unidym, Tego BioSciences Corporation ( Tego ) and Aonex Technologies, Inc. ( Aonex ). Aonex was sold in May 2008 and is included in the results as Loss from Discontinued Operations. Nanotechnica, Inc. ( Nanotechnica ) a majority owned subsidiary dissolved in June 2005, is also included in the results as Loss from Discontinued Operations. All significant intercompany accounts and transactions are eliminated in consolidation, and minority interests are accounted for in the consolidated statements of operations and the balance sheets.

**Use of Estimates** The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the accompanying financial statements. Significant estimates made in preparing these financial statements include valuing of the stock of the Subsidiaries, assumptions to calculate the value of stock options, stock-based compensation expense, allowance for doubtful accounts, deferred tax asset valuation allowance, patents, minority-interest Common Stock and useful lives for depreciable and amortizable assets. Actual results could differ from those estimates.

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

**Credit Risk** The Company extends credit to its customers in the normal course of business and generally does not require collateral or other security. The Company performs ongoing credit evaluations of its customers' financial condition and historically has not incurred significant credit losses.

**Concentration of Credit Risk** The Company maintains checking accounts for Arrowhead and separate accounts for each Subsidiary at either of two financial institutions. These accounts are insured by the Federal Deposit Insurance Corporation (FDIC) for up to \$100,000. The Company has three wealth management accounts at the same financial institution that invest in higher yield money market accounts and in government securities. At June 30, 2008, the Company had uninsured cash deposits totaling \$14,075,847. The Company has not experienced any losses in such accounts and management believes it has placed its cash on deposit with financial institutions that are financially stable.

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

**Intellectual Property** At June 30, 2008, intellectual property consisted of patents and patent applications licensed or purchased in the gross amount of \$570,983. A portion of the consideration paid for Insert has been allocated to the patents held by Insert. The Calando (formerly Insert) patents, in the gross amount of \$3,301,190, are being amortized over the life of these patents. The accumulated amortization of patents totaled \$1,244,243 at June 30, 2008. Patents are being amortized over 3 years to 20 years unless a patent is determined to have no foreseeable commercial value and is written down to \$1. The weighted average original amortization period is 13 years. The weighted average remaining amortization period is 10 years.

**Revenue Recognition** Revenue from product sales is recognized when the related goods are shipped and all significant obligations of the Company have been satisfied. The Company recognizes license fee revenue on a straight-line basis over the term of the license. Development fees, milestone fees, collaboration fees and grant revenues are recognized upon the completion and payment of services or achievement of the mutually agreed milestones.

The Company generated revenues of \$235,000 and \$623,000 for the three months ended June 30, 2008 and 2007, respectively, and revenues of \$1,363,000 and \$630,000 for the nine months ended June 30, 2008 and 2007, respectively. The revenue for the three months ended June 30, 2008 consists of \$85,000 from license fees from Unidym technology, \$144,000 from the sale and delivery of carbon nanotubes to third parties and \$6,000 for shipping charges. The revenue for the first nine months of fiscal 2008 consists of \$748,000 from grants to fund research for the development of carbon nanotube applications, \$507,000 from the sale and delivery of carbon nanotubes to third parties and \$23,000 for shipping charges. The \$630,000 of revenue in the prior year's nine month period consisted of \$409,000 from grants to fund research for the development of carbon nanotube applications, \$207,000 from the sale and delivery of carbon nanotubes to third parties and \$7,000 for shipping charges and \$7,000 of revenue from a National Institute of Health grant at Calando.

**Cost of Goods Sold** The Company includes direct materials, production labor and direct plant production cost (excluding depreciation) in cost of goods sold.

**Research and Development** Costs and expenses that can be identified as research and development are charged to expense as incurred in accordance with Financial Accounting Standards Board ( FASB ) statement No. 2, Accounting for Research and Development Costs .

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

**Recently Issued Accounting Standards** Management does not believe that any recently issued, but not yet effective, accounting standards, if currently adopted, would have a material effect on the accompanying financial statements.

#### **NOTE 2. BASIS OF CONSOLIDATION**

The consolidated financial statements for the three-month and nine-month periods ended June 30, 2008 and 2007, respectively, include the accounts of Arrowhead and its Subsidiaries Calando, Unidym and Tego. Aonex is included in the Loss from discontinued operations. All significant intercompany accounts and transactions are eliminated in consolidation and minority interests were accounted for in the consolidated statements of operations and the balance sheets.

#### **NOTE 3. ALLOWANCE FOR DOUBTFUL ACCOUNTS**

The Company accrues an allowance for doubtful accounts based on estimates of uncollectible revenues by analyzing historical collections, accounts receivable aging and other factors. Accounts receivable are written off when all collection attempts have failed. The allowance for doubtful accounts applicable to Unidym as of June 30, 2008 was \$56,031.

#### **NOTE 4. INVESTMENT IN SUBSIDIARIES AND AFFILIATES**

*Calando Pharmaceuticals, Inc. (formerly known as Insert Therapeutics, Inc.)*

On April 17, 2008, Calando merged with and into Insert, with Insert as the surviving company. Following the common-control merger, Insert changed its name to Calando. Insert and Calando effectuated the merger (the Calando Merger ) of Calando with and into Insert pursuant to the Agreement and Plan of Reorganization dated January 14, 2008 (the Calando Merger Agreement ).

Prior to the merger, Arrowhead had financed the operations of Insert and Calando through a series of working capital loans. At the time of the merger, Arrowhead had a series of 6% simple-interest working capital loans outstanding to Insert totaling \$1,600,000. Arrowhead also had a series of 6% simple-interest working capital loans outstanding to Calando totaling \$4,450,000. As part of the merger, an Agreement to Provide Additional Capital, dated as of March 31, 2006, between Calando and the Company was amended and terminated to accelerate the payment of the remaining \$6,000,000 payable thereunder, against receipt of the repayment of the principal and interest on all loans extended by the Company to either Insert or Calando (\$6,187,663 principal and interest as of the date of the merger).

Among other things, the Calando Merger was conditioned upon the recapitalization of Insert and Calando to eliminate the preferred stock of each company. In the Insert recapitalization, immediately before the effective time of the Calando Merger, each share of Insert Series B Preferred Stock, Series C Preferred Stock and Series C-2 Preferred Stock was converted into one share of common stock, par value \$0.0001 per share, of Insert (the Insert Common Stock ). All warrants outstanding for the purchase of Insert Series D Preferred Stock became exercisable for a like number of shares of Insert Common Stock. In the Calando recapitalization, immediately before the effective time of the Calando Merger, each share of Calando Series A Preferred Stock was be converted into one share of Calando common stock, par value \$0.0001 per share (the Calando Common Stock ).

At the time of the Calando Merger, each issued and outstanding share of Calando Common Stock was canceled and automatically converted into the right to receive shares of Insert Common Stock based on the relative enterprise valuation of Insert to Calando of 1 to 1.5, or a Calando Merger share exchange ratio of 5.974126 shares of Insert Common Stock issued for each share of Calando Common Stock. Outstanding options to acquire Calando Common Stock were converted into an option to acquire approximately 5.974126 shares of Insert Common Stock.

Insert and Calando made representations, warranties and covenants to one another in the Calando Merger Agreement, which expired at the effective time of the Calando Merger. Consummation of the Calando Merger was conditioned upon, among other things: (i) the representations and warranties of each party to the Calando Merger Agreement being true in all material respects as of the closing; (ii) the performance or satisfaction in all material respects of all covenants and conditions of each party to the Calando Merger Agreement; (iii) the completion of the recapitalization of Insert and Calando; (iv) the approval by a majority of Insert s and Calando s stockholders (excluding the Company); and (v) the satisfaction of certain other customary closing conditions.





As a result of the Calando Merger, the following agreements to which the Company was a party terminated: (i) Insert's Right of First Refusal and Co-Sale Agreement, relating to Insert, dated as of June 4, 2004, (ii) Insert's Voting Agreement, dated as of June 4, 2004, (iii) Calando's Amended and Restated Investors' Rights Agreement, dated as of March 31, 2006, (iv) Calando's Amended and Restated Voting Agreement, dated as of March 31, 2006, and (v) Calando's Right of First Refusal and Co-Sale Agreement, dated as of March 31, 2006. Upon the effective date, the license agreement between Insert and Calando, dated as of March 14, 2005, pursuant to which Insert granted Calando worldwide exclusive rights to Insert's intellectual property related technologies, and a broad patent application covering methods and uses for the therapeutic use of RNAi, including its linear cyclodextrin polymers, was terminated.

With the Calando Merger, Insert entered into an Amended and Restated Investors' Rights Agreement (the Restated Investors' Rights Agreement), restating Insert's Investors' Rights Agreement, dated as of June 4, 2004, as amended by Amendment No. 1 to Investors' Rights Agreement, dated as of March 30, 2005, and as further amended by Amendment No. 2 to Investors' Rights Agreement, dated as of October 25, 2006.

Following the Calando Merger, the Company owns 67.8% of the outstanding shares of the combined company (62.5% on a fully diluted basis).

As of June 30, 2008, Arrowhead had a series of 6% simple-interest working capital loans outstanding to Calando totaling \$1,987,663 plus accrued interest of \$20,941 payable upon demand.

*Unidym, Inc. (formerly NanoPolaris, Inc.)*

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

On June 13, 2006, NanoPolaris acquired substantially all of the net assets and the name Unidym from Unidym's founding scientist. Unidym was a developer of carbon nanotube-based electronics. The net assets acquired included Unidym's intellectual property, prototypes and equipment, for a purchase price consisting of \$25,000 in cash, the assumption of \$75,000 of liabilities and shares of NanoPolaris common stock, with an estimated value of \$154,350. At the time of the purchase, the shares issued for the purchase represented 11.9% (10% on a fully diluted basis) of NanoPolaris' outstanding voting stock. Concurrently with the purchase, Arrowhead agreed to provide up to \$4,000,000 in additional capital contributions over the next two years. In August 2006, NanoPolaris changed its name to Unidym, Inc.

On April 20, 2007, a wholly owned subsidiary of Unidym merged with CNI, a Texas-based company involved in the development, manufacture and marketing of carbon nanotubes (the CNI Merger). The combined company operates under the Unidym name, has an expansive portfolio of carbon nanotube-related patents and is one of the largest manufacturers of carbon nanotubes in the world.

In connection with the CNI Merger, Arrowhead agreed to accelerate the \$4,000,000 capital contribution to Unidym and made payment on April 23, 2007. In aggregate consideration for the acceleration of the additional capital to Unidym and the transfer from Arrowhead to Unidym of rights and obligations under two sponsored research agreements, Unidym issued 448,000 shares of Unidym common stock to Arrowhead.

Prior to the CNI Merger, certain shareholders of CNI assumed all of CNI's outstanding debt, a total of \$5,400,000, in exchange for 1,080,000 shares of Series E Preferred Stock of CNI. On the date of the CNI Merger, Arrowhead purchased the Series E Preferred Stock in exchange for 1,431,222 shares of Arrowhead Common Stock with an estimated fair market value of \$5,400,000. The CNI Series E Preferred Stock was exchanged in the merger for 2,784,252 shares of newly authorized Unidym Series B Preferred Stock. The 2,889,000 shares of Unidym Series A Preferred Stock owned by Arrowhead were exchanged for 2,889,000 shares of Unidym Series B Preferred Stock.

In exchange for all the outstanding shares of CNI common stock, Unidym issued 5,000,000 shares of newly authorized Unidym Series A Convertible Preferred Stock with an estimated total value of \$4,200,000. The Series A Preferred Stock is convertible into 8,400,482 shares of Unidym common stock under certain conditions. Unidym also assumed CNI's 2007 Restricted Stock Unit Plan subject to which 1,104,010 shares of Unidym common stock are issuable on the later of June 30, 2008, or an initial public offering by Unidym and a warrant to purchase 64,000 shares of Unidym common stock.

The consolidated statement of operations includes the results of the merged companies since April 21, 2007.

Prior to the CNI Merger, Arrowhead owned 88.1% of the outstanding voting securities of Unidym. Immediately following the CNI Merger, Arrowhead's ownership of the outstanding voting securities was 60.1%. If all options were awarded and exercised, all common stock subject to restricted stock units was issued and all preferred stock was converted, Arrowhead's interest would have been 42.1% immediately following the CNI Merger.

In December 2007, Unidym completed a private financing with strategic and financial investors, pursuant to which Unidym issued and sold an aggregate of 5,764,778 shares of its Series C Preferred Stock for \$1.80 per share. The private placement generated net cash proceeds of \$10,013,897, including \$3,000,000 invested by Arrowhead.

Immediately following the private financing, in December 2007, Arrowhead's ownership of the outstanding, voting securities was 51.2%. If at that point in time all options were awarded and exercised, all common stock subject to restricted stock units was issued and all preferred stock was converted, Arrowhead's interest would have been 39.2%.

On April 23, 2008, the Company entered into a stock purchase agreement whereby the Company purchased from a Unidym stockholder and director 550,000 shares of Unidym common stock in exchange for \$350,000 in cash and restricted Company common stock valued at \$200,000. As part of the agreement, the director resigned from his seat on the Unidym board and the Chief Executive Officer of the Company was appointed to the Unidym board.

At June 30, 2008, the Company owned 53.3% of the outstanding voting stock of Unidym and 37.5% on a fully diluted basis.

On March 13, 2008, the Unidym's wholly owned subsidiary, Unidym Acquisition LLC that merged with CNI was itself merged into Unidym and ceased to exist.

On June 12, 2008 and June 16, 2008, Unidym entered into subscription agreements with Entegris, Inc. and Arrowhead Research Corporation, respectively, pursuant to which Unidym issued and sold an aggregate of 2,222,222 shares of its Series C Preferred Stock for aggregate cash proceeds of \$4,000,000 in a private financing transaction. Entegris' investment was made in connection with its expanded customer relationship with Unidym for carbon nanotubes. The Company purchased 1,111,111 shares of Series C Preferred Stock for a purchase price of \$2,000,000. After giving effect to the Shares issued in this private placement, Arrowhead retains majority ownership of Unidym.

In addition to other licensing agreements on March 14, 2008, Unidym sub-licensed certain of its intellectual property to Ensysce BioSciences Inc. ( Ensysce ) that will focus on research into the medical therapeutic applications of carbon nanotubes. Ensysce is both funded and effectively controlled by a related party to Unidym who also serves as a director of Unidym. Terms of the licensing arrangement between Unidym and Ensysce include a \$25,000 up-front sub-licensing fee, ongoing royalties, and an initial 50% equity position for Unidym in Ensysce. Unidym also provides contract services to Ensysce, including supplies of research grade nanotubes, back-office and accounting support. Ensysce is accounted for on the equity basis.

#### *Tego BioSciences Corporation*

On April 20, 2007, Tego, a newly formed, wholly-owned Subsidiary of Arrowhead, acquired the assets of C Sixty, Inc., a Texas-based company developing pharmaceuticals based on the unique biochemical properties of modified fullerenes, for \$1,000. On July 3, 2007, Arrowhead capitalized Tego with a purchase of 5,000,000 shares of Tego Series A Preferred Stock for \$100,000. The Company is evaluating opportunities for Tego's technology.

On October 25, 2007, Arrowhead provided \$2.4 million in additional capital to Tego, in exchange for 15 million shares of Series A-2 Preferred Stock. The \$2.4 million is to be used for developing and commercializing pharmaceuticals based on modified fullerenes. Arrowhead owns 100% of the outstanding voting securities of Tego and 83% of the voting securities on a fully diluted basis after taking into account stock options and warrants.

Along with the on-going studies with the National Cancer Institute and university laboratories, Tego has initiated a number of pre-clinical studies to better understand the chemistry and the pharmacology as well as the efficacy and potency of its proprietary fullerene based compounds. The studies include applications in the areas of magnetic resonance imaging contrast agents and ophthalmic therapeutics.

---

**Minority Positions in Private Companies**

*Nanotope, Inc.*

Through the acquisition of Masa Energy LLC, a Delaware limited liability company with no other assets or operations, in April 2008, the Company acquired a 5.78% minority position in Nanotope, Inc. ( Nanotope ) and a 6.13% minority position in Leonardo Biosystems, Inc. ( LBS )

On July 23, 2008, the Company acquired shares of Series B Preferred Stock of Nanotope and committed to acquire shares for another \$1 million on or before September 17, 2008, bringing the Company's ownership to approximately 23% of Nanotope. See note 13, Subsequent Events.

Nanotope is developing advanced nanomaterials for the treatment of spinal cord injuries and wound healing. Nanotope is based on technology developed in the laboratories of Dr. Samuel Stupp at Northwestern University. Nanotope's lead product is a compound that, when injected or applied at a wound site, self-assembles to form a scaffold of nanofibers on which cells can grow and differentiate to heal the wound.

*Leonardo Biosystems, Inc.*

LBS is developing a drug-delivery platform technology is based on novel methods of designing spheroid porous silicon microparticles that selectively accumulate in the tumor vasculature. The microparticles are designed to be loaded with drug associated nanoparticles. LBS is based on technology developed in the University of Texas laboratory of Dr. Mauro Ferrari.

**NOTE 5. DISCONTINUED OPERATIONS AONEX**

On May 5, 2008, Aonex entered into an Agreement and Plan of Merger (the Aonex Merger Agreement ) by and among AmberWave Systems Corporation, a Delaware corporation in the business of research, development and licensing of advanced technologies for semiconductor manufacturing ( Amberwave ) and Aonex Acquisition Corporation, a California corporation and wholly-owned subsidiary of the Amberwave formed for the purpose of acquiring Aonex's business ( Acquiror ). On May 6, 2008, the merger was consummated and the outstanding Company loans to Aonex of \$1,298,000 were converted to equity.

At the effective time of the Aonex Merger all of the issued and outstanding shares of Aonex capital stock automatically converted into the right to receive an aggregate amount equal to (a) \$450,000 minus (b) the sum of the of Aonex transaction expenses and \$15,625.31. In addition, the stockholders of Aonex are entitled to receive future payments as follows:

(i) Upon Acquiror's completion of a successful laminate substrate production at its facilities, Acquiror will pay the stockholders of Aonex capital stock ( Aonex Stockholders ) an additional amount equal to \$500,000;

(ii) For each agreement the Acquiror enters into with a customer during the 24 month period following the closing of the Merger (each a Customer Agreement ), the Acquiror will pay Aonex Stockholders an additional amount equal to \$500,000 (with the aggregate amount not to exceed \$2 million), subject to the satisfaction of certain procedural requirements set forth in the Aonex Merger Agreement;

(iii) During the 42-month period beginning on the closing of the Aonex Merger, the Acquiror will pay Aonex Stockholders, on a quarterly basis, the sum of: (A) 20% of the cash gross margin contribution received by the Acquiror or its subsidiaries from its customers during such period for the sale of specified products, services or devices employing Aonex's intellectual property assets, and (B) 35% of the revenues from the licensing or sale of Aonex's intellectual property assets received by the Acquiror from its customers during such period; provided however, that (1) the aggregate payments under this subsection do not exceed \$7 million and (2) certain procedural requirements set forth in the Aonex Merger Agreement are satisfied; and

(iv) During the ten-year period following the Aonex Merger, the Acquiror will pay Aonex Stockholders royalty payments, payable on a quarterly basis, equal to one-half of one percent of the revenues associated with the sale of any product incorporating the Aonex's intellectual property assets for solar applications or the license of Aonex's intellectual property assets for solar applications; subject to the satisfaction of certain procedural requirements set forth in the Aonex Merger Agreement.

Notwithstanding the above, the aggregate Earn-out Payments made by the Acquiror (other than those payments under subsection (iv) above) to Aonex Stockholders shall not exceed \$7.95 million.

Arrowhead has preference to the first \$6,298,000 in future payments after which any additional payments will be split 64% to Arrowhead and 36% to the holders of the common stock of Aonex.

**NOTE 6. STOCKHOLDERS EQUITY**

The Company had a total of 75,000,000 authorized shares at June 30, 2008, consisting of 70,000,000 authorized shares of Common Stock, par value \$0.001, and 5,000,000 shares of authorized Preferred Stock.

At June 30, 2008, 38,941,373 shares of Common Stock were outstanding. At June 30, 2008, 1,559,000 shares and 4,738,310 shares were reserved for issuance upon exercise of options granted under Arrowhead's 2000 Stock Option Plan and 2004 Equity Incentive Plan, respectively. On December 3, 2007, an inducement grant of options to purchase 2,000,000 shares of Common Stock was made outside of Arrowhead's equity incentive plans to the Company's newly hired CEO. Arrowhead's Compensation Committee is negotiating the final terms of this grant to be memorialized in a Stock Option Agreement. Through June 30, 2008, options to purchase 1,559,000 shares were outstanding under the 2000 Stock Option Plan and options to purchase 4,432,680 shares were outstanding under the 2004 Equity Incentive Plan.

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

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

On May 29, 2007, the Company completed a private placement of 2,849,466 shares of restricted Common Stock at \$5.78 per share that generated \$15.2 million in net proceeds. The purchasers received warrants to purchase an additional 712,362 shares of Common Stock at \$7.06 per share. The warrants may be called by the Company any time after May 29, 2008, if the closing price of the Company's Common Stock is \$8.47 or above for the previous 20 trading days.

The following table summarizes information about warrants outstanding at June 30, 2008:

Exercise prices	Number of Warrants	Weighted Average Remaining Life in Years	Weighted Average Exercise Price
\$5.04	1,397,500	7.6	\$5.04
\$7.06	712,362	8.9	\$7.06

On January 30, 2008, Arrowhead's Form S-3 Registration Statement, originally filed on December 20, 2007, was declared effective. The prospectus allows Arrowhead to issue, from time to time in one or more offerings, shares of Common Stock and warrants to purchase common stock for an aggregate dollar amount of up to \$50 million.

It is the Company's intent to use the net proceeds from the sale of the securities and received upon exercise of the warrants for general corporate purposes, which may include one or more of the following: working capital, research and clinical development activities, potential future acquisitions of companies and/or technologies, and capital expenditures.

**NOTE 7. LEASES**

The Company leases the following facilities:

	Lab/Office Space	Monthly Rent	Lease Commencement	Lease Term
Arrowhead				
Pasadena(1)	7,388 sq ft	\$ 17,362	March 1, 2006	62 Months
New York	130 sq ft	\$ 3,600	September 1, 2007	12 Months
Calando	4,354 sq ft	\$ 12,173	June 1, 2006	36 Months
Unidym				
Menlo Park, CA	7,000 sq ft	\$ 14,345	February 1, 2007	36 Months
Houston, TX	8,017 sq ft	\$ 13,362		Month to Month
Springfield, MO	1,900 sq ft	\$ 2,533	December 1, 2007	24 Months

(1) Arrowhead leases corporate office space in Pasadena, which it occupied beginning March 1, 2006. The lease agreement provides Arrowhead with two months' free rent, which was recorded as a deferred liability and is being amortized over the life of the lease. The Company has no plans to own any real estate and expects that all facility leases will be operating leases.

At June 30, 2008, the future minimum commitments remaining under leases were as follows:

Twelve months ending September 30	Facilities Leases	Equipment Leases
2008 (3 months)	\$ 152,426	\$ 4,642
2009	\$ 521,656	\$ 14,382
2010	\$ 283,353	\$ 9,210

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

2011	\$ 129,290	\$ 2,268
2012 and thereafter	\$ 0	\$ 0

Facility and equipment rent expense for the three months ended June 30, 2008 and 2007 was \$295,336 and \$261,194 respectively. Facility and equipment rent expense for the nine months ended June 30, 2008 and 2007 was \$821,082 and \$626,167 respectively. From inception to date, rent expense has totaled \$2,634,513.

**NOTE 8. COMMITMENTS AND CONTINGENCIES SUBSIDIARIES AND SPONSORED RESEARCH****Subsidiaries**

As of June 30, 2008, Arrowhead held a majority interest of each of the following three operating Subsidiaries:

<b>Subsidiary</b>	<b>% Outstanding Voting Securities<sup>2</sup></b>	<b>Technology/Product Focus</b>
Calando Pharmaceuticals, Inc. (1) <i>founded June 4, 2004</i> Unidym, Inc. (formerly NanoPolaris)	67.8%	Developing nano-engineered RNAi therapeutics and drug delivery system in anti-cancer clinical trials
<i>founded April 4, 2005</i> Tego BioSciences Corporation	53.5%	Developing carbon nanotube products for the electronic industry
<i>founded April 20, 2007</i>	100.0%	Developing pharmaceutical products based on the unique biochemical properties of modified fullerenes

- (1) On April 17, 2008, Calando merged with Insert. Following the Calando Merger, Insert Therapeutics, Inc. changed its name to Calando Pharmaceuticals, Inc.
- (2) Each Subsidiary has an option plan to help motivate and retain employees. Calando has 4,335,473 outstanding warrants, primarily issued in connection with a financing event that closed in October 2006. As of June 30, 2008, assuming all options in each Subsidiary plan were awarded and exercised and all warrants were exercised, the Company would own approximately 62.5% of Calando, 37.5% of Unidym and 83% of Tego.

**Sponsored Research**

By funding university research, Arrowhead has the opportunity to ascertain the technical success at low research cost and, if warranted, continue cost effective development by leveraging the already existing resources available to university scientists, such as laboratories and equipment and a culture that encourages the exchange of ideas. Moreover, the cultivation of relationships in the academic community provides an additional window into other promising technologies. The Company normally obtains the exclusive license to the technology developed by the research it sponsors. If such technology has commercial potential, the Company can form a majority-owned subsidiary to develop the technology and provide stock in the subsidiary to the scientist and the university, in order to give them an economic interest in the success of the subsidiary. Should the related technology prove to be too difficult or too expensive to commercialize, Arrowhead may terminate the license agreement and return the licensed intellectual property to the university.

Sponsored Research for the three months ended June 30, 2008 and 2007, was \$142,559 and \$368,782, respectively. Sponsored Research for the nine months ended June 30, 2008 and 2007, was \$678,531 and \$682,565, respectively.

**Sponsored Research Agreement University of Florida**

The terms of the sponsored research agreement with the University of Florida ( UF ) are summarized in the following table:

Research Project	Period Covered	Total Estimated Project Cost	Annual Cost	Amount Paid as of June 30, 2008	Prepaid Amt as of June 30, 2008
Development of flexible electronic devices Thin film transistors (Dr. Andrew Rinzler)	Jul. 1, 2006 - Jun. 30, 2008 (2 years )	\$ 647,533	\$ 323,767	\$ 647,533	\$ 0

In connection with the merger between Unidym and CNI, the rights and obligations under the sponsored research agreement with UF were transferred to Unidym.

**Sponsored Research Agreement Duke University**

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

Research Project	Period Covered	Total Estimated Project Cost	Annual Cost	Amount Paid as of June 30, 2008	Prepaid Amt as of June 30, 2008
Electrical Conductivity of Carbon Nanotubes (Dr. Jie Liu)	Dec. 1, 2007 - Nov. 30, 2010 (3 years)	\$ 574,124	\$ 191,375	\$ 136,641	\$ 25,006

The first payment of \$136,641, for the above sponsored research project was made in May 2008.

The agreement described below concluded in November 2007 and was one of the sponsored research obligations transferred from Arrowhead to Unidym at the time of the CNI merger.

Research Project	Period Covered	Total Estimated Project Cost	Annual Cost	Amount Paid as of June 30, 2008	Prepaid Amt as of June 30, 2008
CVD Growth of Well-Aligned Individual Single Walled Carbon Nanotubes (Dr. Jie Liu)	Dec. 1, 2005 - Nov. 30, 2007 (2 years)	\$ 677,651	\$ 338,826	\$ 677,651	\$ 0

**Sponsored Research Agreements California Institute of Technology**

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

Research Project	Period Covered	Total Estimated Project Cost	Annual Cost	Amount Paid as of June 30, 2008	Prepaid Amt as of June 30, 2008
Drug Discovery & Diagnostics (Dr. C. Patrick Collier)	Oct. 1, 2003 - Sept. 30, 2008 (5 years)	\$ 1,393,806	\$ 292,540	\$ 1,152,266	\$ 0



## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

Gene Regulatory Networks (Dr. Eric H. Davidson)

Jan. 1, 2007 -

Dec. 31, 2009 (3 years)    \$ 765,000    \$ 255,000    \$ 404,800    \$ 0

After fiscal 2007 year end, Arrowhead issued notices to terminate both sponsored research agreements with Caltech. The Company was responsible for any outstanding commitments that could not be canceled. The total cost to terminate the agreements and to settle the outstanding obligations was \$201,000.

In January and July of 2007, Insert made contributions of \$50,000 each to Caltech for laboratory research in the field of synthetic polymers for use primarily in drug delivery applications. Caltech has granted Calando (formerly known as Insert) an exclusive license to the patent rights and improvements in the field of synthetic polymers for drug delivery.

**Sponsored Research Agreement Stanford University**

Arrowhead has exclusively licensed intellectual property from Stanford University ( Stanford ) for a nanotech device designed to control the behavior of stem cells. Arrowhead funded additional research involving the device at Stanford to develop and commercialize the technology.

Research Project	Period Covered	Total Estimated Project Cost	Annual Cost	Amount Paid as of June 30, 2008	Prepaid Amt as of June 30, 2008
Microchip-based Biological Signal Delivery (Dr. Nicholas Melosh)	Jun. 1, 2005 - May 31, 2007 (2 years )	\$ 600,000	\$ 300,000	\$ 600,000	\$ 0

All payments under this agreement had been made and the agreement had been concluded.

**Employment Agreements**

On May 24, 2007, the Company entered into a Severance Agreement with each of R. Bruce Stewart, the Company's Chairman and Chief Executive Officer at that time, and Joseph T. Kingsley, the Company's Interim President and Chief Financial Officer at that time, to provide for payments to the officers in the event of their retirement or the termination of their employment. The agreements provide that the executives will be entitled to receive severance payments and payments for any accrued and unused vacation time in the event that (i) the executive dies or voluntarily retires from the Company, (ii) the executive voluntarily terminates his employment other than for cause or (iii) the Company terminates the executive's employment other than for cause (each, a Termination Event ). Upon the occurrence of a Termination Event, Mr. Stewart is entitled to receive as severance, during each of the first three years following the Termination Event, payments equal to his highest annual salary while employed by the Company, payable in equal monthly installments. Upon the occurrence of a Termination Event, Mr. Kingsley was entitled to receive as severance, during the first year following the Termination Event, payments equal, in the aggregate, to 100% of his highest annual salary while employed by the Company, payable in equal monthly installments, which payments would be reduced by any payments received by Mr. Kingsley or his estate from the Company's Long Term Disability Plan. Each agreement also provides that, if any payment to the executive is subject to excise tax under Section 4999 of the Internal Revenue Code of 1986, as amended (the Code ), the Company will pay to the executive an amount sufficient, on an after-tax basis, to put the executive in the same position he would have been in if the excise tax was not imposed. The timing of payments under the agreements is also subject to adjustment to avoid any adverse tax treatment under Section 409A of the Code.

Mr. Kingsley stepped down from his positions as Interim President on December 1, 2007 and as Chief Financial Officer of the Company on January 14, 2008 and remained an employee of the Company. On March 10, 2008, the Company entered into an Employment Agreement with Mr. Kingsley. Under the Agreement, Mr. Kingsley will serve as Assistant to the President from January 14, 2008 through January 13, 2009 and he will be paid his previous base salary. Mr. Kingsley's previously granted stock options ceased vesting as of January 14, 2008 and all remaining unvested stock options were cancelled. The exercise period for the Executive's vested stock options was extended by the Employment Agreement from 90 days after retirement to one year after he terminates employment with the Company. As a condition to the Employment Agreement, the Severance Agreement between the Company and Mr. Kingsley, entered into on May 24, 2007 was terminated in its entirety.

As of June 30, 2008, the Company had accrued \$750,000 related to the Stewart Severance Agreement.

On June 11, 2008, the Company, entered into an Employment Agreement and a Stock Option Agreement (together with the Employment Agreement with Dr. Christopher Anzalone, the Company's Chief Executive Officer and President as well as a Director of the Company. Dr. Anzalone commenced employment with the Company on December 1, 2007.

Dr. Anzalone will be paid an annual base salary of \$400,000 and is eligible to receive bonuses based on the performance of the Company and individual performance objectives. Dr. Anzalone was also granted an option to purchase 2,000,000 shares of Arrowhead common stock with an exercise price of \$3.92 per share, which is equal to the closing price of Arrowhead's common stock on NASDAQ Global Market on the date of grant, December 3, 2007. The option will vest as follows: 250,000 shares vest on the six month anniversary of Dr. Anzalone's date of hire and the balance of the shares vest in 42 equal installments on the first of each successive month. These options are governed by the Stock Option Agreement and were granted outside of the Company's current equity incentive plans.

Dr. Anzalone will also be reimbursed up to \$100,000 in relocation expenses and the Company agreed to provide supplemental life insurance to bring his life insurance benefit up to \$2,000,000. If the Company terminates Dr. Anzalone's employment without cause, the Company will pay Dr. Anzalone his base salary and benefits for twelve months.



***Facility Lease Agreement***

As of June 30, 2008 the facility lease for Unidym's Houston location has expired and is now operating on a month to month basis. The facility's landlord is unwilling to enter into a new facility lease with Unidym and believes it can achieve a better return on its investment by having a new tenant occupy both the administrative and manufacturing areas that it currently leases to Unidym. Unidym also employs, on a contract basis, certain technicians from the landlord to assist in Unidym's manufacturing and research and development activities. Unidym does not believe that the relocation of the facility or the replacement of the landlord's technicians results in any adverse long term impact to Unidym, although, the relocation of the facility will eventually result in relocation related expenses which are unknown at this time but could be significant. On August 6, 2008, Unidym entered into a lease for a facility in Houston, Texas. See Note 13, Subsequent Events.

**NOTE 9. STOCK OPTIONS**

**Stock-Based Compensation** Arrowhead has two plans that provide for equity-based compensation. Under the 2000 Stock Option Plan, 1,559,000 shares of Arrowhead's Common Stock are reserved for issuance upon exercise of non-qualified stock options. No further grants can be made under the 2000 Stock Option Plan. The 2004 Equity Incentive Plan reserves 4,738,310 shares for the grant of stock options, stock appreciation rights, restricted stock awards and performance unit/share awards by the Board of Directors to employees, consultants and others expected to provide significant services to Arrowhead. As of June 30, 2008, there were options granted and outstanding to purchase 1,559,000 and 4,432,680 shares of common stock under the 2000 Stock Option Plan and the 2004 Equity Incentive Plan, respectively. During the three months ended June 30, 2008, options to purchase 810,000 shares of Common Stock were granted under the 2004 Equity Incentive Plan.

On December 3, 2007, an inducement grant of an option to purchase two million shares of Common Stock was made outside of Arrowhead's equity incentive plans to Dr. Christopher Anzalone, the Company's new Chief Executive Officer. The option vests over 48 months with the first 41,667 shares vesting six months from the date of original grant. The option price is \$3.92 per share, the closing price of Arrowhead's stock on the date of grant. The estimated fair value at the date of grant was \$4,692,207.

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

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

The following tables summarize information about stock options:

	Number of Options Outstanding	Weighted- Average Exercise Price Per Share
Balance at May 7, 2003		
Granted	150,000	0.20
Canceled		
Exercised		
Balance at September 30, 2003	150,000	0.20
Granted	1,570,000	1.00
Canceled	(25,000)	1.00
Exercised	(156,000)	0.23
Balance at September 30, 2004	1,539,000	1.00
Granted	2,095,000	2.53
Canceled	(170,000)	1.00
Exercised	(25,000)	1.00
Balance at September 30, 2005	3,439,000	1.93
Granted	2,235,000	4.79
Canceled	(1,161,167)	4.27
Exercised	(115,794)	2.95
Balance at September 30, 2006	4,397,039	2.74
Granted	945,000	4.97
Canceled	(160,952)	5.32
Exercised	(186,164)	2.34
Balance at September 30, 2007	4,994,923	3.07
Granted	2,215,000	3.95
Canceled	(44,974)	3.44
Exercised	(105,357)	2.75
Balance at December 31, 2007	7,059,592	3.37
Granted	385,000	2.85
Canceled	(237,912)	3.61
Exercised		
Balance at March 31, 2008	7,206,680	3.33
Granted	810,000	2.61
Canceled	(25,000)	3.46
Exercised		
Balance at June 30, 2008	7,991,680	3.26
Exercisable at June 30, 2008	4,162,193	\$ 2.89

Exercise Prices	Number of Options	Weighted Average Remaining Life in Years	Weighted Average Exercise Price
-----------------	----------------------	--	------------------------------------

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

\$1.00	6.89	7,991,680	8.1	\$	3.26
--------	------	-----------	-----	----	------

At June 30, 2008, there were 305,630 options available for future grants under Arrowhead's 2004 Equity Incentive Plan. The intrinsic value of the options exercised during the three months ended June 30, 2008 was \$0 as no options were exercised.

The fair value of the options granted by Arrowhead for the three-month and nine-month periods ended June 30, 2008 is estimated at \$1,505,389 and \$7,475,460, respectively. The \$7,475,460 fair value includes \$4,692,207 related to the inducement grant described previously.

The aggregate fair value of options granted by Unidym, Calando, and Tego for the three months ended June 30, 2008, is estimated at \$253,768, \$0, and \$0, respectively. The aggregate fair value of options granted by Unidym, Calando and Tego for the nine months ended June 30, 2008, is estimated at \$375,480, \$0, and \$0, respectively.

As of June 30, 2008, the estimated fair value of the unvested options for Arrowhead was \$7,998,000 with a weighted average remaining amortization period of 3.5 years.

As of June 30, 2008, the estimated aggregate fair value of the unvested options for Unidym, Calando, and Tego was \$1,090,000 with a weighted average remaining amortization period of 2.8 years.

The fair value of options is estimated at the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions: dividend yield of 0%, expected volatility of 49% to 81%, risk-free interest rate of 2.99% to 5.25%, and expected life of five or six years. The weighted-average fair value of each common share option granted by Arrowhead for the three months ended June 30, 2008 and 2007 is estimated at \$1.86 and \$3.26, respectively. The weighted-average fair value of each common share option granted by Arrowhead for the nine months ended June 30, 2008 and 2007 is estimated at \$2.19 and \$2.48, respectively.

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

#### **NOTE 10. INCOME TAXES**

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

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

For the three months and nine months ended June 30, 2008, the Company had consolidated losses of \$7,502,000 and \$18,430,000, respectively. For the three months and nine months ended June 30, 2007, the Company had consolidated losses of \$12,478,000 and \$22,359,000, respectively. The 2008 losses result in a deferred income tax benefit of approximately \$2,963,000 and \$7,280,000 for the three months and nine months ended June 30, 2008. For the three months and nine months ended June 30, 2007, the Company's losses resulted in a deferred income tax benefit of approximately \$4,929,000 and \$8,832,000, respectively. The deferred income tax benefits are offset by increases in the valuation allowance for the same amount for Arrowhead. Management has chosen to take a 100% valuation allowance against the tax benefit until such time as management believes that its projections of future profits, as well as expected future tax rates, make the realization of these deferred tax assets more-likely-than-not. Significant judgment is required in the evaluation of deferred tax benefits, and differences in future results from our estimates could result in material differences in the realization of these assets.

#### **NOTE 11. SEGMENT AND GEOGRAPHIC REPORTING**

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

Grant and collaborations agreements are not considered to be product or licensing revenue, as the plan of operations for the Company is to sell products and/or license technology.

---

**NOTE 12. RELATED PARTY TRANSACTIONS**

During the three months and nine months ended June 30, 2008, the Company's majority owned subsidiary Unidym had product sales of \$38,999 and \$160,944 respectively, to Sumitomo, one of Unidym's stockholders.

During the three months and nine months ended June 30, 2008, the Company's majority owned subsidiary Calando paid \$35,000 and \$125,000 respectively, in consulting fees to Dr. Mark Davis at Caltech. Dr. Davis is a director and consultant for Calando.

On March 14, 2008, Unidym sub-licensed certain of its intellectual property to Ensysce BioSciences Inc. ( Ensysce ) that will focus on research into the medical therapeutic applications of carbon nanotubes. Ensysce is both funded and effectively controlled by a stockholder of Unidym who also serves as a Unidym director.

See also the discussion of Subsequent Events under Note 13.

**NOTE 13. SUBSEQUENT EVENTS**

Purchase of Series B Preferred Stock from Nanotope, Inc.

On July 23, 2008, Arrowhead entered into a Series B Preferred Stock Purchase Agreement with Nanotope, Inc. ( Nanotope ), pursuant to which the Company purchased 900,901 shares of Nanotope's Series B preferred stock at a price per share of \$1.11 for an aggregate purchase price of \$1 million. In addition, Nanotope issued 9,548 shares of Nanotope Series B to another investor at a price per share of \$1.11. The Company intends to invest an additional \$1 million in Nanotope for 900,901 additional shares of Nanotope Series B in a subsequent closing no later than fifty-six (56) days following the initial investment, subject to the bring down of the representations and warranties in the purchase agreement. Nanotope may sell up to an additional 1,318,391 shares of Nanotope Series B in the subsequent financings.

The Company's purchase of Nanotope Series B added to the Company's previously acquired 5.78% ownership interest in Nanotope. After giving effect to the Company's \$2 million investment in Nanotope, the Company will own 465,300 shares of Nanotope common stock and 1,801,802 shares of Nanotope Series B, which collectively represents approximately 23.0% of the outstanding voting stock of Nanotope, on an as-converted basis, and approximately 19.2% of the fully-diluted stock of Nanotope, on an as-converted basis.

Nanotope was co-founded by the Company's President and Chief Executive Officer, Dr. Christopher Anzalone, through the Benet Group, a private investment entity solely owned and managed by Dr. Anzalone. Through the Benet Group Dr. Anzalone owns 1,395,900 shares of Nanotope common stock, or approximately 14.2% (after giving effect to the sale of Nanotope Series B Preferred Stock) of Nanotope's outstanding voting securities. Dr. Anzalone does not hold options, warrants or any other rights to acquire securities of Nanotope directly or through the Benet Group. The Benet Group has the right to appoint a representative to the board of directors of Nanotope. Dr. Anzalone currently serves on the Nanotope board in a seat reserved for Nanotope's CEO and another individual holds the seat designated by the Benet Group. Dr. Anzalone has served as President and Chief Executive Officer of Nanotope since its formation and continues to serve in these capacities. Dr. Anzalone has not received any compensation for his work on behalf of Nanotope since joining the Company on December 1, 2007. Dr. Anzalone has also waived his right to any unpaid compensation accrued for work done on behalf of Nanotope before he joined the Company.

Dr. Anzalone did not participate on behalf of the Company in the negotiations of the terms of the Nanotope Series B issued to the Company and did not negotiate on behalf of Nanotope after becoming the Chief Executive Officer and President of the Company. Dr. Anzalone did respond to questions asked of him by the Company's board of directors and management regarding Nanotope's business plan, operations and the terms of the Series B Stock Purchase Agreement and ancillary agreements.

Formation of Agonn Systems Corporation

On July 9, 2008, the Company announced the formation of Agonn Systems Corporation to explore, develop and commercialize nanotechnology-based energy storage devices for electric vehicles and other large format applications. Agonn is negotiating for the acquisition of rights to certain energy storage technologies based on nanoscale engineering from research institutions. Agonn expects to complete the acquisition of these rights and to begin prototyping ultracapacitors based on carbon nanotubes and other advanced materials by late 2008. At formation, Agonn was a wholly-owned subsidiary of the Company, although the Company expects that this ownership interest may be diluted in the future with the issuance of equity to strategic partners.

Acquisition of Nanoconduction, Inc. by Unidym, Inc.



## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

On August 8, 2008, Unidym completed an acquisition of Nanoconduction, Inc., a company originally formed to develop carbon nanotube-based thermal management solutions for the microprocessor industry ( *Nanoconduction* ). The acquisition of Nanoconduction was consummated through a merger of a wholly-owned subsidiary of Unidym, formed solely for the purpose of the acquisition, with and into Nanoconduction.

The merger is expected to provide Unidym with access to Nanoconduction's patent portfolio, which will supplement Unidym's existing patent portfolio and to provide Unidym with additional opportunities to out-license and leverage its technology. In addition, through the merger, Unidym will gain access to facilities and equipment that will be used in Unidym's ongoing research and development activities.

Unidym accomplished the acquisition of Nanoconduction through an equity swap, as follows. The Company invested \$250,000 in Unidym through a cashless investment by issuing 114,155 shares of unregistered Common Stock to Unidym. In exchange for this investment, the Company received 138,889 additional shares of Series C Preferred Stock of Unidym. As a condition to this investment, Unidym issued the Company's 114,155 shares of unregistered Common Stock to former stockholders of Nanoconduction as partial consideration for the acquisition of Nanoconduction. Pursuant to the merger agreement, Unidym will assume and discharge Nanoconduction's assets and liabilities. Assets include equipment and leasehold improvements with an estimated net book value of \$3,700,000, and, based on preliminary diligence, intellectual property related to the use of carbon nanotubes for thermal management. Liabilities include, among others, \$288,000 in bridge loan financing by holders of Nanoconduction Series B Stock, accounts payable and accrued liabilities of \$842,000 and approximately \$1,667,000 in capital equipment loans. The equipment loans are guaranteed by Unidym and secured by a blanket lien on Unidym's assets. On August 7, 2008, Unidym entered into a new five-year lease for the facilities currently occupied by Nanoconduction in Sunnyvale, California, with the intention of moving Unidym's existing Menlo Park operations to the Nanoconduction facility. This lease is a 5-year lease agreement for an office and manufacturing facility in Sunnyvale, California. The base rent is \$12,300 per month for the first six months increasing to \$25,625 per month for the following 6 months and increasing by approximately 4% every twelve months during years two through five of the initial 5-year lease term. As an upfront payment, Unidym paid the landlord \$49,461 in back rent due and unpaid by Nanoconduction and \$23,725 as an initial security deposit.

Bayport, Texas

On August 6, 2008 Unidym entered into a 10-year lease agreement for a new office and manufacturing facility in Bayport, Texas to which to move its current Houston operations. The base rent is \$18,200 per month increasing by 1% every 12 months over the 120 month initial lease term. An initial security deposit of \$109,200 will be returned in \$18,200 increments upon the anniversary date each year during the first five years of the lease term.

**ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

This Quarterly Report on Form 10-Q contains forward-looking statements concerning future events and performance of the Company. When used in this report, the words intends, estimates, anticipates, believes, plans, may, will, should, projects or expects and similar included to identify forward-looking statements. These forward-looking statements are based on our current expectations and assumptions and many factors could cause our actual results to differ materially from those indicated in these forward-looking statements. You should review carefully the factors identified in this report under the caption Risk Factors and in our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission ( SEC ). We disclaim any intent to update or announce revisions to any forward-looking statements to reflect actual events or developments. Except as otherwise indicated herein, all dates referred to in this report represent periods or dates fixed with reference to the calendar year, rather than our fiscal year ending September 30. The three-month period ended June 30, 2008, may also be referred to as the third quarter of fiscal 2008.

*Overview*

Arrowhead is a development stage nanotechnology company commercializing new technologies in the areas of life sciences, electronics and energy. Arrowhead's mission is to build value through the identification, development and commercialization of nanotechnology-related products and applications. The Company works closely with universities to source early stage deals and to generate rights to intellectual property covering promising new nanotechnologies. Arrowhead takes a portfolio approach by operating multiple subsidiaries, which allows the pursuit of multiple opportunities and diversifies risk. At June 30, 2008, Arrowhead was operating three majority-owned subsidiaries (the Subsidiaries ), owned minority positions in two other companies (the Minority Positions ) focused on developing and seeing to commercialize nanotechnology products and applications and has funded a number of prototype development efforts in leading university labs in exchange for the right to license the technology developed in such labs.

*Majority-owned Subsidiaries*

Arrowhead owns a majority interest in each of its three operating Subsidiaries, securing substantial participation in any success. Each subsidiary is staffed with its own technical team that focuses on its specific technology and markets, while Arrowhead provides financial, strategic and administrative resources. The Company's majority-owned Subsidiaries seek to commercialize a variety of nanotech products and applications, including anti-cancer drugs, RNAi therapeutics, carbon-based electronics and fullerene anti-oxidants. The two companies in which Arrowhead owns minority positions are focused on developing advanced nanomaterials for spinal cord injury and wound healing and drug delivery technology. Arrowhead's business plan includes adding to its portfolio through selective acquisition and formation of new companies.

*Sponsored Research*

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

In exchange for the right to license the resultant technology developed in sponsored laboratories, Arrowhead sponsors university research. Arrowhead has worked with some of the most highly-regarded academic institutions in the country, including the California Institute of Technology ( Caltech ), Stanford University ( Stanford ), Duke University ( Duke ) and the University of Florida ( UF ), in critical areas such as stem cell research, carbon electronics and molecular diagnostics.

---

## *Subsidiaries*

At June 30, 2008, the Company had three majority-owned operating Subsidiaries: Calando Pharmaceuticals, Inc. ( Calando ), which is the combined corporation that resulted from a merger of the Company's two majority owned subsidiaries, Insert Therapeutics, Inc. ( Insert ) and Calando Pharmaceuticals, Inc.), Unidym, Inc. ( Unidym , formerly NanoPolaris, Inc.) and Tego BioSciences Corporation ( Tego ). Aonex Technologies, Inc. ( Aonex ) was sold in May 2008. As part of its business model, the Company will create subsidiaries to commercialize promising technologies or close subsidiaries based upon lack of progress of the Subsidiary. The success of our Subsidiaries is subject to many risk factors, including technology and product acceptance and maintenance of intellectual property rights. The following discussion is qualified by the risk factors under the caption Risk Factors in this report and our most recent Annual Report on Form 10-K filed with the SEC.

### *Calando Pharmaceuticals, Inc.*

On April 17, 2008, Insert Therapeutics, Inc. and Calando Pharmaceuticals, Inc. completed a merger that was the final step in a process to bring the management of Insert and Calando to the Arrowhead level to take advantage of newly hired expertise in nanobiotechnology. Insert Therapeutics, Inc. was the surviving corporation changed its name to Calando Pharmaceuticals, Inc. The corporation formerly known as Calando Pharmaceuticals, Inc. was dissolved by action of the merger. The merger also combined the two complementary technologies and streamlined the operations of the two companies.

#### *siRNA Delivery*

Calando is continuing the development begun at the corporation formerly known as Calando Pharmaceuticals, Inc. (now dissolved by action of the merger) of novel RNAi therapeutics to treat diseases and other medical conditions by combining effective RNAi therapeutics with patented and proprietary delivery technologies. The system is designed to be used to systemically deliver any siRNA. Calando's therapeutic candidate, CALAA-01, is a targeted nanoparticle, comprised of a proprietary, non-chemically-modified siRNA against the M2 subunit of ribonucleotide reductase, a clinically-validated cancer target, and Calando's proprietary siRNA polymer delivery system. In March 2008, Calando filed an IND application for a Phase I trial of CALAA-01. The trial commenced in May 2008 at the South Texas Accelerated Research Therapeutics (START) clinic in San Antonio, Texas. The trial will also be conducted at the UCLA Jonsson Cancer Center (UCLA) in Los Angeles, California. The Phase I study is an open-label, dose-escalation clinical trial in patients with non-resectable or metastatic solid tumors. The primary objectives of the study are to evaluate the safety and tolerability of CALAA-01 in humans. Additional objectives include characterization of pharmacokinetics, evaluation of tumor response, and recommendation of a CALAA-01 dose for future clinical studies.

#### *Small Molecule Drug Delivery*

Calando is continuing the development of CycloSert , a proprietary drug delivery platform technology based on a nano-engineered class of linear cyclodextrin-containing polymers begun when the corporation was known as Insert Therapeutics, Inc. IT-101 is a conjugate of Calando's patented nano-engineered drug delivery polymer and Camptothecin, a potent anti-cancer compound. A Phase I study for IT-101 began in the summer of 2006 at the City of Hope Cancer Center. Interim results from the trial were reported in June 2007. The report, though not conclusive, was consistent with promising efficacy. In general, IT-101 was well tolerated and pancytopenia was the dose limiting toxicity. Pharmacokinetics data were favorable and consistent with results from preclinical animal studies. In patients studied, IT-101 showed longer half life, lower clearance and lower volume of distribution than seen in patients treated with other Camptothecin-based drugs. The Phase I trial is expected to be completed in 2008. In April 2008, Calando filed a second IND with the FDA to commence a Phase II trial in patients with ovarian cancer. The Phase II study is designed to demonstrate prolonged time until disease progression in patients who achieved a response or stabilization in their disease following a second line course of platinum-based chemotherapy. Previous work with IT-101 suggests that protracted maintenance doses of IT-101 may minimize the typical chemotherapy side effects, allow for an improved quality of life while continuing treatment, and prolong time until disease progression. The company plans to begin dosing patients later this year.

#### *Unidym*

Unidym is developing high-performance, cost-effective carbon nanotube-based products for the electronics industry. Through license of intellectual property from several universities and by virtue of its April 2007 merger with Texas-based Carbon Nanotechnologies, Inc. ( CNI ), Unidym has assembled exclusive commercial rights related to carbon nanotube manufacture and applications. The merger also provided Unidym with the ability to manufacture carbon nanotubes on a larger scale. Unidym's initial product is a transparent conductive film designed to replace the expensive and brittle metal oxide films currently used in electronic products like flat panel displays, touch screens, OLEDs and thin film solar cells. In addition to its product development efforts, Unidym manufactures and sells carbon nanotubes to customers and has entered into joint development agreements to incorporate its carbon nanotube films into existing products.



---

*Tego*

Tego Biosciences, Inc. is developing pharmaceuticals based on the unique biochemical properties of modified fullerenes. Along with the on-going studies with the National Cancer Institute and university laboratories, Tego has initiated a number of pre-clinical studies to better understand the chemistry and the pharmacology as well as the efficacy and potency of its proprietary fullerene based compounds. The studies include applications in the areas of magnetic resonance imaging contrast agents and ophthalmic therapeutics.

***Minority Investments in Private Companies***

*Nanotope, Inc.*

Nanotope, Inc. ( Nanotope ) is developing advanced nanomaterials for the treatment of spinal cord injuries and wound healing. Nanotope is based on technology developed in the laboratories of Dr. Samuel Stupp at Northwestern University. Nanotope s lead product is a compound that when injected or applied at a wound site self-assembles to form a scaffold of nanofibers on which cells can grow and differentiate to heal the wound.

*Leonardo Biosystems, Inc.*

Leonardo Biosystems, Inc. ( LBS ) is developing a drug-delivery platform technology that is based on novel methods of designing spheroidal porous silicon microparticles that selectively accumulate in the tumor vasculature. The microparticles are designed to be loaded with drug associated nanoparticles. LBS is based on technology developed in the University of Texas laboratory of Dr. Mauro Ferrari.

Nanotope and LBS were both co-founded by Dr. Anzalone through the Benet Group. Dr. Anzalone is the sole owner of and manager of the Benet Group. Through the Benet Group, Dr. Anzalone owns 1,395,900 shares of Nanotope common stock and 918,750 shares of LBS common stock, or approximately 14.2% (after giving effect to the sale of Nanotope Series B Preferred Stock) and approximately 18.4% of each Company s outstanding voting securities, respectively. Dr. Anzalone does not hold options, warrants or any other rights to acquire securities of Nanotope or LBS, directly or through the Benet Group. The Benet Group has the right to appoint a representative to the boards of directors of each of Nanotope and LBS. Dr. Anzalone currently serves on the Nanotope board in a seat reserved for Nanotope s CEO and another individual holds the seat designated by the Benet Group. Dr. Anzalone serves on the LBS board as the designee of the Benet Group. Dr. Anzalone has served as CEO and President of both companies since their formation and continues to serve in these capacities. Dr. Anzalone has not received any compensation for his work on behalf of either Nanotope or LBS since joining the Company on December 1, 2007. Dr. Anzalone has also waived his right to any unpaid compensation accrued for work done on behalf of these companies before he joined the Company.

***Discontinued Operations***

On May 6, 2008, a merger was completed pursuant to an Agreement and Plan of Merger by and among Aonex and AmberWave Systems Corporation, a Delaware corporation in the business of research, development and licensing of advanced technologies for semiconductor manufacturing and Aonex Acquisition Corporation a California corporation and wholly-owned subsidiary of the AmberWave formed for the purpose of acquiring Aonex s business.

At the effective time of the merger, Arrowhead received \$450,000 in immediate consideration. Depending upon Aonex s subsequent performance, the former stockholders of Aonex are eligible to receive up to \$7.95 million and a potential royalty for solar applications of Aonex technology. As a former holder of preferred stock in Aonex, Arrowhead will receive the first \$6,298,000. Any amounts in excess of \$6,298,000 will be paid on a pro rata basis, with 64% of such payments, if any, made to Arrowhead and 36% of such payments, if any, to the former holders of Common Stock of Aonex. For further information, see *Note 5, Discontinued Operations*, to our Consolidated Financial Statements, which summarizes the various criteria for the Earn-out Payments.

***Critical Accounting Policies and Estimates***

Management makes certain judgments and uses certain estimates and assumptions when applying accounting principles generally accepted in the United States in the preparation of our Consolidated Financial Statements. We evaluate our estimates and judgments on an on-going basis and base our estimates on historical experience and on assumptions that we believe to be reasonable under the circumstances. Our experience and assumptions form the basis for our judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may vary from what we anticipate and different assumptions or estimates about the future could change our reported results. We believe the following accounting policies are the most critical to us, in that they are important to the portrayal of our consolidated financial statements and require our most difficult, subjective or complex judgments in the preparation of our consolidated financial statements. For further information, see *Note 1, Organization and Significant Accounting Policies*, to our Consolidated Financial Statements, which outlines our application of significant accounting policies and new accounting standards.

*Revenue Recognition*

Revenue from product sales is recorded when persuasive evidence exists that an arrangement existed, title had passed and delivery has occurred, the price was fixed and determinable, and collection is reasonably assured.

We may generate revenue from product sales, technology licenses, collaborative research and development arrangements, and research grants. Revenue under technology licenses and collaborative agreements typically consists of nonrefundable and/or guaranteed technology license fees, collaborative research funding, and various milestone and future product royalty or profit-sharing payments.

Revenue associated with up-front license fees and research and development funding payments, under collaborative agreements, is recognized ratably over the relevant periods specified in the agreement, generally the research and development period. Revenue from substantive milestones and future product royalties is recognized as earned based on the completion of the milestones and product sales, as defined in the respective agreements. Payments received in advance of recognition as revenue are recorded as deferred revenue.

### *Research and Development Expenses*

Research and development expenses include salaries and benefits, trial (including pre-clinical, clinical and other) and manufacturing costs, purchased in-process research expenses, contract and other outside service fees, and facilities and overhead costs related to our research and development efforts. Research and development expenses also consist of costs incurred for proprietary and collaborative research and development. Research and development costs are expensed as incurred.

### *Impairment of Long-lived Assets*

We review our long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of assets may not be fully recoverable or that our assumptions about the useful lives of these assets are no longer appropriate. If an impairment is indicated, the asset is written down to its estimated fair value based on quoted fair market values.

### *Intellectual Property*

Intellectual property consists of patents and patent applications internally developed, licensed from universities or other third parties or obtained through acquisition. Patents and patent applications are reviewed for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable, and any impairment found is written off. Licensed or internally developed patents are written off over the life of the patent unless impairment occurs. Purchased patents are written off over three years, unless an impairment occurs sooner.

### **Results of Operations**

The Company had a consolidated net loss of approximately \$7,502,000 and \$18,431,000 for the three-month and nine-month periods ended June 30, 2008, respectively, versus a consolidated net loss of \$12,478,000 and \$22,359,000 during the same three-month and nine-month periods in the prior year. The smaller 2008 loss is primarily the result of the 2007 charge of \$9,597,000 to purchased in-process research and development resulting from the April 2007 acquisition of CNI by Unidym. In fiscal 2007, Calando also incurred additional expenses attributable to its Phase I clinical trial of the IT-101 and preparing for Phase II. In 2007, Calando was also aggressively pursuing the manufacture of its drug candidate and preparations to file its IND for CALAA-01. In the current year, the reduction in expenses at Calando are offset by increases at Unidym associated with the increase in R&D activities, including operations in Houston added with the merger with CNI in April 2007. Income from grants and carbon nanotube sales at Unidym also offset the consolidated net loss for current versus the prior periods.

### **Revenues**

The Company generated revenues of \$235,000 and \$623,000 for the three months ended June 30, 2008 and 2007, respectively, and revenues of \$1,363,000 and \$630,000 for the nine months ended June 30, 2008 and 2007, respectively. The revenue for the three months ended June 30, 2008 consists of \$85,000 from license fees from Unidym technology, \$144,000 from the sale and delivery of carbon nanotubes to third parties and \$6,000 for shipping charges. The revenue for the first nine months of fiscal 2008 consists of \$748,000 from grants to fund research for the development of carbon nanotube applications, \$507,000 from the sale and delivery of carbon nanotubes to third parties and \$23,000 for shipping charges. The \$630,000 of revenue in the prior year's nine-month period consisted of \$409,000 from grants to fund research for the development of carbon nanotube applications, \$207,000 from the sale and delivery of carbon nanotubes to third parties, \$7,000 for shipping charges and \$7,000 of revenue from a National Institute of Health grant at Calando.

### *Operating Expenses*

#### *Three Months ended June 30, 2008 and 2007*

The Company had operating expenses of \$9.97 million during the three months ended June 30, 2008, compared to \$17.67 million in the same three months in the prior year. The prior year quarter includes a \$9,597,000 charge to purchased in-process R & D for the CNI acquisition.

Excluding the purchased in-process R & D charges, total operating expenses increased period over period and year over year. The composition of those expenses changed. The Company has significantly expanded its Unidym operations and headcount, adding locations in Menlo Park, California, and through the acquisition of CNI in April of 2007, in Houston, Texas. Increases in current year salary related costs were offset by reductions in outside laboratory and contract services as Calando completed the manufacture of drug candidates and streamlined operations. Calando has multiple clinical trials in process whereas in 2007, the expenses incurred were in preparation for those trials.

The Phase I and Phase II clinical trials of Calando's drug IT-101 continue. Calando also completed the process of preparing its IND Application for its CALAA-01 drug candidate and received approval to dose its first patient. Calando's Phase I trial for CALAA-01 began in May 2008 with the dosing of the first patient.

The Company added scientific and executive employees increasing its full-time head count by approximately 20 since the same period in the prior year. Unidym's head count increased by approximately 30 full-time employees. In anticipation of the merger and change in management of Insert and Calando, and the resulting duplication, the combined headcount was reduced by 10 full-time employees. Year over year increases in each major revenue and expense category are the result of the acquisition of CNI by Unidym in April 2007 and operations and the continuing clinical trials by Calando, and the hiring of additional scientific and administrative personnel at the Subsidiaries.

For purposes of comparison, the amounts for the three-month and nine-month periods ended June 30, 2008 and 2007, respectively, are shown in the tables below. Prior period amounts have been reclassified to conform to the current period presentation. Historical amounts have been adjusted to eliminate any Aonex related activities as a result of its sale in May 2008. Aonex is now reflected as Discontinued Operations in the financial statements. The amounts for each period have been adjusted to include the adoption of SFAS 123R.

*Nine months ended June 30, 2008 and 2007*

The net loss for the nine months ended June 30, 2008 was approximately \$18.43 million compared to a loss of approximately \$22.36 million for the same period last year. The loss for the first nine months of fiscal 2008 includes significant increases in headcount resulting from the acquisition of CNI and the scaling up of Unidym's administrative, research and manufacturing operation. Non-cash charges included \$2.57 million related to stock based compensation, \$850,000 related to the depreciation of equipment and amortization of patents and \$136,000 resulting from a gift of Arrowhead stock to Rice University. Other major expense categories for the current period are \$10.03 million for payroll and related expenses, \$2.17 million in consulting expenses, \$4.90 million in general and administrative expenses and \$6.51 million in research and development expenses. For the comparable period in the prior year, the Company incurred \$6.12 million in payroll and related expenses, \$1.24 million in consulting expenses, \$3.85 million in general and administrative expenses and \$17.57 million in research and development expenses. The increase in salaries and related expenses is related to the hiring of a CEO, Chief Patent Officer, a Vice President, Advanced Materials and a Vice President, Medical Technologies at Arrowhead and the 25 additional management, administrative staff and technical staff at Unidym. The increase in consulting expense is the result of an increase in the clinical consulting at Calando, associated with the preparation of the IND application and the administration of the clinical trials. Unidym has employed consultants to assist with the development of the thin film manufacturing process. After adjusting for the CNI acquisition in 2007, the decrease in R&D expense compared to the prior year is related to the significant prior year costs for the preclinical studies, process development and manufacture of the drug candidates, and the preparations for Phase I clinical trials for CALAA-01 and Phase II clinical trials for IT-101, as well as process development for Unidym's first product and the establishment of lab facilities for Unidym in Menlo Park.



Salary & Wage Expenses

The Company employs management, administrative and technical staff at the Arrowhead corporate offices and at the Subsidiaries. Salary and wage expense consists of salary, benefits, and non-cash charges related to stock based compensation in the form of stock options. Salary and benefits can be divided into three major categories: general and administrative compensation-related expenses, stock-based compensation expense, and research and development (R&D) compensation-related expenses, depending on the primary activities of each employee. The following table details salary and related expenses for the three-month and nine-month periods ended June 30, 2008 and 2007.

**For the three months ended June 30, 2008 and June 30, 2007***(in thousands)*

	Three Months		Three Months		Increase (Decrease)	
	Ended June 30, 2008	% of Expense Category	Ended June 30, 2007	% of Expense Category	\$	%
G&A compensation-related	\$ 1,511	39%	\$ 1,136	44%	\$ 375	33%
Stock-based compensation	\$ 1,029	26%	\$ 527	20%	\$ 502	95%
R&D compensation-related	\$ 1,357	35%	\$ 921	36%	\$ 436	47%
Total	\$ 3,897	100%	\$ 2,584	100%	\$ 1,313	51%

**For the nine months ended June 30, 2008 and June 30, 2007***(in thousands)*

	Nine Months		Nine Months		Increase (Decrease)	
	Ended June 30, 2008	% of Expense Category	Ended June 30, 2007	% of Expense Category	\$	%
G&A compensation-related	\$ 4,030	40%	\$ 2,445	40%	\$ 1,585	65%
Stock-based compensation	\$ 2,570	26%	\$ 1,492	24%	\$ 1,078	72%
R&D compensation-related	\$ 3,429	34%	\$ 2,182	36%	\$ 1,247	57%
Total	\$ 10,029	100%	\$ 6,119	100%	\$ 3,910	64%

General and Administrative (G&A) compensation expense increased in the three month and nine months ended June 30, 2008, compared to the same periods in 2007 due to the hiring of several new positions. New positions hired included Chief Executive Officers at Arrowhead (December 2007), Unidym (June 2007) and Calando (November 2007). Arrowhead has also added a Vice President, Medical Technologies (February 2008), a Chief Patent Officer (April 2008) and a Vice President, Advanced Materials (May 2008). Unidym hired the new positions of Vice President of Business Development (July 2007), Chief Financial Officer (September 2007), Vice President of Finance (October 2007), Corporate Controller (April 2008), Vice President of Marketing (May 2008) and additional scientific and administrative staff. Tego hired the new position of Vice President of Finance (December 2007). The increase in G&A salaries also includes the impact of the annual pay increases for existing staff. In addition, two administrative staff were added with the merger of CNI into Unidym. The Company and its Subsidiaries will continue to selectively hire additional executives and administrative staff consistent with its business strategies and operational needs.

In February 2008, Insert's CEO and Executive Vice President positions were eliminated. Severance and release agreements resulted in them receiving additional compensation (approximately \$280,000) which is partially offset by the termination of the severance agreement with Arrowhead's previous Interim-President/CFO (approximately \$245,000).

Stock-based compensation is a non-cash charge related to the issuance and vesting of stock options to new and existing employees. This expense is recorded pursuant to the adoption of SFAS 123R, which requires expensing of stock-based compensation for all options vested. Stock options are awarded to new full time employees and to existing employees. While the number of options has increased overall, this number will vary from period to period depending on hiring, on terminations and on awards to new and existing employees. The December 2007 inducement

## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

grant of options to purchase 2 million shares of Arrowhead common stock to Arrowhead's new CEO resulted in approximately \$292,000 in additional stock based compensation expense in the current quarter compared to the same quarter in the prior year and \$681,000 year to date compared to the prior year.

Research and development (R&D) compensation expense increased in the three months ended June 30, 2008 compared to the same period the prior year due primarily to Unidym's addition of 7 full time employees including research scientists and process engineers. R&D compensation also increased as a result of Unidym's acquisition of CNI with CNI's 15 research and development related staff. On a consolidated basis, the increase in Unidym's R&D compensation expense was partially offset by reductions in the administrative and research and development staff at Insert and Calando preparatory to their merger. In late November 2007, Insert's R&D staff was reduced by 10 employees. The Company expects that salaries and wages will continue to grow during fiscal 2008 as more talented people are selectively hired at Arrowhead or its subsidiaries to support development and commercialization efforts.

General & Administrative Expenses

The following table details G&A expenses for the three-month and nine-month periods ended June 30, 2008 and 2007.

**For the three months ended June 30, 2008 and June 30, 2007**

(in thousands)

	Three Months		Three Months		Increase (Decrease)	
	Ended June 30, 2008	% of Expense Category	Ended June 30, 2007	% of Expense Category	\$	%
Professional/outside services	\$ 426	25%	\$ 341	23%	\$ 85	25%
Recruiting	\$ 65	4%	\$ 108	7%	\$ (43)	(40)%
Patent expense	\$ 464	28%	\$ 361	24%	\$ 103	29%
Facilities and related	\$ 69	4%	\$ 63	4%	\$ 6	10%
Travel	\$ 262	15%	\$ 242	16%	\$ 20	8%
Business insurance	\$ 138	8%	\$ 128	8%	\$ 10	8%
Depreciation	\$ 40	2%	\$ 43	3%	\$ (3)	(7)%
Communications and technology	\$ 93	5%	\$ 80	5%	\$ 13	16%
Office expenses	\$ 92	5%	\$ 99	6%	\$ (7)	(7)%
Other	\$ 71	4%	\$ 60	4%	\$ 11	18%
<b>Total</b>	<b>\$ 1,720</b>	<b>100%</b>	<b>\$ 1,525</b>	<b>100%</b>	<b>\$ 195</b>	<b>12%</b>

**For nine months ended June 30, 2008 and June 30, 2007**

(in thousands)

	Nine Months		Nine Months		Increase (Decrease)	
	Ended June 30, 2008	% of Expense Category	Ended June 30, 2007	% of Expense Category	\$	%
Professional/outside services	\$ 1,438	29%	\$ 1,175	31%	\$ 263	22%
Recruiting	\$ 233	5%	\$ 463	12%	\$ (230)	(50)%
Patent expense	\$ 1,172	24%	\$ 580	15%	\$ 592	102%
Facilities and related	\$ 209	4%	\$ 227	6%	\$ (18)	(8)%
Travel	\$ 524	11%	\$ 493	13%	\$ 31	7%
Business insurance	\$ 394	8%	\$ 291	8%	\$ 103	35%
Depreciation	\$ 128	3%	\$ 123	3%	\$ 5	4%
Communications and technology	\$ 237	5%	\$ 170	4%	\$ 67	39%
Office expenses	\$ 268	5%	\$ 203	5%	\$ 65	32%
Other	\$ 294	6%	\$ 129	3%	\$ 165	128%
<b>Total</b>	<b>\$ 4,897</b>	<b>100%</b>	<b>\$ 3,854</b>	<b>100%</b>	<b>\$ 1,043</b>	<b>27%</b>

Professional/outside services include general legal, accounting and other outside services retained by the Company and its Subsidiaries. All periods include normally occurring legal and accounting expenses related to SEC compliance and other corporate matters. The increase over the prior year nine-month period results from additional legal costs associated with the merger of Calando and Insert and legal work for Unidym in the closing of the private placement, establishing Ensysce, and the acquisition of Nanoconduction, Inc. by Unidym.

Recruiting expense was higher in the prior year three-month period due to the payment of approximately \$150,000 to hire a president for Insert (now Calando) in the first three months of fiscal 2007. The current year expense results from the recruitment of scientific and executive positions filled at Calando and Unidym. Recruiting fees are expected to continue as the Company builds out its management team and the teams

of its Subsidiaries.

Patent expense increased compared to the prior year three-month and nine-month periods as a result of the addition in April 2007 of the patent portfolio that was acquired by the merger of Unidym and Carbon Nanotechnologies, Inc. and as a result of increased patent activity by Calando. Patent expenses incurred by Calando in the current nine month period total approximately \$704,000 and relate primarily to extending intellectual property protection for Calando's products, IT-101 and CALAA-01 to Europe. Patent expenses for Unidym of \$387,000 include payments to Rice University and UCLA for legal fees related to Unidym's licensed technology as well as legal fees on patents filed by Unidym. The Company expects to continue to invest in patent protection as the Company extends and maintains protection for its current portfolios and files new patent applications as its products applications are improved. The cost will vary depending on the needs to the Company.

Travel expense includes recurring expenses related to travel by the Company as management travels to and from Company locations in Pasadena and Menlo Park, California and Houston, Texas. Travel expense is also incurred as Company management pursues new business initiatives and collaborations with other companies throughout the world and for marketing, investor relations and public relations. The current three-month period's expenses are higher than those of the prior period as travel expense fluctuates from quarter to quarter depending on current projects. This expense is expected to increase as the Company adds more business development personnel and identifies new business opportunities.

Year to date, insurance expense has increased due to increases in limits and coverage for new Phase I and Phase II clinical trials and the expansion of Unidym's operations since the same period in the prior year. The specific cost of some coverages fell year over year partially offsetting other increases in coverages. Overall, insurance expense is expected to increase as the Company grows.

The increase in communications and technology expense for both the three months and nine months compared to the prior year is primarily related to the addition of two Unidym locations, the purchase of equipment for new employees, and configuration of data networks among Menlo Park, California, and Pasadena, California, and Houston, Texas.

#### ***Research and Development Expenses***

During the three months ended June 30, 2008, the Company incurred approximately \$3.3 million in research and development ( R&D ) expenses. Currently, Arrowhead operates three majority-owned Subsidiaries, each commercializing nanotech products or applications. The Company also funds sponsored research efforts in leading university labs in exchange for the right to license the technology developed in such labs.

Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

The following table details R&D expenses for the three-month and nine-month periods ended June 30, 2008 and 2007.

**For the three months ended June 30, 2008 and June 30, 2007**

(in thousands)

	Three Months	% of	Three Months	% of	Increase (Decrease)	
	Ended June 30, 2008	Expense Category	Ended June 30, 2007	Expense Category	\$	%
Outside labs & contract services	\$ 1,167	35%	\$ 2,153	17%	\$ (986)	(46)%
Licensing fees, milestones & royalties	\$ 785	23%	\$ 104	1%	\$ 681	655%
Purchased in-process research & development	\$ 550	16%	\$ 9,597	74%	\$ (9,047)	(94)%
Laboratory supplies & services	\$ 286	9%	\$ 302	2%	\$ (16)	(5)%
Facilities related	\$ 263	8%	\$ 228	2%	\$ 35	15%
Sponsored research	\$ 143	4%	\$ 355	3%	\$ (212)	(60)%
Depreciation-R&D-related	\$ 124	4%	\$ 71	1%	\$ 53	75%
Other research expenses	\$ 31	1%	\$ 7	%	\$ 24	343%
<b>Total</b>	<b>\$ 3,349</b>	<b>100%</b>	<b>\$ 12,817</b>	<b>100%</b>	<b>\$ (9,468)</b>	<b>(74)%</b>

**For the nine months ended June 30, 2008 and June 30, 2007**

(in thousands)

	Nine Months	% of	Nine Months	% of	Increase (Decrease)	
	Ended June 30, 2008	Expense Category	Ended June 30, 2007	Expense Category	\$	%
Outside labs & contract services	\$ 2,418	37%	\$ 5,112	29%	\$ (2,694)	(53)%
Licensing fees, milestones & royalties	\$ 952	15%	\$ 580	3%	\$ 372	64%
Purchased in-process research & development	\$ 550	8%	\$ 9,597	55%	\$ (9,047)	(94)%
Laboratory supplies & services	\$ 637	10%	\$ 515	3%	\$ 122	24%
Facilities related	\$ 746	12%	\$ 468	2%	\$ 278	59%
Sponsored research	\$ 679	10%	\$ 1,038	6%	\$ (359)	(35)%
Depreciation-R&D-related	\$ 349	5%	\$ 179	1%	\$ 170	95%
Other research expenses	\$ 184	3%	\$ 108	1%	\$ 76	70%
<b>Total</b>	<b>\$ 6,515</b>	<b>100%</b>	<b>\$ 17,597</b>	<b>100%</b>	<b>\$ (11,082)</b>	<b>(63)%</b>

Outside labs & contract services decreased significantly as the types of expenses incurred has changed between periods. The process development and preclinical trial expenses for Calando are related to preclinical work for pipeline candidates, but decreased from the prior year as Calando focuses on the preparation for Phase II clinical trials for its drug candidate IT-101. The current year expense includes the outsourced preclinical studies in preparation for the INDA filing by Calando's CALAA-01 completed in March 2008, outsourced manufacture of Calando's therapeutic candidate for clinical studies and Tego's outsourced pre-clinical studies. The combined outside labs and contract services expense for IT-101 and CALAA-01 was \$1,265,000 during the first nine months of the current year compared to \$4,828,000 in the same period for the prior year. Unidym incurred approximately \$697,000 of outside lab and contract services expense during the first nine months of the fiscal year compared to approximately \$283,000 of such expenses in the prior year. The increase in Unidym expenses are related to the scale up of the operations to develop the manufacturing processes for carbon nanotubes and the manufacture of thin film conductive materials. Development expenses for Unidym are expected to increase sharply in the coming quarters. Outside laboratory & contract services expenses will continue to fluctuate depending upon where a particular project is in its development, approval or trial process.

Licensing fees, milestones & royalties consist primarily of amounts paid by Calando for the license for siRNA targets from Alnylam and the milestone payments due with at the submission of the INDA.

## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

In the current period, purchased in-process research and development of \$550,000 results from the Company's purchase of an additional 550,000 shares of Unidym common stock from Unidym's founder for a combination of cash and Company stock. In 2007, \$9,597,000 purchased in-process research and development expense is the result of the purchase price allocation for the April 2007 acquisition of Carbon Nanotechnologies, Inc. by Unidym. The value of cash and stock paid at the time of purchase exceeded identifiable assets by approximately \$9,597,000 and was expensed as purchased in process R&D.

Laboratory supplies and services consist primarily of materials, supplies and services consumed in the laboratory. Of the approximately \$637,000 shown above, \$497,000 relates to materials used in the R&D of carbon nanotube manufacturing processes and conductive thin film applications. Of the prior year amount of \$515,000, \$224,000 was related to Unidym and \$291,000 was for research activities at Calando.

Facilities related expenses increased over the same period in prior years due to the addition of Unidym's laboratory space in Menlo Park, California in February 2007, scheduled rent increases and Unidym's addition of a Texas location in April of 2007 and holdover rents incurred since the expiration of Unidym's Houston lease in December 2007. These expenses are expected to fluctuate as the size, configuration and number of facilities is adjusted in the future to adapt to needs and opportunities, especially in anticipation of the relocation of Unidym's Houston operation.

Sponsored research expense decreased for the three-month and nine-month periods ended June 30, 2008, compared to the same period for the prior year, as projects were completed (Stanford & Duke) or terminated (Caltech). A Unidym sponsored research project at Duke University commenced during the nine months ended June 30, 2008. The expense for the project at the University of Florida was transferred to Unidym in April 2007.

Increased depreciation expense is primarily due to the addition of depreciable equipment at Unidym's Houston and Menlo Park facilities.

The table below sets forth the approximate amount of Arrowhead's cash expenses for research and development at each Subsidiary for the periods described below.

Name of Subsidiary / Project	R&D Cash Expenses for the Three Months Ended June 30, 2008	R&D Cash Expenses for the Nine months ended June 30, 2008	Project Cost from Inception of Project Through June 30, 2008
Calando Pharmaceuticals, Inc./CALAA-01 & IT-101	\$ 2.4 Million	\$ 7.3 Million	\$ 31.1 Million
Unidym, Inc. / Thin Films of Carbon Nanotubes	\$ 3.6 Million	\$ 8.2 Million	\$ 14.8 Million
Tego BioSciences Corporation	\$ 0.1 Million	\$ 0.5 Million	\$ 0.5 Million
Total of all Subsidiaries	\$ 6.1 Million	\$ 16.0 Million	\$ 46.4 Million

**Calando Pharmaceuticals, Inc. (formerly Insert Therapeutics, Inc. and merged with Calando Pharmaceuticals, Inc.)**

*On April 17, 2008, Insert and Calando completed a merger. The combined company operates under the name Calando Pharmaceuticals, Inc. For purposes of clarity the following discusses the business of Insert and Calando which have been consolidated by their merger.*

Insert was purchased by the Company in June 2004. Insert's primary asset was a license from Caltech for patents and other intellectual property for the use of cyclodextrin polymers in drug delivery applications. In fiscal 2005, Insert continued research and development of its anti-cancer therapeutic IT-101, which uses the technology covered by the Caltech patents. IT-101 is a conjugate of the cyclodextrin polymer and the anti-cancer agent, Camptothecin. On March 14, 2006, Insert's IND application for IT-101 was accepted by the FDA and Insert began a Phase I clinical trial at the City of Hope in the third quarter of calendar 2006. The Phase I trial is expected to be completed in 2008. In April 2008, Insert filed a second IND with the FDA to commence a Phase II trial in patients with ovarian cancer. The Phase II study is designed to demonstrate prolonged time until disease progression in patients who achieved a response or stabilization in their disease following a second line course of platinum-based chemotherapy. Previous work with IT-101 suggests that protracted maintenance doses of IT-101 may minimize the typical chemotherapy side effects, allow for an improved quality of life with continued treatment, and prolong time until disease progression. The company plans to begin dosing patients by the third quarter of this year. Insert has reduced its previous emphasis on increasing its pipeline of products. Insert has investigated conjugates of the cyclodextrin delivery molecule with each of two other potent anti-cancer agents, epothalones and tubulysins, and a steroid treatment for chronic inflammation. Research and development expenses related to IT-101 are reflected in the tables above. Insert's R&D activities related to IT-101 and other pipeline candidates are preliminary, and there is no assurance that they will be successful. It is not possible at this time to accurately determine the final cost of IT-101, the completion date, or when revenue will commence.



---

**Calando Pharmaceuticals, Inc. (now merged with Insert Therapeutics, Inc.)**

Calando's lead product candidate, CALAA-01, is a formulation containing Calando's proprietary drug delivery technology with a siRNA duplex targeting the M2 subunit of ribonucleotide reductase, a well-established cancer target. Since Calando's inception in 2005, Calando's efforts have been devoted to research and development of its siRNA delivery platform and CALAA-01. In June 2008, Calando dosed the first patient in a Phase I clinical trial for CALAA-01. The Phase I study is an open-label, dose-escalation clinical trial in patients with non-resectable or metastatic solid tumors. Calando's research and development efforts on CALAA-01 are preliminary, and there is no assurance that this compound will be successful. Research and development expenses related to CALAA-01 are reflected in the tables above. It is not possible at this time to accurately determine the final cost of CALAA-01, the completion date, or when revenue will commence.

Arrowhead has advanced \$1,987,663 (excluding interest of \$20,941) to the merged company and expects to invest additional funds to meet Calando's capital needs for the next year. Calando may also seek direct investment from outside investors. Please refer to the Liquidity and Capital Resources discussion that follows for additional information.

**Unidym, Inc.**

Arrowhead founded NanoPolaris (now operating as Unidym) in April 2005. Since inception, the company has aggregated intellectual property related to carbon nanotube manufacturing and product applications. The portfolio has been built through licensing of patents and other intellectual property from various universities, through sponsored research, and by the acquisition of Unidym, Inc., a UCLA spin out developing transparent electrodes, followed by a merger with CNI, a Texas-based company manufacturing and selling carbon nanotubes and developing products containing carbon nanotubes. Unidym is currently generating revenue by producing and selling carbon nanotubes, and is anticipated to generate future revenue by continuing to produce and sell carbon nanotubes, products and product applications using carbon nanotubes and to a lesser extent licensing technology to third parties.

Development, manufacturing and sale of cost effective electronic products incorporating carbon nanotubes may require significant additional investment and take a long time. There are a variety of technical, cost and marketing barriers that must be overcome. It is not possible at this time to predict the final cost of developing Unidym's transparent conductive film or other carbon nanotube products. It is also not possible to predict the final cost of scaling up the manufacturing process for cost effective production of carbon nanotubes for products, or when or if Unidym will generate significant licensing revenue or become profitable. Unidym closed a private placement for net cash proceeds of \$4,000,000 in June 2008 and has enough cash to fund operations through fiscal 2008. Unidym expects to raise capital to meet its capital needs for the next year from outside investors. If Unidym is unable to raise additional capital, Arrowhead may need to provide bridge or more permanent financing and Unidym would have to reduce its operations. Please refer to the Liquidity and Capital Resources discussion that follows for additional information.

**Tego BioSciences Corporation**

In April 2007, Tego was formed to acquire the assets of C Sixty, Inc. Tego is focused on developing and commercializing pharmaceuticals based on the unique biochemical properties of modified buckminsterfullerenes (also known as fullerenes or buckyballs). Tego's product pipeline includes therapeutics targeting acute and chronic central nervous system degenerative diseases, other neuronal degenerative diseases and, potentially, toxicity caused by chemotherapy and radiation therapy. Tego is also exploring the use of modified fullerenes as contrast agents for magnetic resonance imaging (MRI).

Along with the on-going studies with the National Cancer Institute and university laboratories, Tego has initiated a number of pre-clinical studies to better understand the chemistry and the pharmacology as well as the efficacy and potency of its proprietary fullerene based compounds. The studies include applications in the areas of magnetic resonance imaging contrast agents and ophthalmic therapeutics.

Currently, Tego does not plan to expand its internal staff to develop these pharmaceutical products. The company will continue to use third parties to perform most of the development work with a small staff located in Houston, Texas, to direct and oversee the progress of research and development, collaborations and licensing of the intellectual property. The Company invested \$2.4 million in Tego to enable the Subsidiary to contract development with third parties.

**Discontinued Operations Aonex Technologies, Inc.**

On May 5, 2008, Aonex was sold to AmberWave Systems Corporation. Under the terms of the deal, AmberWave will pay Aonex shareholders up to \$7.95M in earn-out payments. The potential earn-out payments are triggered based upon AmberWave's ability to achieve technical milestones, new customer agreements, technology licensing revenues plus a running royalty on sales of solar products incorporating Aonex's technology. Arrowhead has preference to the first \$6,298,000 in earn-out payments after which any additional payments will be split 64% to Arrowhead and 36% to the holders of the Common Stock of Aonex.



### Factors Affecting Further R&D Expenses

The Company expects that R&D expenses will continue to increase in the foreseeable future as it adds personnel, expands its pre-clinical research, continues clinical trial activities, increases its regulatory compliance capabilities, and scales up production capabilities for manufacturing carbon nanotubes and transparent conductive films. The amount of these increases is difficult to predict due to the uncertainty inherent in the timing and extent of progress in the Company's research programs. As the Company's research efforts mature, it will continue to review the direction of its research based on an assessment of the value of possible commercial applications emerging from these efforts.

In addition to these general factors, specific factors that will determine the eventual cost to complete the current projects at Calando and Tego include the following:

the number, size and duration of clinical trials required to gain FDA approval;

the costs of producing supplies of the drug candidates needed for clinical trials and regulatory submissions;

the efficacy and safety profile of the drug candidates; and

the costs and timing of, and the ability to secure, regulatory approvals.

It is possible that the completion of studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm the Company's results of operations. Due to these uncertainties, the Company cannot reasonably estimate the size, nature or timing of the costs to complete or the amount or timing of the net cash inflows from Calando's or Tego's current activities. Until the Company obtains further relevant pre-clinical and clinical data, it will not be able to estimate its future expenses related to the Subsidiaries' programs or when, if ever, and to what extent, the Company will receive cash inflows from resulting products.

In addition to the general factors above, specific factors that will contribute to the eventual cost to complete the current projects at Unidym include the following:

specifications required by customers;

challenges with integrating Unidym's transparent conductive films into customer products;

improvement of Unidym's products;

costs of raw materials, facilities and equipment; and

costs and timing process development.

It is possible that the development and scale up of Unidym's carbon nanotube manufacturing effort and its development and scale up of its transparent conductive film products could be delayed for a number of reasons, including unforeseen difficulties with the technology development and delays in adoption of the technology by customers. Any delay would result in additional unforeseen costs, which would harm the Company's results of operations. Due to these uncertainties, the Company cannot reasonable estimate the size, nature or timing of the costs to complete the development of Unidym's products or net cash inflows from Unidym's current activities.

***Sponsored Research***

The number of sponsored research projects fluctuates as the Company adds or terminates projects. Sponsored Research expense for the three-month and nine-month periods ended June 30, 2008 were \$142,559 and \$678,531, respectively. During the nine months ended June 30, 2008, the Company made final payments totaling \$201,000 applicable to two sponsored research agreements at the California Institute of Technology that were cancelled in September and December 2007. The Company (through Unidym) continues to sponsor research at Duke (commenced in December 2005 and extended in December 2007) and the UF (commenced in August 2006). As part of the merger of Unidym and CNI, the Duke and UF sponsored research projects were transferred from Arrowhead to Unidym.

***Consulting***

Consulting fees total approximately \$902,000 and \$2,172,000 for the three-month and nine-month periods ended June 30, 2008, respectively, compared to approximately \$637,000 and \$1,241,000 in the same periods in the prior year. Of the total year-to-date consulting fees, approximately \$860,000 was incurred at Unidym, \$1,042,000 at Calando, \$152,000 at Tego and \$118,000 at Arrowhead.

### ***Leveraged Technology and Revenue Strategy***

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

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

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

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

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

On April 20, 2007, Unidym and CNI merged, giving Unidym the manufacturing capability to make carbon nanotubes that it uses internally for product development and sells externally to third parties. Prior to this merger, the only revenue generated by the Company was through grants from public and private entities and through one licensing deal. While the ultimate goal of the Company is to generate revenue through the sale of products and/or the licensing of technology, the Company records revenue from grants and development fees. Revenue from grants and development fees are considered to be reimbursements for efforts performed on behalf of third parties and not part of the Company's primary strategy to generate revenue on an ongoing basis.

Unidym generated combined revenues from Unidym grants and sales of carbon nanotubes totaling approximately \$1,363,000 during the first nine months of fiscal 2008 compared to \$630,000 in total revenues for the same period for the prior year primarily from Unidym's grants and sales of carbon nanotubes.

Except for the sale of carbon nanotubes, the Company does not expect any significant product sales in fiscal 2008. Therefore, operating losses can be expected to continue before any substantial revenue is generated. To partially offset these losses, the Company is pursuing other means of funding such as governmental grants, licenses, contracts and collaborations with third parties. The award of grants and contracts depends on numerous factors, many of which are not in the Company's control and, therefore, it is difficult to predict if this strategy will be successful.

### **Liquidity and Capital Resources**

Since inception in May 2003, the Company has incurred significant losses. As of June 30, 2008, the Company had \$13.8 million in cash and cash equivalents compared to \$30.8 million in cash and cash equivalents and marketable securities at June 30, 2007. The Company's investment objectives are primarily to preserve capital and liquidity and secondarily to obtain investment income. The Company invests excess cash in certificates of deposit, U.S. government obligations and high grade commercial paper.

The Company's operating activities have required significant amounts of cash. This trend will continue through fiscal 2008 as the Company's Subsidiaries continue to develop and refine their products and technology. During this period the Company does not expect to generate significant amounts of revenue. It is projected that the Company and its Subsidiaries will continue to add staff, property and equipment during fiscal 2008. In addition, the Company expects to continue to invest in new sponsored research projects and new business opportunities. The Company has agreed to provide an additional \$1 million in capital no later than September 17, 2008 to Nanotope, an unconsolidated affiliate. The remainder of the Company's cash will be used to fund ongoing operations. The Company believes that the cash on hand at June 30, 2008, is sufficient to meet all existing obligations and fund existing operations of Arrowhead and the Subsidiaries through the fourth quarter of fiscal 2008.

## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

On January 30, 2008, Arrowhead's Form S-3 Registration Statement, originally filed on December 20, 2007, was declared effective. The prospectus allows Arrowhead to issue, from time to time in one or more offerings, shares of Common Stock and warrants to purchase common stock for an aggregate dollar amount of up to \$50 million.

It is the Company's intent to use the net proceeds from the sale of the securities and received upon exercise of the warrants for general corporate purposes, which may include one or more of the following: working capital, research and clinical development activities, potential future acquisitions of companies, minority investments in companies and/or technologies, and capital expenditures.

In the past, Arrowhead has been able to raise sufficient capital through equity financing and private placement of securities. The Company expects to be able to continue to raise capital in the future. However, if the Company is unable to raise additional capital, we may have to reduce our activities.

#### Off-Balance Sheet Arrangements

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

#### Contractual Obligations and Commitments

Our contractual commitments as of June 30, 2008 are summarized below by category in the following table:

	Total	Less than 1 year	>1-3 Years	>3-5 Years	More than 5 Years
Operating Lease Obligation	\$ 1,117,227	\$ 584,122	\$ 533,104	\$	\$
Sponsored Research(1)	\$ 437,483	\$ 191,375	\$ 246,108	\$	\$

(1) The sponsored research obligations in the table above include our commitments to Duke and UF.

In addition, the Company has contracts to provide material, testing and contract services to the Subsidiaries. None of those contracts goes beyond one year and almost all contracts are month to month.

#### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

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

As of June 30, 2008, we had no debt, no derivative instruments outstanding and no financing arrangements that were not reflected in our balance sheet.

#### ITEM 4. CONTROLS AND PROCEDURES.

Our chief executive officer and our chief financial officer, after evaluating our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)) as of the end of the period covered by this Quarterly Report on Form 10-Q, have concluded that as of June 30, 2008, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including our chief executive officer and chief financial officer where appropriate, to allow timely decisions regarding required disclosure.

No change in the Company's internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) occurred during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, these controls subsequent to the date this evaluation was carried out.

#### PART II OTHER INFORMATION

**ITEM 1. LEGAL PROCEEDINGS.**

None.



#### **ITEM 1A. RISK FACTORS**

An investment in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described under Item 1A of Part I of our Annual Report on Form 10-K for the year ended September 30, 2007 together with all other information contained or incorporated by reference in this report before you decide to invest in our common stock. The risks described in our annual report have not materially changed since that report was filed, except as described below. If any of the risks described in this report or in our annual report actually occurs, our business, financial condition, results of operations and our prospects could be materially and adversely affected.

*The costs to fund the operations of our Subsidiaries are difficult to predict, and our anticipated expenditures in support of our Subsidiaries may increase for a variety of reasons.*

It is possible that the completion of studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm the Company's results of operations. Due to these uncertainties, the Company cannot reasonably estimate the size, nature or timing of the costs to complete or the amount or timing of the net cash inflows from Calando's or Tego's current activities. Until the Company obtains further relevant pre-clinical and clinical data, it will not be able to estimate its future expenses related to the Subsidiaries' programs or when, if ever, and to what extent, the Company will receive cash inflows from resulting products.

Development, manufacturing and sale of cost effective electronic products incorporating carbon nanotubes may require significant additional investment and take a long time. It is possible that the development and scale up of Unidym's carbon nanotube manufacturing effort and its development and scale up of its transparent conductive film products could be delayed for a number of reasons, including unforeseen difficulties with the technology development and delays in adoption of the technology by customers. Any delay would result in additional unforeseen costs, which would harm the Company's results of operations. Due to these uncertainties, the Company cannot reasonably estimate the size, nature or timing of the costs to complete the development of Unidym's products or net cash inflows from Unidym's current activities.

*Our ability to develop and commercialize products will depend on our ability to enforce our intellectual property rights and operate without infringing the proprietary rights of third parties.*

Our ability and the ability of our subsidiaries to develop and commercialize products based on their respective patent portfolios, will depend, in part, on our ability and the ability of our subsidiaries to enforce those patents and operate without infringing the proprietary rights of third parties. There can be no assurance that any patents that may issue from patent applications owned or licensed by us or any of our subsidiaries will provide sufficient protection to conduct our respective businesses as presently conducted or as proposed to be conducted, or that we or our subsidiaries will remain free from infringement claims by third parties.

*We may be subject to patent infringement claims, which could result in substantial costs and liability and prevent us from commercializing our potential products.*

Because the nanotechnology intellectual property landscape is rapidly evolving and interdisciplinary, it is difficult to conclusively assess our freedom to operate without infringing on third party rights, and we have undertaken no formal freedom to operate assessment to date. However, we are currently aware of certain patent rights held by third parties that, if found to be valid and enforceable, could be alleged to render one or more of our business lines infringing. If a claim should be brought and is successful, we may be required to pay substantial damages, be forced to abandon any affected business lines and/or seek a license from the patent holder. In addition, any patent infringement claims brought against us or our subsidiaries, whether or not successful, may cause us to incur significant expenses and divert the attention of our management and key personnel from other business concerns. These could negatively affect our results of operations and prospects. There can also be no assurance that patents owned or licensed by us or our subsidiaries will not be challenged by others.

In addition, if our potential products infringe the intellectual property rights of third parties, these third parties may assert infringement claims against our customers, and we may be required to indemnify our customers for any damages they suffer as a result of these claims. The claims may require us to initiate or defend protracted and costly litigation on behalf of customers, regardless of the merits of these claims. If any of these claims succeed, we may be forced to pay damages on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, we may be unable to continue selling such products.

*We may not be successful integrating Unidym's operations at various locations.*

Our subsidiary Unidym, through its wholly-owned subsidiary Unidym Acquisition LLC, merged with Texas-based Carbon Nanotechnologies, Inc., or CNI, through a reverse triangular merger on April 20, 2007. Management may fail to successfully integrate CNI or realize the expected benefits from that merger. Additionally, it is possible that the CNI merger will have a negative impact on Unidym's ability to sell carbon nanotubes, commercialize electronic products incorporating carbon nanotubes and generate revenue. Unidym may be unable to obtain access to

## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

carbon nanotubes from other suppliers that may be better suited for Unidym's electronic products. Similarly, Unidym may lose existing customers or fail to secure prospective customers if those customers believe that Unidym's plan to manufacture electronic products incorporating carbon nanotubes represents a competitive threat. It is also possible that the costs required to integrate the operations of Unidym at various locations will be greater than expected. In connection with the acquisition of CNI, it is anticipated that, in the immediate future, both the Houston, Texas and Menlo Park, California facilities will continue to operate. In addition, in August 2008, Unidym acquired Nanoconduction, Inc., a company originally formed to develop carbon nanotube-based thermal management solutions for the microprocessor industry. With the acquisition of Nanoconduction, Unidym will lease a new facility and, as a result, management will be required to supervise and coordinate activities at facilities in different states. There may be unanticipated redundancies in the capital equipment and research efforts at each facility. Researchers and product managers at different facilities may not effectively communicate, and the cultures and work environments may differ between facilities. Any of these factors could harm Unidym's and our business and results of operations.

***We may be liable for damages, or events giving rise to damages, that took place prior to the merger of Unidym and CNI.***

Plaintiffs may succeed in holding Unidym liable for damages, or events giving rise to damages, that took place prior to the merger. This risk will be heightened if and to the extent that Unidym continues to operate CNI's business in the same manner as that business was operated by CNI prior to the merger. If plaintiffs are successful in holding Unidym liable for damages relating to pre-merger operations of CNI's business or other events giving rise to claims for damages, Arrowhead's and Unidym's business could be adversely and materially affected.

***We may incur costs and expenses if Unidym's lease for its Houston premise is terminated.***

As of June 30, 2008 the facility lease for Unidym's Houston location had expired and Unidym is now occupying the Houston facility on a month to month basis. Unidym employs, on a contract basis, certain technicians from the landlord to assist in Unidym's manufacturing and research and development activities. Unidym's management is actively evaluating alternative sites to which to relocate, which distracts management's attention from operations. If the lease is not renewed, Unidym will have only as long as 30 days to find a new facility, upon terms that may not be favorable to Unidym, and relocate operations. If Unidym is required to relocate its Texas operations, Unidym will need to move operations, and will incur costs and expenses that may be significant. In addition, Unidym will need to hire and train new technicians to perform the work currently done by the landlord's technicians.

***Any drugs developed by our Subsidiaries may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, thereby harming our business.***

Increasing expenditures for healthcare have been the subject of considerable public attention in the United States. Both private and government entities are seeking ways to reduce or contain healthcare costs. Numerous proposals that would effect changes in the United States healthcare system have been introduced or proposed in Congress and in some state legislatures, including reductions in the cost of prescription products and changes in the levels at which consumers and healthcare providers are reimbursed for purchases of pharmaceutical products.

The ability of Calando and Tego to market products successfully will depend in part on the extent to which third-party payers are willing to reimburse patients for the costs of their products and related treatments. These third-party payers include government authorities, private health insurers and other organizations, such as health maintenance organizations. Third party payers are increasingly challenging the prices charged for medical products and services. In addition, the trend toward managed healthcare and government insurance programs could result in lower prices and reduced demand for Calando's and Tego's products. Cost containment measures instituted by healthcare providers and any general healthcare reform could affect Calando's and Tego's ability to sell products and may have a material adverse effect on them, thereby diminishing the value of the Company's interest in these Subsidiaries. We cannot predict the effect of future legislation or regulation concerning the healthcare industry and third party coverage and reimbursement on our business.

***There may be a difference in the investment valuations that we used when making initial and subsequent investments in our Subsidiaries and actual market values.***

Our investments in our Subsidiaries were the result of negotiation with Subsidiary management and equity holders, and the investment valuations were not independently verified. Traditional methods used by independent valuation analysts include a discounted cash flow analysis and a comparable company analysis. We have not generated a positive cash flow to date and do not expect to generate significant cash flow in the near future. Additionally, we believe that there exist comparable public companies to provide a meaningful valuation comparison. Accordingly, we have not sought independent valuation analysis in connection with our investments and may have invested in our various holdings at higher or lower valuations than an independent source would have recommended. There may be no correlation between the investment valuations that we used over the years for our investments and the actual market values. If we should eventually sell all or a part of any of our consolidated business or that of a Subsidiary, the ultimate sale price may be for a value substantially lower or higher than previously determined by us, which could materially and adversely impair the value of our common stock.



*We will need to raise additional capital in the near future, and, if we are unable to secure adequate funds on acceptable terms, we may be unable to support our business plan.*

Our plan of operations is to provide substantial amounts of research project funding and financial support for majority-owned Subsidiaries over an extended period of time. We anticipate that we will need to raise additional capital in the near term to support all of these projects, and we may seek to do so by conducting one or more private placements of equity securities, selling additional securities in a registered public offering, or through a combination of one or more of such financing alternatives. There can be no assurance that any additional capital resources that we need will be available when needed or on terms acceptable to us. If we are unable to obtain additional capital on acceptable terms when needed, we may be required to take actions that harm our business and our ability to achieve cash flow in the future, including possibly delaying or reducing implementation of certain aspects of our plan of operations, deferring or abandoning one or more of our research programs, or curtailing or ceasing operations of one or more of our Subsidiaries.

**ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.**

Sales of unregistered securities have been previously reported on Current Reports on Form 8-K filed by the registrant on April 25, 2007 and May 29, 2007.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES.**

None.

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

None.

**ITEM 5. OTHER INFORMATION.**

None.

**ITEM 6. EXHIBITS.**

<b>Exhibit Number</b>	<b>Document Description</b>
3.1	Certificate of Incorporation of InterActive, Inc. (1)
3.2	Certificate of Amendment of Certificate of Incorporation of InterActive Group, Inc. (2)
3.3	Certificate of Amendment to Certificate of Incorporation (3)
3.4	Bylaws (1)
4.1	Form of Registration Rights Agreement (4)
4.2	Form of Warrant to Purchase Common Stock (4)
4.3	Form of Warrant to Purchase Common Stock (5)
10.1**	Employment Agreement, between Arrowhead Research Corporation and Dr. Christopher Anzalone, dated June 11, 2008 (6)
10.2**	Stock Option Agreement between Arrowhead Research Corporation and Dr. Christopher Anzalone, dated June 11, 2008 (6)
10.3	Insert Financing Termination Agreement, dated April 17, 2008 (7)

## Edgar Filing: ARROWHEAD RESEARCH CORP - Form 10-Q

- 10.4 Calando Financing Termination Agreement, dated April 17, 2008 (7)
- 10.5 Insert Therapeutics, Inc. Amended and Restated Investors Rights Agreement, dated April 17, 2008 (7)
- 10.6 Agreement and Plan of Merger by and among AmberWave Systems Corporation, Aonex Acquisition Corporation, Aonex Technologies, Inc. and the stockholders signatory thereto, dated May 5, 2008 (8)
- 10.7 Aonex Technologies, Inc. Series B Preferred Stock Purchase Agreement, dated May 5, 2008 (8)
- 10.8 Form of Series C Preferred Stock Subscription Agreement between Unidym, Inc. and Investor (9)
- 10.9 Second Amended and Restated Investor Rights Agreement among Unidym, Inc., Investors and the stockholders party thereto, dated October 29, 2007 (9)
- 31.1 Section 302 Certification of Chief Executive Officer\*
- 31.2 Section 302 Certification of Chief Financial Officer \*
- 32.1 Section 1350 Certification by Principal Executive Officer\*
- 32.2 Section 1350 Certification by Principal Financial Officer\*

\* Filed herewith

\*\* Compensation arrangement

- (1) Incorporated by reference from the Schedule 14C filed by the registrant on December 22, 2000.
- (2) Incorporated by reference from the Schedule 14C filed by the registrant on December 22, 2003.
- (3) Incorporated by reference from the Quarterly Report on Form 10-QSB filed by the registrant on February 11, 2005.
- (4) Incorporated by reference from the Current Report on Form 8-K filed by the registrant on January 18, 2006.
- (5) Incorporated by reference from the Current Report on Form 8-K filed by the registrant on May 30, 2007.
- (6) Incorporated by reference from the Current Report on Form 8-K filed by the registrant on June 13, 2008.
- (7) Incorporated by reference from the Current Report on Form 8-K filed by the registrant on April 23, 2008.
- (8) Incorporated by reference from the Current Report on Form 8-K filed by the registrant on May 9, 2008.
- (9) Incorporated by reference from the Current Report on Form 8-K filed by the registrant on June 18, 2008.

**SIGNATURES**

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

Dated: August 11, 2008

ARROWHEAD RESEARCH CORPORATION

By: /s/ PAUL C. McDONNELL  
Paul C. McDonnell  
Chief Financial Officer