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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, DC 20549

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**FORM 10-Q**

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(Mark One)

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

For the quarterly period ended December 31, 2010

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

Commission file number 000-21898

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**ARROWHEAD RESEARCH CORPORATION**

(Exact name of registrant as specified in its charter)

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Delaware  
(State of incorporation)

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). 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.

Large accelerated

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

Accelerated filer

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

The number of shares of the registrant's common stock outstanding as of February 4, 2011 was 71,806,694.

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## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

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

	<u>December 31,</u> <u>2010</u>	<u>September 30,</u> <u>2010</u>
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 5,466,804	\$ 6,847,162
Trade receivable, net of allowance for doubtful accounts of \$89,589 at December 31, 2010 and \$90,789 at September 30, 2010	4,587,173	58,864
Other receivables	785,709	871,819
Prepaid expenses	182,383	239,097
Other current assets	18,470	114,833
TOTAL CURRENT ASSETS	<u>11,040,539</u>	<u>8,131,775</u>
<b>PROPERTY AND EQUIPMENT</b>		
Computers, office equipment and furniture	335,784	335,784
Research equipment	752,850	752,850
Software	150,445	150,445
Leasehold improvements	78,594	78,594
	1,317,673	1,317,673
Less: Accumulated depreciation and amortization	<u>(1,219,867)</u>	<u>(1,176,404)</u>
NET PROPERTY AND EQUIPMENT	97,806	141,269
<b>OTHER ASSETS</b>		
Rent deposit	34,735	34,735
Patents	1,967,929	2,046,836
Investment in Nanotope Inc., equity basis	1,861,754	1,812,927
Investment in Leonardo Biosystems Inc., at cost	187,000	187,000
TOTAL OTHER ASSETS	<u>4,051,418</u>	<u>4,081,498</u>
<b>TOTAL ASSETS</b>	<u><b>\$ 15,189,763</b></u>	<u><b>\$ 12,354,542</b></u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 2,423,844	\$ 681,563
Accrued expenses	2,840,142	471,236
Accrued payroll and benefits	171,213	191,425
Accrued severance	23,500	23,500
Derivative liability	1,943,252	2,408,522
Note payable	500,000	500,000
TOTAL CURRENT LIABILITIES	<u>7,901,951</u>	<u>4,276,246</u>
Commitments and contingencies		
<b>STOCKHOLDERS' EQUITY</b>		
Arrowhead Research Corporation shareholders' equity:		
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock, \$0.001 par value; 145,000,000 shares authorized; 71,806,694 and 71,720,137 shares issued and outstanding as of December 31, 2010 and September 30, 2010, respectively	71,822	71,735
Additional paid-in capital	120,157,693	119,716,834
Subscription receivable	—	—
Accumulated deficit during the development stage	<u>(112,180,549)</u>	<u>(110,742,867)</u>
Total Arrowhead Research Corporation stockholders' equity	8,048,966	9,045,702
Noncontrolling interest	<u>(761,154)</u>	<u>(967,406)</u>
TOTAL STOCKHOLDERS' EQUITY	<u>7,287,812</u>	<u>8,078,296</u>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<u><b>\$ 15,189,763</b></u>	<u><b>\$ 12,354,542</b></u>

*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 December 31, 2010	Three Months Ended December 31, 2009	May 7, 2003 (Inception) to December 31, 2010
<b>REVENUE</b>	<b>\$ 4,994,969</b>	<b>\$ 148,068</b>	<b>\$ 13,122,705</b>
<b>OPERATING EXPENSES</b>			
Salaries	1,056,437	1,104,103	45,388,905
Consulting	230,528	101,239	8,576,726
General and administrative expenses	1,128,957	746,250	27,378,461
Research and development	3,509,458	277,788	58,241,089
Patent amortization	78,906	78,906	2,180,997
<b>TOTAL OPERATING EXPENSES</b>	<b>6,004,286</b>	<b>2,308,286</b>	<b>141,766,178</b>
<b>OPERATING LOSS</b>	<b>(1,009,317)</b>	<b>(2,160,218)</b>	<b>(128,643,473)</b>
<b>OTHER INCOME (EXPENSE)</b>			
Gain (loss) on equity of investments—Nanotope	48,826	(48,639)	(511,247)
Gain on sale of stock in subsidiary	—	—	2,292,800
Gain on sale of equity of investments—Ensysce	—	—	700,000
Gain (loss) on sale of fixed assets, net	—	—	(66,493)
Realized and unrealized gain in marketable securities	—	—	382,264
Interest income (expense), net	3,338	(22,025)	2,765,268
Change in value of derivative liability	465,270	—	2,226,655
Other income	—	220	90,858
<b>TOTAL OTHER INCOME</b>	<b>517,434</b>	<b>(70,444)</b>	<b>7,880,105</b>
<b>LOSS FROM CONTINUING OPERATIONS BEFORE INCOME TAXES</b>	<b>(491,883)</b>	<b>(2,230,662)</b>	<b>(120,763,368)</b>
Provision for income taxes	742,500	—	742,500
<b>LOSS FROM CONTINUING OPERATIONS</b>	<b>(1,234,383)</b>	<b>(2,230,662)</b>	<b>(121,505,868)</b>
Gain (loss) from discontinued operations	2,953	(15,767)	(8,564,820)
Gain (loss) on disposal of discontinued operations	—	430,000	789,375
<b>INCOME (LOSS) FROM DISCONTINUED OPERATIONS</b>	<b>2,953</b>	<b>414,233</b>	<b>(7,775,445)</b>
<b>NET LOSS</b>	<b>(1,231,430)</b>	<b>(1,816,429)</b>	<b>(129,281,313)</b>
Net (income) loss attributable to noncontrolling interests	(206,252)	271,502	17,264,724
<b>NET LOSS ATTRIBUTABLE TO ARROWHEAD</b>	<b>\$ (1,437,682)</b>	<b>\$ (1,544,927)</b>	<b>\$ (112,016,589)</b>
<b>Earnings per share—basic and diluted:</b>			
Loss from continuing operations attributable to Arrowhead common shareholders	\$ (0.02)	\$ (0.04)	
Income from discontinued operations attributable to Arrowhead common shareholders	—	0.01	
Net loss attributable to Arrowhead shareholders	\$ (0.02)	\$ (0.03)	
<b>Weighted average shares outstanding—basic and diluted</b>	<b>71,779,410</b>	<b>58,649,086</b>	

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

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**Arrowhead Research Corporation and Subsidiaries**  
**(A Development Stage Company)**  
**Consolidated Statement of Stockholders' Equity**  
**from inception through December 31, 2010**  
**(Unaudited)**

	Common Stock		Additional Paid-in Capital	Subscription Receivable	Accumulated Deficit during the Development Stage	Noncontrolling interest	Totals
	Shares	Amount					
<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>—</b>	<b>(95,238)</b>	<b>—</b>	<b>1,419,762</b>
Exercise of stock options	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)	1,777,699	(751,255)
<b>Balance at September 30, 2004</b>	<b>13,631,546</b>	<b>13,645</b>	<b>12,059,997</b>	<b>—</b>	<b>(2,624,192)</b>	<b>1,777,699</b>	<b>11,227,149</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
Common stock issued to purchase Insert Therapeutics share @ \$3.98 per 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)	121,491	(6,733,427)
<b>Balance at September 30, 2005</b>	<b>27,984,194</b>	<b>27,997</b>	<b>35,578,580</b>	<b>—</b>	<b>(9,479,110)</b>	<b>1,899,190</b>	<b>28,026,657</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	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 @ \$5.91 per share	25,364	25	149,975	—	—	—	150,000
Common stock issued to purchase Calando Pharmaceuticals, Inc. @ \$5.17 per share	208,382	208	1,077,125	—	—	—	1,077,333
Stock-based compensation	—	—	1,369,478	—	—	—	1,369,478
Net loss for the year ended September 30, 2006	—	—	—	—	(18,997,209)	(964,752)	(19,961,961)
<b>Balance at September 30, 2006</b>	<b>34,143,588</b>	<b>34,156</b>	<b>59,113,369</b>	<b>—</b>	<b>(28,476,319)</b>	<b>934,438</b>	<b>31,605,644</b>
Exercise of stock options	186,164	186	434,541	—	—	—	434,727
Common stock issued @ \$5.78 per share, net	2,849,446	2,849	15,149,366	—	—	—	15,152,215
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. @ \$3.77 per share	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)	(781,829)	(30,712,947)
<b>Balance at September 30, 2007</b>	<b>38,610,420</b>	<b>38,622</b>	<b>84,672,783</b>	<b>—</b>	<b>(58,407,437)</b>	<b>152,609</b>	<b>26,456,577</b>
Exercise of stock options	105,357	106	289,921	—	—	—	290,027
Common stock issued at approximately \$1.80 per share, net	3,863,989	3,867	6,956,718	—	—	—	6,960,585
Arrowhead's increase in proportionate share of Unidym's equity	—	—	1,720,962	—	—	—	1,720,962
Common stock issued @ \$2.72 per share to Rice University	50,000	50	135,950	—	—	—	136,000
Common stock issued @ \$2.83 per share to purchase shares of Unidym, Inc.	70,547	71	199,929	—	—	—	200,000
Common stock issued @ \$2.95 per share to purchase MASA Energy, LLC	105,049	105	309,895	—	—	—	310,000
Common stock issued @ \$2.19 per share to Unidym for the acquisition of Nanoconduction	114,155	114	249,886	—	—	—	250,000
Common stock issued @ \$2.18 per share	15,000	15	32,685	—	—	—	32,700
Stock-based compensation	—	—	3,187,397	—	—	—	3,187,397
Net loss for the year ended September 30, 2008	—	—	—	—	(27,089,030)	(152,609)	(27,241,639)
<b>Balance at September 30, 2008</b>	<b>42,934,517</b>	<b>42,950</b>	<b>97,756,126</b>	<b>—</b>	<b>(85,496,467)</b>	<b>—</b>	<b>12,302,609</b>
Common Stock issued @ \$0.55 per share to Unidym stockholder in exchange for Unidym's shares	2,058,393	2,059	1,131,617	—	—	—	1,133,676
Common Stock issued @ \$0.52 per share to TEL Ventures in exchange for Unidym's shares	2,222,222	2,222	1,156,111	—	—	—	1,158,333
Reclassification of former Unidym mezzanine debt to equity	—	—	2,000,000	—	—	—	2,000,000
Arrowhead's increase in proportionate share of Calando's equity	—	—	2,120,250	—	—	—	2,120,250
Common stock issued @ \$0.30 per share	9,196,642	9,197	2,749,796	—	—	—	2,758,993
Change in percentage of ownership in subsidiary	—	—	16,297	—	—	—	16,297
Stock-based compensation	—	—	2,676,170	—	—	—	2,676,170
Issuance of Series D Preferred Stock for Subscription in Unidym	—	—	300,000	(300,000)	—	—	—
Amortization of discount on Unidym Series D Preferred Stock	—	—	163,960	—	(163,960)	—	—
Net loss for the year ended September 30, 2009	—	—	—	—	(19,308,392)	—	(19,308,392)
<b>Balance at September 30, 2009</b>	<b>56,411,774</b>	<b>56,428</b>	<b>110,070,327</b>	<b>(300,000)</b>	<b>(104,968,819)</b>	<b>—</b>	<b>4,857,936</b>
Exercise of stock options	6,875	7	7,624	—	—	—	7,631
Issuance of Series D Preferred Stock for Subscription in Unidym	—	—	—	300,000	—	—	300,000
Issuance of Unidym's common stock to minority shareholders	—	—	245,345	—	—	54,655	300,000
Common stock issued @ \$0.63 per share	5,083,430	5,083	3,217,813	—	—	—	3,222,896
Common stock issued @ \$1.312 per share	6,592,989	6,593	3,692,078	—	—	—	3,698,671
Common stock issued to Calando stockholders in exchange for Calando's shares	1,220,000	1,220	(160,667)	—	—	159,447	—
Common Stock issued to Unidym stockholders in exchange for Unidym's shares	153,176	153	(1,435)	—	—	1,282	—
Stock-based compensation	—	—	1,582,149	—	—	—	1,582,149
Exercise of warrants	2,251,893	2,251	1,063,600	—	—	200	1,066,051
Net loss for the year ended September 30, 2010	—	—	—	—	(5,774,048)	(1,182,990)	(6,957,038)
<b>Balance at September 30, 2010</b>	<b>71,720,137</b>	<b>\$ 71,735</b>	<b>\$119,716,834</b>	<b>\$ —</b>	<b>\$(110,742,867)</b>	<b>\$ (967,406)</b>	<b>\$ 8,078,296</b>
Exercise of warrants	86,557	87	43,192	—	—	—	43,279
Stock-based compensation	—	—	397,667	—	—	—	397,667
Net income (loss) for quarter ended December 31, 2010	—	—	—	—	(1,437,682)	206,252	(1,231,430)
<b>Balance at December 31, 2010</b>	<b>71,806,694</b>	<b>\$ 71,822</b>	<b>\$120,157,693</b>	<b>\$ —</b>	<b>\$(112,180,549)</b>	<b>\$ (761,154)</b>	<b>\$ 7,287,812</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**  
**(unaudited)**

	Three Months Ended December 31, 2010	Three Months Ended December 31, 2009	May 7, 2003 (Date of inception) to December 31, 2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net Loss	\$ (1,231,430)	\$ (1,816,429)	\$ (129,281,313)
Net (income) loss attributable to noncontrolling interests	(206,252)	271,502	17,264,724
Net loss attributable to Arrowhead	(1,437,682)	(1,544,927)	(112,016,589)
(Income) loss from discontinued operations	(2,953)	(414,233)	7,775,445
Realized and unrealized (gain) loss on investment	—	—	(1,082,263)
Gain from sale of subsidiary	—	—	(306,344)
Loss on sale/donation of fixed assets	—	—	66,493
Stock issued as gift to Caltech	—	—	162,750
Stock issued as gift to Rice University	—	—	136,000
Stock issued for professional services	—	—	232,700
Stock issued for in-process research and development	—	—	13,166,347
Change in percentage of ownership in subsidiary	—	—	16,297
Change in value of derivative liability	(465,270)	—	(2,226,655)
Purchased in-process research and development—Nanoconduction	—	—	2,685,208
Stock-based compensation	397,667	302,072	12,072,571
Depreciation and amortization	122,370	174,304	5,514,704
Gain on sale of stock in subsidiary	—	—	(2,292,800)
Non-cash (gain) loss from equity investment	(48,826)	48,639	511,247
Noncontrolling interest	206,252	(271,502)	(17,264,724)
Gain on renegotiation of accrued severance	—	—	(726,500)
Changes in operating assets and liabilities:			
Receivables	(4,528,308)	14,376	(4,591,123)
Other receivables	86,110	—	(782,600)
Prepaid expenses	56,714	110,155	(184,860)
Other current assets	96,363	—	(18,470)
Deposits	—	14,808	(36,795)
Accounts payable	1,745,233	(121,604)	1,794,587
Accrued expenses	2,368,905	(8,866)	2,450,604
Accrued severance and other liabilities	(20,212)	78,935	938,402
<b>NET CASH USED IN OPERATING ACTIVITIES OF CONTINUING OPERATIONS</b>	<b>(1,423,637)</b>	<b>(1,617,843)</b>	<b>(94,006,368)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES OF CONTINUING OPERATIONS:</b>			
Purchase of marketable securities—US Treasury Bills	—	—	(18,575,915)
Purchase of property and equipment	—	—	(3,555,925)
Purchase of MASA Energy, LLC	—	—	(250,000)
Minority equity investment	—	—	(2,000,000)
Cash paid for interest in Insert	—	—	(10,150,000)
Cash paid for interest in Calando	—	—	(8,800,000)
Cash paid for interest in Unidym	—	—	(14,138,003)
Cash obtained from interest in Insert	—	—	10,529,594
Cash obtained from interest in Calando	—	—	8,800,000
Cash obtained from interest in Unidym	—	—	14,138,003
Proceeds from sale of marketable securities—US Treasury Bills	—	—	18,888,265
Proceeds from sale of investments	—	—	1,269,913
Proceeds from sale of subsidiary (net)	—	—	359,375
Proceeds from sale of fixed assets	—	—	142,375
Payment for patents	—	—	(303,440)
Restricted cash	—	—	50,773
<b>NET CASH PROVIDED BY (USED) IN INVESTING ACTIVITIES OF CONTINUING OPERATIONS</b>	<b>—</b>	<b>—</b>	<b>(3,594,985)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES OF CONTINUING OPERATIONS:</b>			
Principal payments on capital leases	—	(212,914)	(1,677,000)
Proceeds from issuance of Calando debt	—	—	2,516,467
Proceeds from sale of stock in subsidiary	—	—	19,175,168
Proceeds from issuance of common stock and warrants, net	43,279	3,205,896	90,830,670
<b>NET CASH PROVIDED BY FINANCING ACTIVITIES OF CONTINUING OPERATIONS</b>	<b>43,279</b>	<b>2,992,982</b>	<b>110,845,305</b>
<b>Cash flows from discontinued operations:</b>			
Operating cash flows	—	(15,767)	(8,567,773)
Investing cash flows	—	430,000	790,625
<b>Net cash provided by (used in) discontinued operations:</b>	<b>—</b>	<b>414,233</b>	<b>(7,777,148)</b>
<b>NET INCREASE (DECREASE) IN CASH</b>	<b>(1,380,358)</b>	<b>1,789,372</b>	<b>5,466,804</b>
<b>CASH AT BEGINNING OF PERIOD</b>	<b>6,847,162</b>	<b>2,020,224</b>	<b>—</b>
<b>CASH AT END OF PERIOD</b>	<b>\$ 5,466,804</b>	<b>\$ 3,809,596</b>	<b>\$ 5,466,804</b>
<b>Supplementary disclosures:</b>			
Interest paid	\$ —	\$ 13,118	\$ 125,419
Taxes paid	\$ 742,500	\$ —	\$ 742,500

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

## SUPPLEMENTAL NON-CASH TRANSACTIONS

On March 23, 2005, Arrowhead Research Corporation (“Arrowhead”) purchased 7,375,000 shares of Insert Therapeutics, Inc. (“Insert”) 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. (“Calando”) 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, Inc. (“Unidym”), Carbon Nanotechnologies, Inc., Arrowhead and others.

On April 23, 2008, Arrowhead purchased 200,000 shares of the common stock of Unidym 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.

On August 8, 2008, Unidym acquired all of the outstanding stock of Nanoconduction, Inc. in exchange for 114,115 shares of Arrowhead Common Stock with an estimated fair market value of \$250,000.

On June 11, 2009, Arrowhead issued 1,324,625 shares of Common Stock with an estimated fair market value of \$688,802 in exchange for an equal number of Series A Preferred Stock of Unidym, with minority stockholders of Unidym.

On June 25, 2009, Arrowhead issued 1,944,444 shares of Common Stock with an estimated fair market value of \$972,222 in exchange for an equal number of Series C Preferred Stock of Unidym, with a minority stockholder of Unidym.

On September 22, 2009, Arrowhead issued 91,495 shares of Common Stock with an estimated fair market value of \$46,662 in exchange for an equal number of Series A Preferred Stock of Unidym with a minority stockholder of Unidym.

On September 28, 2009, Arrowhead issued 642,273 shares of Common Stock with an estimated fair market value of \$398,209 in exchange for 5,574 shares of Series A Preferred Stock and 636,699 shares of Series C Preferred Stock of Unidym, with several minority stockholders of Unidym.

On September 30, 2009, Arrowhead issued 277,778 shares of Common Stock with an estimated fair market value of \$186,111 in exchange for an equal number of shares of Series C-1 Preferred Stock of Unidym, with a minority stockholder of Unidym.

In October and November 2009, Arrowhead issued 153,176 shares of Common Stock with an estimated fair market value of \$47,485 in exchange for an equal number of shares of Series C Preferred Stock of Unidym, with several minority stockholders of Unidym.

In October and November 2009, Arrowhead issued 1,140,000 shares of Common Stock with an estimated fair market value of \$706,800 in exchange for 2,850,000 shares of Calando common stock, with several minority stockholders of Calando. In conjunction with the exchange, Arrowhead also issued 240,000 Warrants to purchase Arrowhead Common Stock in exchange for 600,000 Warrants to purchase Calando common stock.

In February 2010, Arrowhead issued 80,000 shares of Common Stock and 24,000 warrants to purchase Arrowhead Common Stock, at an exercise price of \$0.50, to several Calando shareholders, in exchange for 200,000 shares of Calando common stock and 60,000 warrants to purchase Calando common stock.

In March 2010, a warrant holder exercised 247,880 warrants to purchase Arrowhead Common Stock, in a cashless exercise, whereby Arrowhead issued to the warrant holder 128,707 shares of Arrowhead Common Stock.

In September 2010, Arrowhead issued warrants to purchase 3,906,250 shares of Arrowhead Common Stock, at an exercise price of \$0.50, to two Calando shareholders, in exchange for 1,562.5 shares of Series A Preferred Stock of Calando Pharmaceuticals, Inc.

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

**Arrowhead Research Corporation**  
**Notes to Consolidated Financial Statements**  
**(Unaudited)**

Unless otherwise noted, (1) the term “Arrowhead” refers to Arrowhead Research Corporation, a Delaware corporation formerly known as InterActive Group, Inc., (2) the terms the “Company,” “we,” “us,” and “our,” refer to the ongoing business operations of Arrowhead and its Subsidiaries, whether conducted through Arrowhead or a subsidiary of Arrowhead, (3) the term “ARC” refers to Arrowhead Research Corporation, a privately-held California corporation with which Arrowhead consummated a stock exchange transaction in January 2004, (4) the term “Subsidiaries” refers collectively to Calando Pharmaceuticals, Inc. (“Calando”), Unidym, Inc. (“Unidym”), Ablaris Therapeutics, Inc. (“Ablaris”), Agonn Systems, Inc. (“Agonn”), and Tego Biosciences Corporation (“Tego”), the term “Minority Investments” refers collectively to Nanotope, Inc. (“Nanotope”) and Leonardo Biosystems, Inc. (“Leonardo”) in which the company holds a less than majority ownership position, and (5) the term “Common Stock” refers to Arrowhead’s Common Stock and the term “stockholder(s)” refers to the holders of Common Stock or securities exercisable for Common Stock.

**NOTE 1. ORGANIZATION AND ACCOUNTING POLICIES**

*Nature of Business*

Arrowhead Research Corporation is a nanomedicine company developing innovative therapeutic products at the interface of biology and nanoengineering to cure disease and improve human health. Arrowhead addresses its target markets through ownership in subsidiaries that are selected based on synergies in their technology, and clinical and business strategies. By focusing on specific related applications of nanomedicine, Arrowhead and its subsidiaries leverage shared expertise and resources to develop pioneering therapeutic platforms for large unmet medical needs. Arrowhead is currently focused on the preclinical and clinical development of therapeutics for the treatment of cancer and obesity, as well as the regeneration of wounded or diseased tissue.

Arrowhead’s portfolio includes two majority owned subsidiaries, Calando, a leader in delivering small RNAs for gene silencing, and Ablaris, an anti-obesity therapeutics company, and minority investments in Nanotope, a regenerative medicine company and Leonardo, a multistage drug delivery company.

*Liquidity*

As a development stage company, Arrowhead has historically financed its operations through the sale of securities of Arrowhead and its Subsidiaries. Development activities at our Subsidiaries, in particular Calando and Unidym, has required significant capital investment since the Company’s inception and we expect our current portfolio companies to continue to require cash investment in fiscal 2011 to continue development.

At December 31, 2010, the Company had approximately \$5.5 million in cash to fund operations. During the first quarter of fiscal 2011, the Company’s cash position decreased by \$1.4 million, primarily as a result of operational spending at Arrowhead, Calando and Unidym. In January 2011, Arrowhead sold its ownership interest in Unidym; therefore the cash burn associated with Unidym will discontinue beginning in the second half of January 2011. The Company’s management anticipates that the Company will be able to satisfy the cash requirements of its operations through at least the next twelve months with current cash resources. The Company anticipates that further equity financings, and/or asset sales and license agreements will be necessary to continue to fund operations in the future.

*Basis of Presentation and Principles of Consolidation*

The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) for interim financial information and in accordance with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, the financial statements do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments, including normal recurring accruals, considered necessary for a fair presentation have been included. Interim results are not necessarily indicative of results for a full year. The year-end balance sheet was derived from audited financial statements, but does not include all disclosures required by GAAP. This financial information should be read in conjunction with the consolidated financial statements and notes included in the Company’s Annual Report on Form 10-K for the year ended September 30, 2010.

The consolidated financial statements of the Company include the accounts of Arrowhead and its wholly-owned and majority-owned Subsidiaries. Prior to April 2008, Arrowhead’s Subsidiaries included Insert Therapeutics, Inc. (“Insert”), which was merged with Calando in April 2008. The merged entity is majority-owned by Arrowhead and continues to operate under the name of Calando. At December 31, 2010, other Subsidiaries included Unidym, Tego, and Agonn. On December 23, 2009, Tego completed a sale of its assets to Luna Innovations, Inc. and Tego results are included in the Income (Loss) from Discontinued Operations. Income (Loss) from Discontinued Operations also includes Aonex Technologies, Inc. (“Aonex”), sold in May 2008 and Nanotechnica, Inc. (“Nanotechnica”), dissolved in June 2005. All significant intercompany accounts and transactions are eliminated in consolidation, and noncontrolling interests are accounted for in the Company’s financial statements. Certain reclassifications have been made to prior period financial statements to conform to the current period presentation.

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### *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. Actual results could differ from those estimates.

### **Recently Issued Accounting Standards**

In June 2010, the FASB issued ASU No. 2010-17, *Revenue Recognition—Milestone Method (Topic 605): Milestone Method of Revenue Recognition*. This ASU codifies the consensus reached in EITF Issue No. 08-9, “Milestone Method of Revenue Recognition.” The amendments to the Codification provide guidance on defining a milestone and determining when it may be appropriate to apply the milestone method of revenue recognition for research or development transactions. Consideration that is contingent on achievement of a milestone in its entirety may be recognized as revenue in the period in which the milestone is achieved only if the milestone is judged to meet certain criteria to be considered substantive. Milestones should be considered substantive in their entirety and may not be bifurcated. An arrangement may contain both substantive and nonsubstantive milestones, and each milestone should be evaluated individually to determine if it is substantive. This guidance was adopted effective October 1, 2010. The adoption of this guidance did not have a material impact on our consolidated financial statements.

In January 2010, the FASB issued Accounting Standards Update ASU No. 2010-06, “Fair Value Measurements and Disclosures (Topic 820) – Improving Disclosures about Fair Value Measurements”. This guidance requires new disclosures related to recurring and nonrecurring fair value measurements. The guidance requires disclosure of transfers of assets and liabilities between Level 1 and Level 2 of the fair value measurement hierarchy, including the reasons and the timing of the transfers and information on purchases, sales, issuance, and settlements on a gross basis in the reconciliation of the assets and liabilities measured under Level 3 of the fair value measurement hierarchy. The adoption of this guidance is effective for interim and annual reporting periods beginning after December 15, 2009. We have adopted this guidance in the financial statements presented herein, which did not have a material impact on our consolidated financial position or results of operations.

In October 2009, the FASB issued ASU 2009-13, which amends ASC Topic 605, *Revenue Recognition*. This new accounting guidance relates to the revenue recognition of multiple element arrangements. The new guidance states that if vendor specific objective evidence or third party evidence for deliverables in an arrangement cannot be determined, companies will be required to develop a best estimate of the selling price for separate deliverables and allocate arrangement consideration using the relative selling price method. We adopted this guidance as of January 1, 2010 on a prospective basis. The adoption of this guidance did not have a material impact on our consolidated financial statements.

In October 2009, the FASB issued authoritative guidance on multiple-deliverable revenue arrangements, ASC 605-25. This guidance amends the existing criteria for separating consideration received in multiple-deliverable arrangements and requires that arrangement consideration be allocated at the inception of the arrangement to all deliverables based on their relative selling price. The guidance establishes a hierarchy for determining the selling price of a deliverable which is based on vendor-specific objective evidence, third-party evidence, or management estimates. Expanded disclosures related to multiple-deliverable revenue arrangements are also required. This guidance is effective for the Company beginning fiscal year 2011. We have adopted this guidance in the financial statements presented herein, which did not impact our consolidated financial position or results of operations.

On July 1, 2009, the FASB issued the FASB Accounting Standards Codification (the Codification). The Codification became the single source of authoritative non-governmental U.S. generally accepted accounting principles (“GAAP”), superseding existing FASB, American Institute of Certified Public Accountants (“AICPA”), Emerging Issues Task Force (“EITF”) and related literature. The Codification eliminates the previous US GAAP hierarchy and establishes one level of authoritative GAAP. All other literature is considered non-authoritative. The Codification was effective for interim and annual periods ending after September 15, 2009. The Company adopted the Codification for the year ended September 30, 2009. This guidance did not change GAAP; therefore it did not have an impact on our consolidated financial statements. References within this note and throughout our financial statements to authoritative guidance issued by the FASB are in reference to the codification.

In June 2009, the FASB issued guidance codified as ASC 470-20, regarding accounting for own-share lending arrangements in contemplation of convertible debt issuance, which changes the accounting for equity share lending arrangements on an entity’s own shares when executed in contemplation of a convertible debt offering. This guidance requires the share lending arrangement to be measured at fair value and recognized as an issuance cost. These issuance costs should then be amortized as interest expense over the life of the financing arrangement. Shares loaned under these arrangements should be excluded from computation of earnings per share. This guidance is effective for fiscal years beginning after December 15, 2009 and requires retrospective application for all arrangements outstanding as of the beginning of the fiscal year. We have adopted this guidance in the financial statements presented herein, which did not impact our consolidated financial position or results of operations.

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In June 2009, the FASB issued amendments to the accounting rules for variable interest entities (VIEs) and for transfers of financial assets, codified as ASC 860-10. The new guidance for VIEs eliminates the quantitative approach previously required for determining the primary beneficiary of a variable interest entity and requires ongoing qualitative reassessments of whether an enterprise is the primary beneficiary. In addition, qualifying special purpose entities (“QSPEs”) are no longer exempt from consolidation under the amended guidance. The amendments also limit the circumstances in which a financial asset, or a portion of a financial asset, should be derecognized when the transferor has not transferred the entire original financial asset to an entity that is not consolidated with the transferor in the financial statements being presented, and/or when the transferor has continuing involvement with the transferred financial asset. This guidance is effective as of the beginning of a reporting entity’s first annual reporting period that begins after November 15, 2009 and for interim periods within the first annual reporting period. This guidance became effective on October 1, 2010. We have adopted this guidance in the financial statements presented herein, which did not impact our consolidated financial position or results of operations.

### **NOTE 2. INVESTMENT IN SUBSIDIARIES**

#### *Unidym, Inc.*

Unidym, Inc. was founded by Arrowhead in 2005. Through the license of intellectual property and the acquisition of three development stage nanotechnology companies in 2006, 2007 and 2008, Unidym acquired the rights to key patents for the manufacture and application of carbon nanotubes, and is developing products with applications for the display industry. The consolidated financial statements include the results of the merged companies.

Prior to fiscal 2009, Arrowhead invested \$8.3 million in Unidym and provided Arrowhead stock with an aggregate value of \$5.4 million to facilitate Unidym acquisitions. In fiscal 2009, Unidym raised a total of \$4.7 million through the sale of Series C-1 Preferred Stock, of which \$2.7 million was invested by Arrowhead.

In fiscal 2008 and fiscal 2009, Arrowhead increased its ownership interest in Unidym through a series of stock exchanges with minority holders of Unidym. In April 2008, Arrowhead acquired 550,000 shares of Unidym common stock from a director and minority holder of Unidym in exchange for \$350,000 in cash and restricted Arrowhead Common Stock valued at \$200,000. In fiscal 2009, Arrowhead acquired 4.3 million shares of Unidym preferred stock in exchange for 4.3 million shares of Arrowhead Common Stock.

In September 2009, Arrowhead invested \$642,000 in exchange for 2,140,000 shares of Unidym Series D Preferred Stock and a warrant to purchase 3,146,208 shares of Unidym common stock at an exercise price of \$0.25 per share with an expiration date three years from the date of issuance. As a condition to this investment, each share of Series C-1 Preferred Stock was converted to six shares of Unidym Series D Preferred Stock. A minority shareholder of Unidym invested \$300,000 for 1,000,000 shares of Unidym Series D Preferred Stock and 1,000,000 warrants with similar terms.

In October and November 2009, Arrowhead issued 153,176 shares of Common Stock with an estimated fair market value of \$47,485 in exchange for an equal number of shares of Series C Preferred Stock of Unidym, with several minority stockholders of Unidym. In June 2010, Arrowhead received 4,785,077 shares of Series D Preferred Stock of Unidym in exchange for the cancellation of \$1,435,523 in accumulated operational loans by Arrowhead to Unidym.

As of December 31, 2010, Arrowhead owned 79% of the outstanding stock of Unidym and 64% on a fully diluted basis.

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

On April 17, 2008, Calando merged with and into Insert, with Insert as the surviving company. Prior to the merger, Arrowhead invested an aggregate of \$23.2 million in Calando through the purchase of equity and loans. As a condition of the merger, the Preferred Stock of each of Calando and Insert was converted into common stock and the loans were converted to equity. As a result of the merger, shares of Insert common stock were issued to the stockholders of the former Calando, and Insert changed its name to Calando Pharmaceuticals, Inc.

On November 26, 2008, Calando entered into Unsecured Convertible Promissory Note Agreements (“Notes”) for \$2.5 million with accredited investors and Arrowhead, which invested \$200,000 in the Notes offering. Arrowhead subsequently invested an additional \$600,000 in the same offering. Except for one Note in the principal amount of \$500,000, all Notes and accrued interest were converted into a total of 2,950 shares of Calando Series A Preferred Stock on June 23, 2009. The remaining Note had a 10% interest rate and matured on November 26, 2010. The Note was temporarily extended and is not in default while the parties negotiate the terms of a new Note; see Note 4 for further information.

In fiscal 2010, Arrowhead issued 1,220,000 shares of its Common Stock in exchange for 3,050,000 shares of Calando common stock, with several minority stockholders of Calando. In conjunction with this exchange, Arrowhead also issued 240,000 warrants to purchase Arrowhead Common Stock in exchange for 600,000 warrants to purchase Calando common stock.

As of December 31, 2010, Arrowhead had a series of 6% simple-interest working capital loans and advances outstanding to Calando totaling \$8.2 million, of which \$8.1 million was converted to newly issued Calando Series B and Series C preferred stock in January 2011.

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As of December 31, 2010, Arrowhead owned 70% of the outstanding shares of Calando and 64% on a fully diluted basis.

### *Nanotope, Inc.*

Nanotope is developing advanced nanomaterials for the treatment of spinal cord injuries, cartilage regeneration and wound healing. In April 2008, Arrowhead acquired a 5.8% ownership interest in Nanotope. In July and September 2008, Arrowhead acquired 1,801,802 shares of Series B Preferred Stock of Nanotope for two payments of \$1 million each, increasing Arrowhead's ownership interest in Nanotope to 23%. Arrowhead accounts for its investment in Nanotope using the equity method of accounting. As of December 31, 2010, Nanotope had indebtedness to Arrowhead in the amount of \$529,000, included in other receivables, which is expected to be repaid or converted to equity.

Summarized financial information for Nanotope, Inc. is as follows:

	<u>December 31, 2010</u>	<u>September 30, 2010</u>
Current assets	\$ 289,000	\$ 16,000
Non-current assets 529	131,000	130,000
Liabilities	647,000	585,000
Equity	(227,000)	(439,000)

  

	<u>For the three months ended December 31, 2010</u>	<u>For the three months ended December 31, 2009</u>
Revenue	\$ 495,000	\$ —
Operating expenses	275,000	215,000
Net Income (Loss)	212,000	(215,000)

  

	<u>For the three months ended December 31, 2010</u>	<u>For the three months ended December 31, 2009</u>
Cash flows provided by (used in) operating activities	\$ 294,000	\$ (187,000)
Cash flows used in investing activities	(15,000)	—
Cash flows provided by financing activities	—	—

### *Leonardo Biosystems, Inc.*

Leonardo is developing a drug-delivery platform technology based on novel methods of designing spheroid porous silicon microparticles that selectively accumulate in tumor vasculature. In April 2008, Arrowhead acquired a 6.1% ownership interest in Leonardo. Arrowhead accounts for its investment in Leonardo using the cost method of accounting. As of December 31, 2010, Leonardo had indebtedness to Arrowhead in the amount of \$257,000, included in other receivables, which is expected to be repaid or converted to equity. As of December 31, 2010, Arrowhead's ownership interest in Leonardo was 5%.

### **NOTE 3. DISCONTINUED OPERATIONS—TEGO BIOSCIENCES CORPORATION**

On April 20, 2007, Tego, a wholly-owned subsidiary of Arrowhead, acquired for \$1,000 the assets of C Sixty, Inc., a Texas-based company developing protective products based on the anti-oxidant properties of fullerenes. On July 3, 2007, Arrowhead capitalized Tego with a purchase of 5,000,000 shares of Tego Series A1 Preferred Stock for \$100,000. On October 25, 2007, Arrowhead purchased 15,000,000 shares of Tego Series A-2 Preferred Stock for \$2.4 million. In line with Tego's revised strategy to focus on the out-license of its technology and to reduce its internal development activities, on November 21, 2008, Tego repurchased from Arrowhead 5,000,000 shares of Tego Series A-1 Preferred Stock for \$1.7 million. As of December 31, 2010, the Company had incurred approximately \$1,014,000 of expenses related to Tego since its inception.

On December 23, 2009, Tego completed the sale of all of its non-cash intellectual property assets ("Tego IP") to Luna Innovations, Inc. ("Luna") under the terms of the Tego-Luna Asset Purchase Agreement dated November 13, 2009 ("APA"). The Tego IP includes a portfolio of Tego-owned foreign and domestic patents and patent applications. The Tego IP also includes patent licenses from Siemens AG and Washington University, St. Louis. Under the APA, Luna agreed to assume Tego's role as licensor under a license Tego granted under the Tego IP to The Bronx Project, Inc. ("TBP") to develop carboxyfullerenes in the field of neuronal injury (the "TBP License"). Luna also assumed Tego's role as licensor under the exclusive license Tego granted to Arrowhead's affiliate Unidym, under the Tego IP in the field of industrial non-pharmaceutical fullerenes.

Luna paid to Tego an upfront purchase price of \$350,000 and reimbursements of patent and license expenses of \$80,000. Further, under the terms of the APA, Luna will pay Tego 10% of any revenues it receives from its licensing or resale of the Tego IP. Tego shall also receive from Luna 50% of any net proceeds Luna receives from the TBP License. Tego shall receive royalties from Luna for any sales of fullerene products covered by the Tego IP, as well as clinical development milestones totaling \$4.25 million for each fullerene product it develops that is covered by the Tego IP.

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Due to the sale of substantially all of Tego's assets, the operations of Tego ceased and the gain on the sale and the results of historical operations are recorded as discontinued operation in the Company's Statements of Operations. Additionally, the cash flows from Tego are reflected separately as cash flows from discontinued operations. Potential future cash flows associated with the Luna APA, as discussed above, will be reflected as a part of cash flows from discontinued operations in the Company's Consolidated Statements of Cash Flows.

### **NOTE 4. NOTES PAYABLE**

On November 26, 2008, Calando entered into Unsecured Convertible Promissory Note Agreements ("Notes") for \$2.5 million with accredited investors and Arrowhead, which invested \$200,000 in the Notes offering. Arrowhead subsequently invested an additional \$600,000 in the same offering. Except for one Note in the principal amount of \$500,000, all Notes and accrued interest were converted into a total of 2,950 shares of Calando Series A Preferred Stock on June 23, 2009. The remaining Note had a 10% interest rate and matured on November 26, 2010. The note has been temporarily extended as the parties negotiate revised terms to a new note agreement.

### **NOTE 5. STOCKHOLDERS' EQUITY**

At December 31, 2010, the Company had a total of 150,000,000 shares of capital stock authorized for issuance, consisting of 145,000,000 shares of Common Stock, par value \$0.001, and 5,000,000 shares of Preferred Stock, par value \$0.001.

At December 31, 2010, 71,806,694 shares of Common Stock were outstanding. At December 31, 2010, 1,532,000 shares and 9,731,435 shares were reserved for issuance upon exercise of options granted under Arrowhead's 2000 Stock Option Plan and 2004 Equity Incentive Plan, respectively.

On July 17, 2009 and August 6, 2009, the Company sold an aggregate of 9,196,642 units in a private placement transaction with institutional and accredited investors. Each unit consisted of one share of Arrowhead Common Stock and a warrant to purchase an additional share of Common Stock exercisable at \$0.50 per share; the unit price was \$0.30. The warrants became exercisable on January 18, 2010 and February 7, 2010, and remain exercisable until June 30, 2014. The warrants can be called for redemption by the Company as the redemption feature provided for in the warrants has been met. Gross proceeds of the offering totaled approximately \$2.8 million.

On December 11, 2009, the Company sold an aggregate of 5,083,430 units in a private placement transaction with accredited investors. Each unit consisted of one share of Arrowhead Common Stock and a warrant to purchase an additional share of Common Stock exercisable at \$0.509 per share. The unit price was \$0.634, based upon the closing bid price on the Company's Common Stock on December 11, 2009, which was \$0.509, plus \$0.125 for the purchase of the warrant. The warrants became exercisable on June 12, 2010 and remain exercisable until December 11, 2014. The warrants can be called for redemption by the Company as the redemption feature provided for in the warrants has been met. Gross proceeds of the offering were approximately \$3.2 million.

On June 17, 2010, the Company sold an aggregate of 6,592,989 units at a price of \$1.312 per unit in a registered offering to institutional and individual investors. Each unit consisted of one share of Arrowhead Common Stock and a warrant to purchase 0.5 share of Common Stock exercisable at \$1.65 per share. The warrants contain an antidilution provision which can result in an adjustment to the exercise price under certain circumstances (see Note 9 for additional information). Gross proceeds from the offering were \$8.65 million before deducting placement agent commission and other offering expenses.

The following table summarizes information about warrants outstanding at December 31, 2010:

<u>Exercise prices</u>	<u>Number of Warrants</u>	<u>Remaining Life in Years</u>
\$5.04	1,235,994	0.0 (1)
\$7.06	948,969	6.9
\$2.00	3,863,999	2.6
\$0.50	11,630,335	3.9
\$0.51	4,610,244	3.9
\$1.65	3,296,497	5.0
Total warrants outstanding	25,586,038	

(1) 1,235,994 warrants, with exercise price of \$5.04, expired on January 11, 2011

[Table of Contents](#)**NOTE 6. LEASES**

As of December 31, 2010, the Company leased the following facilities:

	<u>Lab/Office Space</u>	<u>Monthly Rent</u>	<u>Lease Commencement</u>	<u>Lease Term</u>
<b>Arrowhead</b>				
Pasadena, CA	7,388 sq ft	\$18,470	March 1, 2006	62 Months
<b>Unidym</b>				
Sunnyvale, CA	20,500 sq ft	\$26,650	October 1, 2008	60 Months

Facility and equipment rent expense for the three months ended December 31, 2010 and 2009 was \$101,471 and \$154,570, respectively. From inception to date, rent expense has totaled \$4,896,521.

**NOTE 7. COMMITMENTS AND CONTINGENCIES—SUBSIDIARIES AND SPONSORED RESEARCH***Sponsored Research*

In exchange for the exclusive right to license technology developed in sponsored laboratories, Arrowhead has worked with universities in areas such as stem cell research, carbon electronics and molecular diagnostics. By funding university research, Arrowhead has the opportunity to ascertain the technical success at low research cost and, if warranted, continue cost effective development at the university by leveraging the already existing resources available to scientists at universities, such as laboratories and equipment and a culture that encourages the exchange of ideas. If sponsored research results in technology that appears to have commercial applications, the Company can form a subsidiary to develop the technology. Should the 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 expense for the three months ended December 31, 2010 and 2009 was \$26,676 and \$25,000. As of December 31, 2010, there was one active sponsored research agreement at Unidym.

*Sponsored Research Agreement—Duke University*

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

<u>Research Project</u>	<u>Period Covered</u>	<u>Total Estimated Project Cost</u>	<u>Annual Cost</u>	<u>Amount Paid as of Dec. 31, 2010</u>	<u>Prepaid Amt as of Dec. 31, 2010</u>
Electrical Conductivity of Carbon Nanotubes (Dr. Jie Liu)	Dec. 1, 2007 - Jan. 31, 2011 (3.2 years)	\$ 431,641	\$ 100,000	\$ 370,327	\$ 7,500

In fiscal 2009, the Duke sponsored research agreement was renegotiated resulting in the annual maximum cost decreasing from \$191,375 to \$100,000. The current contract expired on November 30, 2010, but is expected to be renewed.

**NOTE 8. STOCK-BASED COMPENSATION**

Arrowhead has two plans that provide for equity-based compensation. Under the 2000 Stock Option Plan, 1,532,000 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 9,731,435 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. As of December 31, 2010, there were options granted and outstanding to purchase 1,532,000 and 5,935,188 shares of Common Stock under the 2000 Stock Option Plan and the 2004 Equity Incentive Plan, respectively. During the quarter ended December 31, 2010, no options were granted under the 2004 Equity Incentive Plan.

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The following tables summarize information about stock options:

	Number of Options Outstanding	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value
Balance At September 30, 2009	2,901,588	\$ 1.73		
Granted	5,251,750	0.69		
Cancelled	(23,125)	1.11		
Exercised	(6,875)	1.11		
Balance At September 30, 2010	8,123,338	1.06		
Granted	—	—		
Cancelled	(656,150)	2.85		
Exercised	—	—		
Balance At December 31, 2010	7,467,188	\$ 0.90	7.8 years	\$1,383,873
Exercisable At September, 30, 2010	4,216,663	\$ 1.21	7.6 years	\$ 537,482

Stock-based compensation expense for the three months ended December 31, 2010 and 2009 was \$397,667 and \$302,072, respectively, and is included in Salaries expense in the Company's consolidated statements of operations. There is no income tax benefit as the company is currently operating at a loss and an actual income tax benefit may not be realized. The result of the loss creates a timing difference, resulting in a deferred tax asset, which is fully reserved by a valuation allowance.

As of December 31, 2010, the pre-tax compensation expense for all unvested stock options at Arrowhead in the amount of approximately \$1,831,537 will be recognized in our results of operations over a weighted average period of 2.5 years. As of December 31, 2010, the pre-tax compensation expense for all unvested stock options at Unidym and Calando in the amount of approximately \$442,752 will be recognized in our results of operations over a weighted average period of 2.1 and 1.3 years, respectively.

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model. 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. The determination of the fair value of each stock option is affected by our stock price on the date of grant, as well as assumptions regarding a number of highly complex and subjective variables. 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. The assumptions used to value Arrowhead stock options granted are as follows:

	Three Months Ended December 31,	
	2010 (1)	2009
Dividend yield	N/A	—
Risk-free interest rate	N/A	2.83% to 2.87%
Volatility	N/A	100%
Expected life (in years)	N/A	5
Weighted average grant date fair value per share of options granted	N/A	\$0.46

(1) There were no Arrowhead stock options granted during the three months ended December 31, 2010

The dividend yield is zero as the Company currently does not pay a dividend.

The risk-free interest rate is based on the US Treasury bond.

Volatility is estimated based on volatility average of the Company's Common Stock price.

### **NOTE 9. FAIR VALUE MEASUREMENTS & DERIVATIVE INSTRUMENTS**

The Company measures its financial assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., exit price) in an orderly transaction between market participants at the measurement date. Additionally, the Company is required to provide disclosure and categorize assets and liabilities measured at fair value into one of three different levels depending on the assumptions (i.e., inputs) used in the valuation. Level 1 provides the most reliable measure of fair value while Level 3 generally requires significant management judgment. Financial assets and liabilities are classified in their entirety based on the lowest level of input significant to the fair value measurement. The fair value hierarchy is defined as follows:

Level 1—Valuations are based on unadjusted quoted prices in active markets for identical assets or liabilities.

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Level 2—Valuations are based on quoted prices for similar assets or liabilities in active markets, or quoted prices in markets that are not active for which significant inputs are observable, either directly or indirectly.

Level 3—Valuations are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Inputs reflect management's best estimate of what market participants would use in valuing the asset or liability at the measurement date.

The following table summarizes fair value measurements at December 31, 2010 for assets and liabilities measured at fair value on a recurring basis:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>	<u>Total</u>
Cash and cash equivalents	\$5,466,804	\$ —	\$ —	\$5,466,804
Derivative liabilities	\$ —	\$ —	\$1,943,252	\$1,943,252

As part of the equity financing on June 17, 2010, as described in Note 5, Arrowhead issued 3,296,497 warrants (the "Warrants") that contain antidilution protection. Under the provisions of the Warrants, if, during the term of the Warrants, the Company issues Common Stock at a price lower than the exercise price of the Warrants, the exercise price of the Warrants would be reduced to the amount equal to the issuance price of the Common Stock. Because the Warrants have this feature, the Warrants are subject to derivative accounting as prescribed under ASC 815. Accordingly, the fair value of the Warrants on the date of issuance was estimated using an option pricing model and recorded on the Company's consolidated balance sheet as a derivative liability. The fair value of the Warrants is estimated at the end of each reporting period and the change in the fair value of the Warrants is recorded as a nonoperating gain or loss in the Company's consolidated statement of operations. During the three months ended December 31, 2010, the Company recorded a gain from the change in fair value of the derivative liability of \$465,270. The assumptions used in valuing the derivative liability as of December 31, 2010 were as follows:

Risk free interest rate	2%
Expected life	5.0 Years
Dividend yield	none
Volatility	100%

During 2009, Arrowhead's subsidiary, Unidym, issued Series D Preferred Stock. The rights of the Preferred Stock necessitate the presentation of the fair value of the conversion feature as a liability as prescribed under ASC 815. These rights include those that protect the holders from decline in Unidym's stock price, which is considered outside the control of the Company. The derivative liability is marked-to-market each reporting period and changes in fair value are recorded as a non-operating gain or loss in the statement of operations, until they are completely settled. The fair value of the conversion feature is determined each reporting period using an option pricing model, and is affected by changes in inputs to that model including our stock price, expected stock price volatility, interest rates and expected term. At December 31, 2010, no value was ascribed to this derivative liability. The assumptions used in valuing the derivative liability at December 31, 2010 were as follows:

Risk free interest rate	2%
Expected life	3 Years
Dividend yield	none
Volatility	30%

The following is a reconciliation of the derivative liability for the three months ended December 31, 2010:

Value at October 1, 2010	\$2,408,522
Issuance of instruments	—
Decrease in value	(465,270)
Net settlements	—
Value at December 31, 2010	<u>\$1,943,252</u>

The carrying amounts of the Company's other financial instruments, which include accounts receivable and accounts payable, approximate their respective fair values due to the relatively short-term nature of these instruments.

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

Dr. Anzalone owns 1,395,900 shares of Nanotope, Inc. common stock or approximately 14.2% of Nanotope's outstanding voting securities. Dr. Anzalone does not hold options, warrants or any other rights to acquire securities of Nanotope. Dr. Anzalone has the right to appoint a representative to the board of directors of Nanotope. Dr. Anzalone currently serves on the Nanotope board in

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a seat reserved for Nanotope's CEO, and another individual holds the seat designated by Dr. Anzalone. 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 Preferred Stock 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.

During fiscal 2009, Calando raised \$2.5 million through the sale of senior unsecured convertible promissory notes ("New Notes"), to accredited investors, plus \$800,000 from Arrowhead. Dr. Anzalone, Arrowhead's President and CEO, personally participated in the offering by buying \$100,000 of the New Notes.

As part of the private placement on December 11, 2009 (see Note 5. Stockholder's Equity), Dr. Anzalone, Arrowhead's President and CEO personally invested \$100,000.

### **NOTE 11. SUBSEQUENT EVENTS**

On January 10, 2011, Arrowhead and Calando entered into a Stock Purchase Agreement whereby Arrowhead purchased newly issued Series B Preferred Stock and Series C Preferred Stock, the consideration for which was \$1 million cash investment and extinguishment of approximately \$8.1 million debt owed to Arrowhead by Calando. For further information, see the Company's 8-K filed with the Securities and Exchange Commission on January 14, 2011.

On January 13, 2011, Ablaris, a newly formed subsidiary of Arrowhead, entered into Stock Purchase Agreements with certain investors who collectively invested approximately \$1.7 million, in a first closing, through the purchase of Ablaris Series A Preferred Stock, including \$500,000 of which was invested by Arrowhead. For further information, see the Company's 8-K filed with the Securities and Exchange Commission on January 14, 2011. Upon the closing, Arrowhead had a 64% ownership interest in Ablaris.

On January 17, 2011, the Company entered into a merger agreement whereby Unidym merged into a merger subsidiary wholly owned subsidiary of Wisepower Co., Ltd. ("Wisepower"), a corporation of the Republic of Korea, with Unidym remaining as the surviving company and wholly owned subsidiary of Wisepower. The consideration to the shareholders of Unidym include \$2.5 million in Wisepower stock, \$2.5 million in Wisepower convertible notes, and contingent consideration of up to \$140 million based on revenue milestones over the next ten years. For further information, see the Company's 8-K filed with the Securities and Exchange Commission on January 21, 2011.

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

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

*The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to predict accurately and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Readers should carefully review the factors identified in this report under the caption "Risk Factors" as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission ("SEC"), including our most recent Annual Report on Form 10-K. In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to place undue reliance on such forward-looking information. Except as may be required by law, disclaim any intent to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.*

#### **Overview**

Arrowhead Research Corporation is a nanomedicine company developing innovative therapeutic products at the interface of biology and nanoengineering to cure disease and improve human health. Arrowhead addresses its target markets through majority or

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minority ownership in subsidiaries that are selected based on synergies in their technology, clinical, and business strategies. By focusing on specific applications of nanomedicine, Arrowhead and its subsidiaries leverage shared expertise and resources to develop pioneering therapeutic platforms for large unmet medical needs. Arrowhead is currently focused on the preclinical and clinical development of therapeutics for the treatment of cancer and obesity, as well as the regeneration of wounded or diseased tissue.

Arrowhead's ultimate goal is to increase and realize the value of its investments through:

- A public offering of Subsidiary stock;
- A sale of Subsidiary to another company;
- License of Subsidiary technology; or
- Generating positive cash flows through operations.

As of December 31, 2010, Arrowhead had three majority-owned operating subsidiaries, Calando Pharmaceuticals, Inc., Ablaris Therapeutics, Inc. and Unidym, Inc. and minority investments in two early-stage nanotechnology companies, Nanotope, Inc. and Leonardo Biosystems, Inc. Arrowhead plans to add to this portfolio through selective acquisition and formation of new nanomedicine companies, as capital resources allow. On January 18, 2011, Arrowhead sold Unidym to Wisepower Co Ltd. as described in Note 11 to Arrowhead's consolidated financial statements.

Arrowhead was originally incorporated in South Dakota in 1989, and was reincorporated in Delaware in 2000. The Company's principal executive offices are located at 201 South Lake Avenue, Suite 703, Pasadena, California 91101, and its telephone number is (626) 304-3400.

### ***Liquidity and Capital Resources***

At December 31, 2010, the Company had approximately \$5.5 million in cash to fund operations. During the first quarter of fiscal 2011, the Company's cash position decreased by \$1.4 million, primarily as a result of operational spending at Arrowhead, Calando and Unidym. In light of Arrowhead's sale of Unidym in January 2011, the cash burn associated with supporting the operations of Unidym will discontinue beginning in the second half of January 2011. The Company's management anticipates that the Company will be able to satisfy the cash requirements of its operations through at least the next twelve months with current cash resources. However, it is anticipated that further equity financings, and/or asset sales and license agreements will be necessary to fund operations in the future.

The Company's strategic plan includes focusing on near term revenue opportunities, conserving cash and seeking sources of additional capital. To execute this plan, the Company will seek to accomplish one or more of the following on favorable terms: the out-license of technology, sale of a Subsidiary, sale of non-core assets, scaling down development efforts, funded joint development or partnership arrangements and/or sale of securities. The likelihood that any of these events will occur is uncertain, especially in light of current economic conditions, and the lack of liquidity in the current capital and credit markets. Until such time as one or more of these goals is accomplished, the Company has scaled back operating activities at its Subsidiaries.

### ***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 ongoing 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 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 are recorded when persuasive evidence of an arrangement exists, title has passed and delivery has occurred, a price is fixed and determinable, and collection is reasonably assured.

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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 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 up-front license fees, milestones and product royalties are 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 production costs, purchased in-process research expenses, contract and other outside service fees, and facilities and overhead costs related to 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 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 impairment is indicated, the asset is written down to its estimated fair value.

### *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 appropriate adjustments recorded. Purchased or licensed patents are amortized over the remaining life of the patent, generally three to twenty years.

### *Recent Accounting Pronouncements*

See Note 1 to the Consolidated Financial Statements for information concerning the Company's implementation and impact of new accounting guidance.

## **First Quarter Review**

During the three months ended December 31, 2010, the Company had two significant transactions affecting its results of operations. On December 7, 2010, Unidym entered into three agreements with Samsung Electronics ("Samsung"), pursuant to which it recorded \$4.5 million in revenue and as well as certain expenses necessary to complete the transaction including license payments to universities and consulting fees. The Company also recorded an income tax provision due to withholding taxes from the Korean government. On December 14, 2010, the Company entered into an agreement with the University of Texas related to its newly formed subsidiary, Ablaris, whereby the Company was required to make a one-time \$2 million payment to the University of Texas.

## **Results of Operations**

The Company had a consolidated loss attributable to Arrowhead of \$1,438,000 million for the three months ended December 31, 2010, compared to a consolidated loss attributable to Arrowhead of \$1,545,000 for the three months ended December 31, 2009. Details of the results of operations are presented below.

## **Revenue**

The Company recorded revenue of \$4,995,000 during the three months ended December 31, 2010 as compared to revenue of \$148,000 during the three months ended December 31, 2009. Revenue for the three months ended December 31, 2010 included \$4.5 million related to three agreements with Samsung, as well as recurring revenue from the sales of CNTs and inks. Calando recognized revenue of \$296,000 primarily as a result of grant revenue. Revenue for the three months ended December 31, 2009 related to the sales of CNTs and inks by Unidym. On January 18, 2011, Arrowhead's ownership interest in Unidym was sold, therefore revenues from Unidym will cease in January 2011.

## **Operating Expenses**

The analysis below details the operating expenses and discusses the expenditures of the Company within the major expense categories. The following tables provide details of operating expenses for the three months ended December 31, 2010 and 2009.

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### **Salary & Wage Expenses – Three months ended December 31, 2010 compared to the three months ended December 31, 2009**

The Company employs management, administrative and technical staff at the Arrowhead corporate offices and the Subsidiaries. Salary and wage expense consists of salary, benefits, and non-cash charges related to equity-based compensation from the issuance of stock options. Salary and benefits are allocated to two major categories: general and administrative compensation expense and research and development compensation expense depending on the primary activities of each employee. The following tables provide detail of salary and wage expenses for the three months ended December 31, 2010 as compared to the three months ended December 31, 2009.

(in thousands)

	Three Months Ended	% of	Three Months Ended	% of	Increase (Decrease)	
	December 31, 2010	Expense Category	December 31, 2009	Expense Category	\$	%
G&A - compensation-related	\$ 399	37%	\$ 554	51%	\$ (155)	-28%
Stock-based compensation	398	38%	302	27%	96	32%
R&D - compensation-related	259	25%	248	22%	11	4%
Total	<u>\$ 1,056</u>	<u>100%</u>	<u>\$ 1,104</u>	<u>100%</u>	<u>\$ (48)</u>	<u>-4%</u>

During the three months ended December 31, 2010, G&A compensation expense remained relatively unchanged, while R&D compensation expense decreased \$120,000 due to lower R&D headcount at Unidym versus the prior year.

Stock-based compensation is a non-cash charge related to the issuance and vesting of stock options. This expensing of stock-based compensation is based upon the estimated fair value of the awards issued. Stock-based compensation expense increased approximately \$96,000 during the three months ended December 31, 2010, as compared to the three months ended December 31, 2009, primarily due to the issuance of new stock options during fiscal 2010. The number of options outstanding and the option expense will vary from period to period depending on hiring, terminations and awards to new and existing employees. The sale of Unidym will result in a decrease in salary & wage expenses beginning in mid January 2011.

### **General & Administrative Expenses – Three months ended December 31, 2010 compared to the three months ended December 31, 2009**

The following tables provide detail of G&A expenses for the three months ended December 31, 2010 as compared to the three months ended December 31, 2009.

(in thousands)

	Three Months Ended	% of	Three Months Ended	% of	Increase (Decrease)	
	December 31, 2010	Expense Category	December 31, 2009	Expense Category	\$	%
Professional/outside services	\$ 647	57%	\$ 420	57%	\$ 227	54%
Patent expense	206	18%	1	0%	205	NM
Facilities and related	43	4%	74	10%	(31)	-42%
Travel	62	5%	50	7%	12	24%
Business insurance	67	6%	93	12%	(26)	-28%
Depreciation	18	2%	24	3%	(6)	-25%
Communication and technology	32	3%	30	4%	2	7%
Office expenses	24	2%	31	4%	(7)	-23%
Other	30	3%	23	3%	7	30%
Total	<u>\$ 1,129</u>	<u>100%</u>	<u>\$ 746</u>	<u>100%</u>	<u>\$ 383</u>	<u>51%</u>

NM = Not Meaningful

Professional/outside services include 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. Professional/outside services expense was \$647,000 during the three months ended December 31, 2010, compared to \$421,000 in the comparable prior period. The increase in professional fees primarily related to a charge of \$458,000 at Unidym related to services by a consultant to secure and negotiate Unidym's two license agreements, and its intellectual property purchase and business cooperation agreements with Samsung, as well as certain attorney fees associated with that transaction. This increase was partially offset by decrease in professional services at Arrowhead from certain one-time charges related to tax and audit services in the prior quarter.

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Patent expense was \$206,000 during the three months ended December 31, 2010, compared to \$1,000 in the comparable prior period. Patent expense for the three months ended December 31, 2010, was primarily related to fees from services from attorneys related to the Company's intellectual property portfolio. These services were related to both Calando and Unidym. During the comparable prior period, there were limited patenting activities relating to maintaining Calando's and Unidym's patent portfolios. 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 product applications are improved. The cost will vary depending on the needs of the Company.

Travel expense was \$62,000 during the three months ended December 31, 2010, compared to \$50,000 in the comparable prior period. Travel expense includes recurring expenses related to travel by Company personnel to and from Company locations in Pasadena and Northern California. Travel expense is also incurred as the Company pursues business initiatives and collaborations throughout the world with other companies and for marketing, investor relations, fund raising and public relations purposes. Travel expenses can fluctuate from quarter to quarter and from year to year depending on current projects and activities, although we expect these expenses to decrease following the sale of Unidym.

Business insurance expense was \$67,000 during the three months ended December 31, 2010, compared to \$93,000 in the comparable prior period. The company experienced favorable rate decreases in its Directors and Officers insurance coverage, as well as a modest decline in the cost of commercial coverage at Unidym. Calando's insurance cost for clinical trials remained relatively stable, however, this expense can fluctuate as a result of changes in the market and the status of clinical trials.

Communication and technology expense was \$32,000 during the three months ended December 31, 2010, essentially unchanged from \$30,000 in the comparable prior period.

Office expense was \$24,000 during the three months ended December 31, 2010, compared to \$31,000 in the comparable prior period. The reduction in office expense is related to less spending generally across all companies.

### **Research and Development Expenses – Three months ended December 31, 2010 compared to the three months ended December 31, 2009**

R&D expenses are primarily related to activities within Arrowhead's Subsidiaries. The following tables provide detail of research and development expenses for the three months ended December 31, 2010, as compared to the three months ended December 31, 2009.

(in thousands)

	Three Months Ended	% of	Three Months Ended	% of	Increase (Decrease)	
	December 31, 2010	Expense Category	December 31, 2009	Expense Category	\$	%
Outside labs & contract services	\$ 104	3%	\$ 49	17%	\$ 55	112%
License, royalty & milestones	3,220	92%	3	1%	3,217	NM
Laboratory supplies & services	12	0%	10	4%	2	20%
Facilities and related	137	4%	109	39%	28	26%
Sponsored research	27	1%	25	9%	2	8%
Depreciation - R&D-related	28	1%	71	26%	(43)	-61%
Other research expenses	(19)	-1%	11	4%	(30)	NM
<b>Total</b>	<b>\$ 3,509</b>	<b>100%</b>	<b>\$ 278</b>	<b>100%</b>	<b>\$ 3,231</b>	<b>1162%</b>

NM = Not Meaningful

Outside labs and contract services expense was \$104,000 during the three months ended December 31, 2010, compared to \$49,000 in the comparable prior period. The increase of \$55,000 was primarily related to outside lab costs at Calando primarily costs related to patient enrollment of clinical trials; during the prior quarter, Calando was not enrolling patients as its key assay was under redevelopment. Calando is engaged in patient recruitment, and as new patients are enrolled, we would expect that these costs continue to increase.

Licensing fees, royalty and milestones expense was \$3.2 million during the three months ended December 31, 2010, compared to \$3,000 in the comparable prior period. Licensing fees, royalty and milestones expenses during the three months ended December 31, 2010 were due to \$2 million in licensing fees owed to the University of Texas M.D. Anderson Cancer Center related to a Patent and Technology License Agreement entered into in December 2010. Also, Unidym recorded \$1.2 million in license fees due to certain universities necessary to consummate the agreements with Samsung in December 2010.

Laboratory supplies and services expense was \$12,000 during the three months ended December 31, 2010, compared to \$10,000 in the comparable prior period. Laboratory supplies and services consist primarily of materials, supplies and services consumed in the laboratory.

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Facilities expense was \$137,000 during the three months ended December 31, 2010, compared to \$109,000 in the comparable prior period. Unidym experienced higher than average repairs and maintenance costs during the quarter.

Sponsored research expense was \$27,000 during the three months ended December 31, 2010, compared to \$25,000 in the comparable prior period. Sponsored research expense during the quarter related to Unidym's funding of a project at Duke University. The only sponsored research agreement currently in place is Unidym's agreement with Duke University.

Depreciation expense was \$28,000 during the three months ended December 31, 2010, compared to \$71,000 in the comparable prior period. The decrease in depreciation expense is primarily due to certain lab equipment reaching the end of its useful life.

Other research expense was (\$19,000) during the three months ended December 31, 2010, compared to \$11,000 in the comparable prior period. Unidym experienced a credit in other research expense due to the write off of certain aged payables.

### ***Consulting – Three months ended December 31, 2010 compared to the three months ended December 31, 2009***

Consulting expense was \$231,000 during the three months ended December 31, 2010, compared to \$101,000 in the comparable prior period. The increase in consulting expense is primarily related to \$80,000 paid to the scientific founders of Ablaris as an upfront fee for their participation on the company's scientific advisory board representing half of the annual fees expected to be paid to these advisors.

The use of consultants with diverse backgrounds enabled the Company to accomplish various objectives without having to add full time staff and is expected to continue in fiscal 2011.

### ***Other income (expense) – Three months ended December 31, 2010 compared to the three months ended December 31, 2009***

Other income was \$517,000 during the three months ended December 31, 2010, compared to other expense of \$70,000 in the comparable prior period. The primary component of the other income in the current quarter was a noncash gain from the change in value of a derivative liability of \$465,270 (see Note 9 in the Consolidated Financial Statements for further information). Additionally the Company recognized equity in earnings of Nanotope, Inc., which reflected our share of its earnings for the period. Nanotope had a loss in the comparable prior period (see Note 2 in the Consolidated Financial Statements for further information).

### **Off-Balance Sheet Arrangements**

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

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

Not applicable

### **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 (the "Evaluation Date"), have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC 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, our internal control over financial reporting.

## **PART II—OTHER INFORMATION**

### **ITEM 1. LEGAL PROCEEDINGS**

From time to time, we may be involved in routine legal proceedings, as well as demands, claims and threatened litigation, which arise in the normal course of our business. We believe there is no litigation pending that could, individually or in the aggregate, have a material adverse effect on our results of operations or financial condition.

## ITEM 1A. RISK FACTORS

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

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

### **Risks Related to Our Financial Condition**

#### ***We have limited cash resources.***

Our plan of operations is to provide substantial amounts of development funding and financial support to our subsidiaries over an extended period of time. The Company adopted a cash conservation strategy that reduced corporate expenses and scaled back our financial support for our major subsidiaries. This has influenced Calando's decision to curtail internal R&D efforts for its drug delivery platforms and clinical candidates and seek partners for future development of its drug candidates. Management continues to operate under a plan to conserve cash resources while selectively investing in near-term opportunities. The Company's management anticipates that the Company will be able to satisfy the cash requirements of its operations through at least the next twelve months with current cash resources.

However, we may need to obtain additional capital to further our development efforts, and we intend to seek additional capital by out-licensing technology, selling one or more of our subsidiaries, securing funded partnerships, conducting one or more private placements of equity securities of the Company or our subsidiaries, selling additional securities in a registered public offering, or through a combination of one or more of such financing alternatives. However, there can be no assurance that we will be successful in any of these endeavors or, if we are successful, that such transactions will be accomplished on favorable terms. If we are unable to obtain additional capital, we will implement additional cash saving measures, which could materially harm our business and our ability to achieve cash flow in the future, including delaying or reducing implementation of certain aspects of our plan of operations. Even if we are successful in obtaining additional capital, because we and each subsidiary are separate entities, it could be difficult or impossible to allocate funds in a way that meets the needs of all entities.

#### ***The current financial market conditions may exacerbate certain risks affecting our business.***

Neither Arrowhead nor its subsidiaries generate substantial revenue, and our operations and research and development activities have been primarily funded through the sale of Company securities and securities of our subsidiaries. Current market conditions may impair our ability to raise the capital we need. If we are unable to secure additional cash resources from the sale of securities or other sources, it could become necessary to further slow, interrupt or close down development efforts. In addition, we may have to make additional reductions in expenses at the Company, which could impair our ability to manage our business and our subsidiaries. Even if investment capital is available to us, the terms may be onerous. If investment capital is needed and available to Calando or our other portfolio companies and the Company does not have the funds to make a pro rata investment, our ownership interest could be diluted. The sale of additional Company stock to fund operations could result in significant dilution to stockholders.

The strategy for eventual monetization of our subsidiaries will likely depend on our ability to exit our ownership position in each subsidiary in an orderly manner. Exit opportunities could include an initial public offering ("IPO") for the subsidiary or acquisition of the subsidiary by another company. During the recent economic recession, companies have been adopting conservative acquisition strategies and, even if there is interest, they may not be able to acquire our subsidiaries on terms that are attractive to us. These factors could reduce the realizable return on our investment if we are able to sell a subsidiary. Additionally, the market for IPOs continues to be very limited, which limits public exit opportunities for our subsidiaries.

#### ***We may not be able to maintain our listing on the NASDAQ Capital Market.***

Our Common Stock trades on the NASDAQ Capital Market, which has certain compliance requirements for continued listing of common stock. In the past, we have been subject to delisting procedures due to a drop in the price of our Common Stock. If our minimum closing bid price per share falls below \$1.00 for a period of 30 consecutive trading days in the future, we may again be subject to delisting procedures. We must also meet additional continued listing requirements contained in NASDAQ Marketplace Rule 5550(b), which requires that we have (1) a minimum of \$2,500,000 in stockholders' equity, (2) \$35,000,000 market value of listed securities held by non-affiliates or (3) \$500,000 of net income from continuing operations for the most recently completed fiscal year (or two of the three most recently completed fiscal years). As of February 1, 2011, based on our closing price as of that day, the market value of our securities held by non-affiliates was approximately \$63,000,000.

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As of the close of business on December 8, 2010, our Common Stock had a closing bid price of \$0.90 per share, and has had a bid price of less than \$1.00 for 30 consecutive days. Accordingly, on December 8, 2010, we received a deficiency letter from the NASDAQ Stock Market indicating that, based on the Company's closing bid price for the last 30 consecutive business days, the Company does not comply with the minimum bid price of \$1.00 per as set forth in NASDAQ Marketplace Rule 5550(a)(2).

In accordance with NASDAQ Marketplace Rule 5810(c)(3)(A), the Company has a grace period of 180 calendar days, or until June 6, 2011 to regain compliance with the minimum closing bid price requirement for continued listing. In order to regain compliance, the minimum closing price per share of the Company's common stock must be at least \$1.00 for a minimum of ten consecutive business days. In the event the Company does not regain compliance by June 6, 2011, the Company may be afforded an additional 180 day compliance period, provided it demonstrates that it meets all other applicable standards for initial listing on the NASDAQ Capital Market (except the bid price requirement). If the Company fails to regain compliance after the second grace period, the Company's stock will be subject to delisting by NASDAQ.

Delisting could reduce the ability of our shareholders to purchase or sell shares as quickly and as easily as they have done historically. For instance, failure to obtain listing on another market or exchange may make it more difficult for traders to sell our securities. Broker-dealers may be less willing or able to sell or make a market in our Common Stock. Not maintaining our NASDAQ Capital Market listing may (among other effects):

- Result in a decrease in the trading price of our Common Stock;
- Lessen interest by institutions and individuals in investing in our Common Stock;
- Make it more difficult to obtain analyst coverage; and
- Make it more difficult for us to raise capital in the future.

***We have debt on our consolidated balance sheet, which could have consequences if we were unable to repay the principal or interest due.***

Calando has a \$500,000 unsecured convertible promissory note outstanding. The note bears 10% interest accrued annually, matured in November 2010 and has been temporarily extended. The note is payable at two times face value in certain events, including, among other things, the license of Calando's siRNA delivery system. An amendment to extend the note is currently being negotiated, however if the note is not extended, the Company has the ability and intent to repay this note. However, if Calando is unable to meet its obligations to the bearer of the note, Arrowhead may also not be in a position to lend Calando sufficient cash to pay such demand note. Unless other sources of financing become available, this could result in Calando's insolvency.

***Our subsidiaries have entered into technology license agreements with third parties that require us to satisfy obligations to keep them effective and, if these agreements are terminated, our technology and our business would be seriously and adversely affected.***

Through our subsidiaries, we have entered into exclusive, long-term license agreements with California Institute of Technology, Alnylam Pharmaceuticals, Inc. and other entities to incorporate their proprietary technologies into our proposed products. These license agreements require us to pay royalties and satisfy other conditions, including conditions related to the commercialization of the licensed technology. We cannot give any assurance that we will successfully incorporate these technologies into marketable products or, if we do, whether sales will be sufficient to recover the amounts that we are obligated to pay to the licensors. Failure by us to satisfy our obligations under these agreements may result in the modification of the terms of the licenses, such as by rendering them non-exclusive, or may give our licensors the right to terminate their respective agreement with us, which would limit our ability to implement our current business plan and harm our business and financial condition.

### **Risks Related to Our Business Model and Company**

***We are a development stage company and our success is subject to the substantial risks inherent in the establishment of new business ventures.***

The implementation of our business strategy is still in the development stage. We currently own interests in several biotech companies. Our business and operations should be considered to be in the development stage and subject to all of the risks inherent in the establishment of a new business venture. Accordingly, our intended business and operations may not prove to be successful in the near future, if at all. Any future success that we might enjoy will depend upon many factors, several of which may be beyond our control, or which cannot be predicted at this time, and which could have a material adverse effect upon our financial condition, business prospects and operations, and the value of an investment in the Company.

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### ***Calando may be unable to find additional partners to license its technologies.***

As part of our cash conservation strategy that scales back our financial support for Calando at this time, Calando has closed its laboratory facilities, eliminated its technical employees and has shifted its focus to licensing its technologies to partners. Currently, Calando has one licensing partner, but there can be no assurance that Calando will be able to find additional partners to license its technologies upon terms favorable to Calando.

### ***We may lose a considerable amount of control over our intellectual property and may not receive anticipated revenues in strategic transactions involving our subsidiaries, particularly where the consideration is contingent on the achievement of development or sales milestones after closing.***

The business model of our subsidiaries has historically been to develop new nanotechnologies and to exploit the intellectual property created through the research and development process to develop commercially successful products. Calando has licensed a portion of its technology to Cerulean Pharma, Inc. and intends to pursue further licensing arrangements with other companies. A significant portion of the potential value from these licenses is tied to the achievement of the development and sales milestones, which we cannot control. Similarly, the majority of the consideration, up to \$140 million, potentially payable by Wisepower in connection with our sale of Unidym is tied to the achievement of commercialization milestones, over which we cannot exercise control. Although Wisepower and Cerulean are required to use certain minimum efforts to achieve the post-closing milestones, we cannot control whether they actually achieve these milestones. If the acquirers fail to achieve performance milestones, we may not receive a significant portion of the total value of any sale, license or other strategic transaction.

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

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

### ***Because we have not generated significant revenues to cover our operating expenses, we are dependent on raising additional capital from investors or lenders.***

To date, we have only generated a small amount of revenue as a result of our current plan of operations. Given our strategy of financing new and unproven technology research, there is no assurance we would ever generate significant revenues. Our revenue-producing opportunities depend on liquidity events within our subsidiaries, such as a sale of the subsidiary, licensing transaction or initial public offering. We cannot be certain that we will be able to create a liquidity event for any of our subsidiaries and, even if we are able to, we cannot be certain of the timing or the potential proceeds to Arrowhead as a stockholder. Accordingly, our revenue prospects are uncertain and we must plan to finance our operations through the sales of equity securities or debt financing. If we are unable to continue raising operating capital from these sources, we may be forced to curtail or cease our operations.

### ***We will need to achieve commercial acceptance of our applications to generate revenues and achieve profitability.***

Even if our research and development yields technologically feasible applications, we may not successfully develop commercial products, and even if we do, we may not do so on a timely basis. Even if our research efforts are technologically successful, it could take several years before this technology will be commercially viable. During this period, superior competitive technologies may be introduced or customer needs may change, which could diminish or extinguish the commercial uses for our applications. The degree to which potential consumers will adopt our products is uncertain. We cannot predict when significant commercial market acceptance for our products will develop, if at all, and we cannot reliably estimate the projected size of any such potential market. If markets fail to accept our products, we may not be able to generate revenues from the commercial application of our technologies. Our revenue growth and achievement of profitability will depend substantially on our ability to introduce new technological applications to manufacturers for products accepted by customers. If we are unable to cost-effectively achieve acceptance of our technology among the medical establishment and patients, or if the associated products do not achieve wide market acceptance, our business will be materially and adversely affected.

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### ***We will need to establish additional relationships with strategic and development partners to fully develop and market our products.***

We do not possess all of the resources necessary to develop and commercialize products that may result from our technologies on a mass scale. Unless we expand our product development capacity and enhance our internal marketing capability, we will need to make appropriate arrangements with strategic partners to develop and commercialize current and future products. If we do not find appropriate partners, or if our existing arrangements or future agreements are not successful, our ability to develop and commercialize products could be adversely affected. Even if we are able to find collaborative partners, the overall success of the development and commercialization of product candidates in those programs will depend largely on the efforts of other parties and is beyond our control. In addition, in the event we pursue our commercialization strategy through collaboration, there are a variety of technical, business and legal risks, including:

- A development partner would likely gain access to our proprietary information, potentially enabling the partner to develop products without us or design around our intellectual property;
- We may not be able to control the amount and timing of resources that our collaborators may be willing or able to devote to the development or commercialization of our product candidates or to their marketing and distribution; and
- Disputes may arise between us and our collaborators that result in the delay or termination of the research, development or commercialization of our product candidates or that result in costly litigation or arbitration that diverts our management's resources.

The occurrence of any of the above events or other related events not foreseen by us could impair our ability to generate revenues and harm our business and financial condition.

### ***We need to retain a controlling interest, by ownership, contract or otherwise, in Calando in order to avoid potentially being deemed an investment company under the Investment Company Act of 1940.***

Companies that have more than 100 U.S. stockholders or are publicly traded in the U.S. or are, or hold themselves out as being, engaged primarily in the business of investing, reinvesting or trading in securities are subject to regulation under the Investment Company Act of 1940. Unless a substantial part of our assets consists of, and a substantial part of our income is derived from, interests in majority-owned subsidiaries and companies that we primarily control, whether by contract or otherwise, we may be required to register and become subject to regulation under the Investment Company Act. Because Investment Company Act regulation is, for the most part, inconsistent with our strategy of actively managing and operating our portfolio companies, a requirement to operate our business as a registered investment company would restrict our operations and require additional resources for compliance.

If we are deemed to be, and are required to register as, an investment company, we will be forced to comply with substantive requirements under the Investment Company Act, including:

- Limitations on our ability to borrow;
- Limitations on our capital structure;
- Restrictions on acquisitions of interests in associated companies;
- Prohibitions on transactions with our affiliates;
- Restrictions on specific investments; and
- Compliance with reporting, record keeping, voting, proxy disclosure and other rules and regulations.

In order to avoid regulation under the Investment Company Act, we may choose to make additional pro rata investments in Calando and Ablaris to maintain a controlling interest.

### ***We may not be able to effectively secure first-tier research and development projects when competing against other ventures.***

Our business plan requires that we identify and successfully acquire promising technologies. However, we compete with a substantial number of other companies that fund early-stage, scientific research at universities to secure rights to promising technologies. In addition, many venture capital firms and other institutional investors invest in companies seeking to commercialize various types of emerging technologies. Many of these companies have greater financial, scientific and commercial resources than us. Therefore, we may not be able to secure the opportunity to finance first-tier research and commercialization projects. Furthermore, should any commercial undertaking by us prove to be successful, there can be no assurance competitors with greater financial resources will not offer competitive products and/or technologies.

### ***We rely on outside sources for various components and processes for our products.***

We rely on third parties for various components and processes for our products. While we try to have at least two sources for each component and process, we may not be able to achieve multiple sourcing because there may be no acceptable second source, other companies may choose not to work with us, or the component or process sought may be so new that a second source does not exist, or does not exist on acceptable terms. In addition, due to the continued tightening of global credit markets, there may be a disruption or delay in the performance of our third-party contractors, suppliers or collaborators. If such third parties are unable to

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satisfy their commitments to us, our business would be adversely affected. Therefore, it is possible that our business plans will have to be slowed down or stopped completely at times due to our inability to obtain required raw materials, components and outsourced processes at an acceptable cost, if at all, or to get a timely response from vendors.

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

Our model to integrate and oversee the strategic direction of various subsidiaries and research and development projects presents many risks, including:

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

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

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

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

### ***Our success depends on the attraction and retention of senior management and scientists with relevant expertise.***

Our future success will depend to a significant extent on the continued services of our key employees, including Dr. Anzalone, our CEO. In addition, we rely on key executives to manage each of our subsidiaries. We do not maintain key man life insurance for any of our executives. Our ability to execute our strategy also will depend on our ability to continue to attract and retain qualified scientists and additional managerial personnel. If we are unable to find, hire and retain qualified individuals, we could have difficulty implementing our business plan in a timely manner, or at all. We may need to terminate additional employees, including senior management and technical employees, or such employees may seek other employment which may result in the loss of valuable know-how and that development efforts could be negatively affected.

### ***Members of our senior management team and Board may have a conflict of interest in also serving as officers and/or directors of our subsidiaries.***

While we expect that our officers and directors who also serve as officers and/or directors of our subsidiaries will comply with their fiduciary duties owed to our stockholders, they may have conflicting fiduciary obligations to our stockholders and the minority stockholders of our subsidiaries. Specifically, Dr. Anzalone, our CEO and President, is the founder, CEO and a board member of each of Nanotope, a regenerative medicine company in which the Company owns a 23% interest, and Leonardo, a drug delivery company in which the Company owns a 5% interest. Dr. Anzalone owns a noncontrolling interest in the stock of each of Nanotope and Leonardo. To the extent that any of our directors choose to recuse themselves from particular Board actions to avoid a conflict of interest, the other members of our Board of Directors will have a greater influence on such decisions.

### ***Our efforts pertaining to the pharmaceutical industry are subject to additional risks.***

Our subsidiary, Calando, as well as minority investments Nanotope and Leonardo, are focused on technology related to new and improved pharmaceutical candidates. Drug development is time consuming, expensive and risky. Even product candidates that appear promising in the early phases of development, such as in early animal and human clinical trials, often fail to reach the market for a number of reasons, such as:

- Clinical trial results may be unacceptable, even though preclinical trial results were promising;
- Inefficacy and/or harmful side effects in humans or animals;
- The necessary regulatory bodies, such as the U.S. Food and Drug Administration, may not approve our potential product for the intended use; and
- Manufacturing and distribution may be uneconomical.

Clinical trial results are frequently susceptible to varying interpretations by scientists, medical personnel, regulatory personnel, statisticians and others, which often delays, limits, or prevents further clinical development or regulatory approvals of potential products. Additionally, clinical trials can take years to complete site selection and the enrollment of patients. If the subsidiaries' technology is not cost effective or if the associated drug products do not achieve wide market acceptance, the value of a subsidiary would be materially and adversely affected.

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***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 U.S. Both private and government entities are seeking ways to reduce or contain healthcare costs. Numerous proposals that would affect changes in the U.S. 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 our minority investments, Nanotope and Leonardo, to market products successfully (either on their own or in partnership with other companies) 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 the products of these companies. Cost containment measures instituted by healthcare providers and any general healthcare reform could affect their 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 or any anticipated milestone or royalty payments. 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 minority investments and actual market values.***

Our investments in our subsidiaries and noncontrolling interests were the result of negotiation with subsidiary management and equity holders, and the investment valuations may not always have been 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 few comparable public companies to provide meaningful valuation comparisons. Accordingly, we have always 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 different than previously determined by us, which could materially and adversely impair the value of our Common Stock.

### **Risks Related to Our Intellectual Property**

***Our ability to protect our patents and other proprietary rights is uncertain, exposing us to the possible loss of competitive advantage.***

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

***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. We cannot be certain 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.

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***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. 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. We cannot be certain 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.

***The technology licensed by our subsidiaries from various third parties may be subject to government rights and retained rights of the originating research institutions.***

We license technology from Caltech, and other universities and companies. Our licensors may have obligations to government agencies or universities. Under their agreements, a government agency or university may obtain certain rights over the technology that we have developed and licensed, including the right to require that a compulsory license be granted to one or more third parties selected by the government agency.

In addition, our collaborators often retain certain rights under their agreements with us, including the right to use the underlying technology for noncommercial academic and research use, to publish general scientific findings from research related to the technology, and to make customary scientific and scholarly disclosures of information relating to the technology. It is difficult to monitor whether our collaborators limit their use of the technology to these uses, and we could incur substantial expenses to enforce our rights to our licensed technology in the event of misuse.

### **Risks Related to Regulation of Our Products**

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

Our operations, including our research and development and our commercialization efforts, such as clinical trials, manufacturing and distribution, are subject to extensive federal and state regulation. While we have developed and instituted a corporate compliance program, we cannot be assured that the Company or our employees are, or will be in compliance with all potentially applicable federal and state regulations or laws. If we fail to comply with any of these regulations or laws, a range of actions could result, including, but not limited to, the termination of clinical trials, the failure to approve a commercialized product, significant fines, sanctions, or litigation, any of which could harm our business and financial condition.

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

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

### **Risks Related to our Stock**

***Stockholder equity interest may be substantially diluted in any additional financing.***

Our certificate of incorporation authorizes the issuance of 145,000,000 shares of Common Stock and 5,000,000 shares of Preferred Stock, on such terms and at such prices as our Board of Directors may determine. As of December 31, 2010, 71,806,694 shares of Common Stock and no shares of Preferred Stock were issued and outstanding. As of December 31, 2010, 7,467,188 shares were reserved for issuance upon exercise of outstanding options. As of December 31, 2010, there were warrants outstanding to purchase 25,586,038 shares of Common Stock. The issuance of additional securities in financing transactions by us or through the exercise of options or warrants will dilute the equity interests of our existing stockholders, perhaps substantially, and might result in dilution in the tangible net book value of a share of our Common Stock, depending upon the price and other terms on which the additional shares are issued.

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***Our Common Stock price has fluctuated significantly over the last several years and may continue to do so in the future, without regard to our results of operations and prospects.***

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

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

We will not have control over many of these factors but expect that they may influence our stock price. As a result, our stock price may be volatile and any extreme fluctuations in the market price of our Common Stock could result in the loss of all or part of your investment.

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

Although our Common Stock is listed for trading on the NASDAQ Capital Market, historically our securities have been relatively thinly traded. Investor trading patterns could serve to exacerbate the volatility of the price of the stock. For example, mandatory sales of our Common Stock by institutional holders could be triggered if an investment in our Common Stock no longer satisfies their investment standards and guidelines. Accordingly, it may be difficult to sell shares of Common Stock quickly without significantly depressing the value of the stock. Unless we are successful in developing continued investor interest in our stock, sales of our stock could continue to result in major fluctuations in the price of the stock.

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

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

***The market price of our Common Stock may be adversely affected by the sale of shares by our management or founding stockholders.***

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

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

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

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

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

***Our Board of Directors has the authority to issue shares of “blank check” preferred stock, which may make an acquisition of the Company by another company more difficult.***

We have adopted and may in the future adopt certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of the Company that a holder of our Common Stock might consider in its best interest. Specifically, our Board of Directors, without further action by our stockholders, currently has the authority to issue up to 5,000,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares (“blank check” preferred). Such preferred stock may have rights, including economic rights, senior to our Common Stock.

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

All information under this Item has been previously reported on our Current Reports on Form 8-K.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. (REMOVED AND RESERVED)**

**ITEM 5. OTHER INFORMATION**

None.

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**ITEM 6. EXHIBITS**

<u>Exhibit Number</u>	<u>Document Description</u>
10.1	License and Enforcement Agreement* +
10.2	CNT Production Patent License Agreement* +
10.3	Intellectual Property Purchase and Business Cooperation Agreement* +
10.4	Patent and Technology License Agreement* +
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*

\* Filed herewith

+ Certain provisions of this Exhibit have been omitted pursuant to a request for confidential treatment

**SIGNATURE**

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: February 10, 2010

ARROWHEAD RESEARCH CORPORATION

By: /s/ KENNETH A. MYSZKOWSKI

\_\_\_\_\_  
Kenneth A. Myszkowski  
Chief Financial Officer

**CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH “[\*\*\*]”. A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT UNDER RULE 406 OF THE SECURITIES ACT OF 1933.**

## **LICENSE AND ENFORCEMENT AGREEMENT**

This **LICENSE AND ENFORCEMENT AGREEMENT** (this “Agreement”), dated as of December \_\_, 2010, is entered into by and between Unidym, Inc., a Delaware Corporation having a principal place of business at 1244 Reamwood Avenue, Sunnyvale, CA 94089, USA (“Unidym”), and Samsung Electronics Co., Ltd., a company organized under the laws of the Republic of Korea and having a principal place of business at 416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, the Republic of Korea (“Samsung”). Unidym and Samsung may be referred to herein as a “Party” or, collectively, as the “Parties.”

**WHEREAS**, Unidym is engaged in the research, development, marketing and sale of certain carbon nanotube and graphene based technology and is the owner of and licensee to certain patents and patent applications relating to such carbon nanotube and graphene based technology under exclusive license agreements with certain universities;

**WHEREAS**, Samsung desires to obtain a non-exclusive license to patents and patent applications owned or controlled by Unidym, and Unidym desires to grant to Samsung such non-exclusive license, on and subject to the terms and conditions set forth herein;

**NOW THEREFORE**, in consideration of the mutual promises and covenants set forth herein, and, for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

### **1. DEFINITIONS**

#### 1.1 Definitions.

“Affiliate” shall mean any entity directly or indirectly controlled by, controlling or under common control with, a Party to this Agreement. For purposes of this definition, “control” (including, with correlative meanings, “controlled by,” “controlling” and “under common control with”) means (a) possession, direct or indirect, of the power to direct or cause direction of the management or policies of an entity (whether through ownership of securities or other ownership interests, by contract or otherwise), or (b) beneficial ownership of \*\*\* percent (\*\*\*) or more of the voting securities or other ownership interest (whether directly or pursuant to any option, warrant or other similar arrangement) or other comparable equity interests of an entity.

“Business Day” shall mean a day other than a Saturday, Sunday, or bank or other public holiday in the State of California, USA or Seoul, Republic of Korea.

“Claim” shall mean any claim, action, lawsuit or other proceeding.

“CNT Production Patent License Agreement” shall mean the agreement of even date herewith entered into by and between Unidym and Samsung relating to sole license of Unidym CNT Production Patents.

“Confidential Information” shall have the meaning set forth in Section 11.1.

“Contract” shall mean any contract, license, sublicense, purchase, sale, permit, loan, security, pledge, instrument and any other arrangement or any commitment to enter into any of the foregoing (in each case, whether written or oral).

“Control” shall mean, with respect to any intellectual property rights, ownership or possession of the legal authority or right of a Party hereto (or any of its Affiliates) to grant a license or sublicense of any such intellectual property right to the other Party or to otherwise disclose proprietary or trade secret information to the other Party, without breaching the terms of any Contract with a Third Party or infringing or misappropriating the intellectual property rights of a Third Party.

“Effective Date” shall have the meaning set forth in Section 2.1.

“Enforcement Action” shall mean any and all actions required to make a Claim.

“Existing Unidym Outbound License Agreements” shall mean the contracts executed before the Effective Date and set forth on Exhibit J, pursuant to which Third Parties have and continue to maintain in the future licenses to both Unidym In-Licensed Patents and patents owned by Unidym prior to this Transaction.

“Field of Use” shall mean \*\*\* in pursuant to the Unidym Inbound Agreements and Unidym In-Licensor Consents and \*\*\*.

“Intellectual Property Purchase and Business Cooperation Agreement” shall mean the agreement of even date herewith entered into by and between Unidym and Samsung relating to purchase and grant-back license of Unidym Patents.

“License and Enforcement Agreement Disclosure Schedules” shall mean the disclosure schedules attached hereto as Exhibit L.

“Licensed Products” shall mean any products, processes or services covered by the Unidym In-Licensed Patents.

“Liens” shall mean, with respect to any property or asset, any mortgage, pledge, security interest, encumbrance, claim, lien, or charge of any kind in respect of such property or asset (including, without limitation, any conditional sale or option), any sale of receivables with recourse against such seller, or any agreement to file any of the foregoing.

“Losses” shall have the meaning set forth in Section 10.1.

“Patent Rights” shall mean all patents, patent applications, patent disclosures and equivalents thereof, whether domestic or foreign, including all continuations, continuations-in-part, divisionals, provisionals and renewals, and letters patent granted with respect to any of the foregoing, and all reissues, re-examinations and extensions thereof.

“Recovery” shall have the meaning set forth in Section 9.1.

“Subsidiary” shall mean, with respect to any specified Party, any entity of which securities or other interests having the power to elect a majority of that entity’s board of directors or similar governing body, or otherwise having the power to direct the business and policies of that entity (other than securities or other interests having such power only upon the happening of a contingency that has not occurred) are held by such specified Party or one or more Subsidiaries of such specified Party.

“Third Party” shall mean any person or entity other than one of the Parties or an Affiliate of a Party.

“Transaction Documents” shall mean, collectively, this Agreement, the Intellectual Property Purchase and Cooperation Agreement and the CNT Production Patent License Agreement.

“Unidym CNT Production Patents” shall mean the patent(s) and patent application (s) owned by Unidym or its Subsidiaries as of the Effective Date and listed on Exhibit A of the CNT Production Patent Agreement.

“Unidym Inbound Agreements” shall mean the Contracts set forth on Exhibit B, pursuant to which Unidym in-licenses the Unidym In-Licensed Patents from the Unidym In-Licensors.

“Unidym In-Licensor” means any entity that has granted a license to Unidym for the Unidym In-Licensed Patents.

“Unidym In-Licensor Consents” shall mean the three-party letter agreements between Unidym, Samsung and the licensors under the Unidym Inbound Agreements, together with corresponding amendments required by Samsung and specific to each such Unidym Inbound Agreement, in the form agreed to by Samsung, Unidym and the applicable Unidym In-Licensor and attached hereto as Exhibits C through I. Any additional terms imposed by the Unidym In-Licensors are also set forth in such exhibits.

“Unidym In-Licensed Patents” shall mean \*\*\* licensed to Unidym by the Unidym In-Licensors pursuant to the Unidym Inbound Agreements, including the Patent Rights listed on Exhibit A, and further including any patents that may issue from, or claim priority to or through, the applications included in such Patent Rights.

“Unidym \*\*\* Future Inbound Agreements” shall mean any and all Contracts between Unidym and a Third Party entered into after the Effective Date and pursuant to which Unidym is granted a license (with the right to grant further sublicenses) under Patent Rights of such Third Party \*\*\*.

“Unidym \*\*\* Future Inbound Agreements” shall mean any and all Contracts between Unidym and a Third Party entered into after the Effective Date and pursuant to which Unidym is granted a license (with the right to grant further sublicenses) under Patent Rights of such Third Party \*\*\*.

“Unidym Patents” shall mean all Patent Rights existing anywhere in the world owned by Unidym or its Subsidiaries as of the Effective Date, including all the Patent Rights listed on Exhibit A of the Intellectual Property Purchase and Business Cooperation Agreement and further including any patents that may issue from, or claim priority to or through, the applications included in such Patent Rights, except for the Unidym CNT Production Patents which will be retained by Unidym.

1.2 Other Definitional and Interpretative Provisions. The words “hereof,” “herein,” and “hereunder” and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. References to Sections, Exhibits and Schedules are to Sections, Exhibits and Schedules of this Agreement unless otherwise specified. All Exhibits and Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein, shall have the meaning as defined in this Agreement. Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation,” whether or not they are in fact followed by those words or words of like import. When the words “not to be unreasonably withheld” are used in this Agreement, they shall be deemed to be followed by the phrase “, conditioned or delayed,” whether or not they are in fact followed by that phrase or a phrase of like import. References to any agreement or contract are to that agreement or contract as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof. References to any Third Party include the successors and permitted assigns of that Third Party. References from or through any date mean, unless otherwise specified, from and including or through and including, respectively. References to “law” or “laws” shall be deemed to include any and all applicable laws.

## 2. **EFFECTIVENESS OF AGREEMENT**

2.1 This Agreement shall come into effect upon receipt by Samsung of all deliverables set forth in Section 2.3 below, provided that the conditions set forth in Section 2.2 have also been met (the date of satisfaction of all such conditions and receipt of all such deliverables being the “Effective Date”). Samsung may in its sole and absolute discretion waive the satisfaction of any such conditions or the delivery of any such deliverables.

2.2 The effectiveness of this Agreement shall be subject to each of the following conditions:

(a) Accuracy of Representations and Warranties. The representations and warranties of Unidym set forth in Section 6.1 and of Samsung set forth in Section 6.2 shall be true and correct in all material respects as of the Effective Date.

(b) Litigation. As of the Effective Date, no action, suit, litigation, proceeding or investigation shall have been instituted, be pending or threatened against Unidym or any of its Affiliates challenging or seeking to make illegal, to delay or otherwise directly or indirectly to restrain or prohibit the consummation of the transactions contemplated by this Agreement and the other Transaction Documents, or seeking to obtain damages in connection with the transactions contemplated by this Agreement or the other Transaction Documents.

(c) No Loss or Destruction. As of the Effective Date, no material loss, damage, destruction, rejection or expiration shall have occurred to the Unidym In-Licensed Patents regardless of whether covered by insurance.

2.3 The effectiveness of this Agreement shall be subject to Unidym having delivered to Samsung the following:

(a) a certificate signed on behalf of Unidym by its Chief Executive Officer, dated the Effective Date, certifying that the conditions specified in Sections 2.2(a) through (c) have been satisfied in all respects;

(b) a certificate signed by the corporate secretary of Unidym, dated the Effective Date, attaching the resolutions and consents of the board of directors of Unidym and, to the extent required, each of its Affiliates authorizing the execution and delivery of, and the consummation of the transactions contemplated by, this Agreement and the other Transaction Documents; and

(c) all Unidym In-Licenser Consents, duly executed and delivered by all parties thereto (other than Samsung).

### 3. GRANT OF RIGHTS

3.1 License Grant under Unidym In-Licensed Patents. Subject to the terms and conditions of this Agreement and Unidym In-Licenser Consents, Unidym hereby grants to Samsung a worldwide, perpetual, non-exclusive, \*\*\* under the Unidym In-Licensed Patents in the Field of Use to research, develop, make, have made, import, have imported, use, have used, sell, have sold, offer for sale, have offered for sale and otherwise exploit Licensed Products.

#### 3.2 Addition of Unidym In-Licensed Patents.

(a) In the event Unidym has the opportunity to obtain a license (A) within \*\*\* (\*\*\*) years following the Effective Date, to any Patent Rights related to carbon nanotubes or graphene solely owned by a Third Party (because solely created, invented or developed by such Third Party) pursuant to a development agreement, collaboration agreement, evaluation agreement or other similar Contract with Unidym, as well as Unidym \*\*\* Future Inbound Agreement or (B) \*\*\*, to any Patent Rights related to carbon nanotubes or graphene of a Third Party pursuant to a Unidym \*\*\* Future Inbound Agreement, then in each case of (A) and (B), Unidym shall (1) use its best efforts to negotiate terms that permit Unidym to sublicense such Patent Rights to Samsung, \*\*\*, under Section 3.1 of this Agreement and (2) promptly notify Samsung of the detailed

status of such negotiation. Following Samsung's confirmation that such terms permit the sublicensing of such Patent Rights \*\*\* under Section 3.1 of this Agreement, such Patent Rights shall be included in the Unidym In-Licensed Patents licensed to Samsung under Section 3.1 of this Agreement.

(b) In the event Samsung, Unidym, and the Third Party licensor of the Patent Rights described under Section 3.2(a) are unable to agree on terms of the license grant to Unidym that would permit the further sublicensing of such Patent Rights to Samsung \*\*\*, then Unidym hereby grants to Samsung a right of first refusal to obtain a sublicense from Unidym to such Patent Rights on \*\*\*.

### 3.3 Sublicensing.

(a) Samsung shall have the right to grant sublicenses of its rights to the Unidym In-Licensed Patents in the Field of Use to \*\*\*, provided that each such Affiliate or entity sublicensee must comply with the terms of this Agreement.

(b) Except as otherwise agreed in writing by the Parties, Samsung shall not sublicense all or any portion of its rights to the Unidym In-Licensed Patents \*\*\*.

## 4. **PAYMENTS**

4.1 Subject to satisfaction of conditions in Article 2, Samsung shall pay to Unidym for the grant of license pursuant to Section 3.1 and for other obligations under this Agreement:

\* \*\*\* US Dollars (US\$\*\*\*) within thirty (30) Business Days from the Effective Date.

4.2 Unidym shall send Samsung an invoice for any payment to be made by Samsung to Unidym under this Agreement sufficiently early for Samsung to receive such invoice no later than thirty (30) Business Days before the due date specified for such payment herein. Each invoice shall clearly reference this Agreement and indicate the invoiced amount and what such amount relates to.

4.3 The payment hereunder by Samsung to Unidym shall be made by electronic transfer in immediately available funds via either a bank wire transfer or any other means of electronic funds transfer, at Samsung's election, to such bank account as Unidym may designate in a written notice at least thirty (30) Business Days before the payment is due.

## 5. **TAX**

5.1 Each Party shall be solely responsible for paying any and all taxes, levies, imposts, duties or fees (collectively, "Taxes") imposed by the United States in the case of Unidym and by the Republic of Korea in the case of Samsung in connection with the transactions contemplated by this Agreement and the performance of such Party's obligations under this Agreement.

5.2 With respect to withholding Taxes, Samsung shall, if applicable, pay the amount of Tax imposed by the Republic of Korea on any payments to Unidym under this Agreement,

transmit such amount of withholding Tax to the appropriate authority, and promptly deliver to Unidym applicable certification or other evidence of such withholding Tax payments. Such withheld amounts shall be treated for all purposes of this Agreement as having been paid to Unidym.

## 6. REPRESENTATIONS AND WARRANTIES

6.1 Representations and Warranties of Unidym. As of the Effective Date, Unidym hereby represents and warrants to Samsung, as a material inducement for Samsung's entry into this Agreement, as follows:

(a) Organization. Unidym is a corporation validly existing and in good standing under the laws of its jurisdiction of incorporation or formation.

(b) Authority. Unidym's execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby has been duly authorized by all necessary action on the part of Unidym and do not and shall not violate any provisions of its organizational documents. This Agreement constitutes the valid and binding agreement and obligation of Unidym, enforceable against Unidym in accordance with its terms, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect, and to general equitable principles.

(c) No Conflict or Violations. The execution and delivery of this Agreement, the consummation of the transactions contemplated hereby, and the performance of, fulfillment of and compliance with the terms and conditions hereof by Unidym does not and shall not: (i) violate any statute, law, rule, regulation, order, writ, injunction or decree of any court or governmental authority, including any applicable import, export and re-export laws and regulations; (ii) violate or conflict with or constitute a default under any Contract to which Unidym is a party as of the Effective Date, including the Unidym Inbound Agreements; or (iii) result in the creation or imposition of any Lien upon any of the Unidym In-Licensed Patents, except for any Lien created in favor of Samsung by this Agreement, the IP Purchase and Cooperation Agreement or the CNT Production Patent License Agreement.

(d) Governmental Consents. No consent, approval or authorization of, or designation, declaration or filing with, any governmental authority on the part of Unidym or any of its Affiliates is required in connection with the execution and delivery of this Agreement and the other Transaction Documents by Unidym, or the consummation by Unidym and its Affiliates of the transactions contemplated hereby or thereby.

(e) No Broker. To the extent Unidym or any of its Affiliates has engaged any corporation, firm or other Third Party who is entitled to any fee or commission as a finder or a broker in connection with the negotiation of this Agreement or the other Transaction Documents or the consummation of the transactions contemplated hereby and thereby, Unidym shall be responsible for any such fee or commission.

(f) Unidym In-Licensed Patents.

- (i) Unidym has the full right, power and authority to grant to Samsung the license of Section 3.1.
- (ii) (A) Unidym has a valid and subsisting exclusive license (with the right to sublicense) to the Unidym In-Licensed Patents, (B) except for Luna Innovations, the Unidym In-Licensors are the sole licensors of Unidym with respect to the Unidym In-Licensed Patents, and (C) except for the Unidym Inbound Agreements and the license agreement between Luna Innovations and Unidym, there are no other Contracts pursuant to which Unidym in-licenses Patent Rights of Third Parties.
- (iii) Exhibit B contains a complete and accurate list of all of the Contracts pursuant to which Unidym in-licenses the Unidym In-Licensed Patents and Unidym has provided Samsung true and complete copies thereof, together with any amendments, waivers or other changes thereto, whether written or oral (all of which are disclosed on Exhibit L).
- (iv) Except as set forth in Schedule 6.1(f)(v), Unidym has not granted to any Third Party any ownership, license or other rights in the Unidym In-Licensed Patents.
- (v) There are no claims, actions, suits, proceedings, investigations or inquiries before any court, arbitrator or governmental or regulatory official or office pending, or, to Unidym's knowledge, threatened involving the Unidym In-Licensed Patents, including any of the foregoing challenging the ownership, validity or enforceability of any of the Unidym In-Licensed Patents. No Unidym In-Licensed Patents is subject to any judgment, order or decree entered in any lawsuit or proceeding that would prohibit the grant to Samsung of the license of Section 3.1.
- (vi) With respect to each Contract within the Unidym Inbound Agreements: (A) such Contract is legal, valid, binding, and enforceable; (B) such Contract shall continue to be legal, valid, binding, and enforceable on identical terms (except as modified pursuant to the In-Licensor Consents) immediately following the consummation of the transactions contemplated hereby; (C) Unidym has not subjected any such Contract to any Liens, (D) none of the parties to any such Contract is in breach or default; (E) no party to any such Contract has received any written or oral notice from the other party under such Contract (1) terminating or providing notice of termination of such Contract, (2) alleging any material breach of or default under such Contract by such party or (3) asserting the existence of any facts, circumstances or events which alone or together with other facts, circumstances or events

could reasonably be expected (with or without the giving of notice or passage of time or both) to give rise to a material breach of or default under or right to terminate such Contract; (F) none of the parties to any such Contract has taken any action which, with notice or lapse of time, would constitute a breach or default or would permit termination, modification or acceleration under the Contract; and (G) none of the parties to any such Contract has repudiated any provision of such Contract.

6.2 Representations and Warranties of Samsung. As of the Effective Date, Samsung hereby represents and warrants to Unidym, as a material inducement for Unidym's entry into this Agreement, as follows:

(a) Organization. Samsung is a corporation validly existing and in good standing under the laws of its jurisdiction of incorporation or formation.

(b) Authority. Samsung's execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of Samsung and do not and shall not violate any provisions of its organizational documents. This Agreement constitutes the valid and binding agreement and obligation of Samsung, enforceable against Samsung in accordance with its terms, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect, and to general equitable principles.

## 7. UNIDYM COVENANTS

7.1 Unidym shall take any and all actions and prepare, execute, deliver and file any and all documents or instruments which are necessary or desirable to diligently and actively prosecute and maintain the Unidym In-Licensed Patents.

7.2 Unidym shall not, whether by affirmative action or through failure to act, (a) waive, amend, cancel or terminate, exercise or fail to exercise, any of its material rights under the Unidym Inbound Agreements; or (b) amend, modify, restate, cancel, supplement, terminate or waive any provision of any Unidym Inbound Agreement, or grant any consent thereunder, or agree to do any of the foregoing, including, without limitation, entering into any agreement with the Unidym In-Licensors under the provisions of such Unidym Inbound Agreement, in each case which could reasonably be expected, individually or cumulatively, to have a material adverse effect on the rights and licenses granted to Samsung under this Agreement.

7.3 Promptly (but in no event later than five (5) Business Days) after (a) receiving written or oral notice from a licensor under any Unidym Inbound Agreement (i) terminating or providing notice of termination of such Unidym Inbound Agreement, (ii) alleging any material breach of or default under such Unidym Inbound Agreement by Unidym, or (iii) asserting the existence of any facts, circumstances or events which alone or together with other facts, circumstances or events could reasonably be expected (with or without the giving of notice or passage of time or both) to give rise to a material breach of or default under or right to terminate

such Unidym Inbound Agreement, or (b) Unidym otherwise having knowledge of any fact, circumstance or event which alone or together with other facts, circumstances or events could reasonably be expected (with or without the giving of notice or passage of time or both) to give rise to a material breach of or default under such Unidym Inbound Agreement by Unidym or a right to terminate such Unidym Inbound Agreement by such licensor, in each case, Unidym shall immediately provide a written notice to Samsung describing in reasonable detail the relevant breach, default or termination event, including a copy of any written notice received from such licensor, and describing the corrective action Unidym proposes to take. Unidym shall thereafter use its best efforts to cure such breach, default or termination event.

7.4 Unidym shall not assign the Unidym Inbound Agreements without the prior written consent of Samsung, which shall not be unreasonably withheld. Any assignment, by operation of law or otherwise, in contravention of the above provisions shall be void and ineffective.

## **8. PROSECUTION**

Unidym shall have sole responsibility over the preparation, filing, prosecution and maintenance of the Unidym In-Licensed Patents, to the extent Unidym controls their preparation, filing, prosecution and maintenance pursuant to the terms of the Unidym Inbound Agreement applicable thereto. As between the Parties, Unidym shall bear all costs and expenses associated with the preparation, filing and prosecution of such Unidym In-Licensed Patents, including all costs and expenses associated with the maintenance of any and all issued patents within such Unidym In-Licensed Patents.

## **9. ENFORCEMENT**

9.1 In consideration of Samsung's payments pursuant to Section 4.1, Samsung shall have the \*\*\*, subject to the Unidym In-Bound Agreements or Unidym In-Licensor Consent, as applicable, including obtaining any necessary approvals from Unidym In-Licensors. Subject to the Unidym In-Bound Agreements, Unidym shall keep Samsung informed of the status of any Enforcement Action involving Unidym In-Licensed Patents. Samsung and Unidym shall cooperate with each other and with Unidym In-Licensors, \*\*\*. Samsung shall maintain \*\*\*. If \*\*\*, Samsung shall bear all costs of any such Enforcement Action and, after reimbursement to Samsung, Unidym, and Unidym In-Licensors of their costs and expenses incurred, any awards, damages, payments (including royalties for any licenses granted) or other recoveries ("Recoveries") resulting therefrom shall be divided between Samsung and Unidym on \*\*\* basis. Any royalties or payments that are due and payable to a Unidym In-Licensor under a Unidym Inbound Agreement shall be paid by \*\*\*. Without limiting the foregoing general duty of cooperation between the Parties, each of Unidym and Samsung shall (i) notify the other of any infringement by a Third Party of any Unidym In-Licensed Patents of which it becomes aware, and (ii) provide all reasonably necessary cooperation and assistance in connection with any Enforcement Action involving any Unidym In-Licensed Patents, including being joined as a party-plaintiff if necessary to bring or maintain such lawsuit and having its employees testify and providing all relevant records, papers, information, samples, specimens and the like. \*\*\* shall pay \*\*\*'s reasonable and documented out of pocket expenses incurred in connection with any such cooperation and assistance. Notwithstanding the foregoing, at any time after the Parties

learn of infringement of any Unidym In-Licensed Patents by a Third Party or during any Enforcement Action, if \*\*\*, then Unidym (or Unidym In-Licensors) shall have the right to proceed with such action at its sole cost and to retain any Recoveries, provided \*\*\*.

9.2 During the term of this Agreement, Unidym agrees to \*\*\*. \*\*\* shall cause any new Third Party intending to enter into a new license agreement with Unidym regarding the Unidym In-Licensed Patents \*\*\*. Upon acknowledging the existence of such new Third Party, \*\*\* shall immediately notify \*\*\* and provide any necessary support or arrangement reasonably requested \*\*\*. \*\*\* and \*\*\* shall use commercially reasonable efforts to \*\*\*. Execution of the license between Unidym and a Third Party will be subject to Unidym In-Bound Agreements or Unidym In-Licensors Consents, as applicable, including obtaining any necessary approvals from Unidym In-Licensors. Any and all Recoveries procured from such sublicense arrangement with any Third Party will be distributed \*\*\* according to the formula \*\*\*.

9.3 Unidym Customers. Samsung agrees not to require Unidym to enforce Unidym In-Licensed Patents against any Third Party that purchases Licensed Products from Unidym provided: (a) that \*\*\*; (b) that \*\*\*; and (c) that \*\*\*. For the avoidance of doubt, Samsung retains its rights to enforce against any Third Party for \*\*\*.

9.4 Existing Unidym Outbound License Agreements. For any future royalties or payments received from Third Parties under Existing Unidym Outbound License Agreements, after making any royalty or other payments due to Unidym In-Licensors under Unidym Inbound Agreements, the difference between the amount received from Third Parties and amount transferred to Unidym In-Licensors shall be distributed between the Parties on a \*\*\* basis.

## 10. INDEMNIFICATION

10.1 Indemnification by Unidym. Unidym shall indemnify, defend and hold harmless Samsung and its Affiliates, and their directors, officers, employees, customers and agents (collectively, "Samsung Indemnitees"), from and against any and all liabilities, losses, costs, damages, fees or expenses (including reasonable legal expenses and attorneys' fees) (collectively, "Losses") arising out of or resulting from any Claim brought against any Samsung Indemnitees by a Third Party to the extent such Losses arise out of or result from: (a) a misrepresentation or breach by Unidym of any of its representations, warranties or covenants under this Agreement; (b) Unidym's, its Affiliates', its other licensees' or its other sublicensees' (expressly excluding the Samsung Indemnitees) practice or use of the Unidym In-Licensed Patents; and (c), except as set forth in Schedule 10.1, the infringement, misappropriation, dilution or other conflict with any intellectual property rights of a Third Party from the Samsung Indemnitees' practice or use of the Unidym In-Licensed IP; provided that (A) Unidym is notified promptly in writing by the Samsung Indemnitees of any Claim; (B) Unidym has the sole right to control and defend any litigation or settlement within the scope of this indemnity; and (C) all Samsung Indemnitees cooperate to the extent reasonably necessary in the defense of any such Claim at Unidym's reasonable expense.

10.2 Indemnification by Samsung. Samsung shall indemnify, defend and hold harmless Unidym its Affiliates, and their directors, officers, trustees, students, employees, customers and agents (collectively, "Unidym Indemnitees"), from and against any and all Losses

arising out of or resulting from any Claim brought against any Unidym Indemnitees by a Third Party to the extent such Losses arise out of or result from: (a) a misrepresentation or breach by Samsung of any of its representations or warranties under this Agreement; and (b) any liability or damages arising out of or related to the use of Licensed Products sold by Samsung where Samsung is also a named party in such Claim, except to the extent the Claim is the subject of Unidym's indemnification obligation under Section 10.1; provided that (i) Samsung is notified promptly in writing by the Unidym Indemnitees of any Claim; (ii) Samsung has the sole right to control and defend any litigation or settlement within the scope of this indemnity, and (iii) all Unidym Indemnitees cooperate to the extent reasonably necessary in the defense of any such Claim at Samsung's reasonable expense.

10.3 Limitation of Liability. EXCEPT TO THE EXTENT OF ANY SUCH DAMAGES PAID TO A THIRD PARTY IN CONNECTION WITH A THIRD PARTY CLAIM UNDER SECTION 10.1 OR 10.2, AS APPLICABLE, OR IN CONNECTION WITH A BREACH OF SECTION 11, (A) IN NO EVENT SHALL EITHER PARTY OR ITS AFFILIATES BE LIABLE UNDER THIS AGREEMENT FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING LOSS OF PROFITS OR REVENUE, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND (B) EACH PARTY'S TOTAL CUMULATIVE LIABILITY ARISING FROM OR RELATING TO THE TRANSACTION DOCUMENTS SHALL NOT EXCEED (1) \$\*\*\* FOR EITHER PARTY UNTIL THERE IS A CHANGE OF CONTROL IN UNIDYM; AND (2) \$\*\*\* FOR ANY SUCCESSOR OR ASSIGN OF EITHER PARTY PERMITTED HEREUNDER FROM THE OCCURRENCE OF UNIDYM'S CHANGE OF CONTROL TO THE EXPIRATION OF THE LAST OF THE UNIDYM PATENTS.

For the purpose of this provision, the term "Change of Control" shall mean (i) the direct or indirect sale or exchange by the stockholders of Unidym of all or substantially all of the stocks of Unidym or (ii) a merger or consolidation in which Unidym is a party. The foregoing limitation on liability shall not apply to Samsung's obligation to pay the amounts specified in Section 4.1.

## 11. CONFIDENTIAL INFORMATION

11.1 Confidential Information; Exceptions. Except as provided herein, each Party shall maintain in confidence, and shall not use for any purpose or disclose to any Third Party, information disclosed by the other Party in writing and marked "Confidential" or in a similar manner to indicate its confidential nature or that is disclosed orally and confirmed in writing as confidential within thirty (30) Business Days following such disclosure (collectively, "Confidential Information"). Confidential Information shall not include any information that is: (a) already known to the receiving Party at the time of disclosure hereunder, or (b) now or hereafter becomes publicly known other than through acts or omissions of the receiving Party in breach of this Agreement, or (c) disclosed to the receiving Party by a Third Party under no obligation of confidentiality to the disclosing Party, or (d) independently developed by the receiving Party without use of reliance on the Confidential Information of the disclosing Party.

**11.2 Authorized Disclosure.** Notwithstanding the provisions of Section 11.1 above, the receiving Party may use and disclose Confidential Information of the disclosing Party as follows: (a) under appropriate confidentiality provisions substantially equivalent to those in this Agreement (i) in connection with the performance of its obligations or as reasonably necessary or useful in the exercise of its rights under this Agreement, (ii) to its Affiliates, (iii) solely where Samsung is the receiving Party, to actual or potential licensees, sublicensees or assignees as permitted hereunder, (iv) to advisors (including lawyers, accountants and auditors); (b) to a government entity as is reasonably necessary (i) to file and prosecute Patent Rights and copyright and trademark applications in accordance with this Agreement, (ii) to prosecute or defend litigation relating to this Agreement or (iii) to comply with applicable law, governmental regulations or court order, provided that, in each case of (b)(i), (ii) and (iii), the receiving Party, to the extent it may legally do so, shall give reasonable advance notice to the disclosing Party of the disclosure and shall cooperate with the disclosing Party to secure confidential treatment of Confidential Information prior to its disclosure (whether through a protective order or otherwise); or (c) to the extent mutually agreed to by the Parties.

**11.3 Confidentiality of Agreement.** Each Party agrees that the existence and general nature of this Agreement (subject only to Section 11.4), and the terms and conditions this Agreement shall be treated as confidential, provided, however, that each Party may disclose the foregoing: (a) as required by any court or other governmental body; (b) as otherwise required by law; (c) to such Party's advisors (including lawyers, accountants and auditors); (d) subject to Section 11.5, in connection with the requirements of a public offering or securities filing or in filings with national stock exchanges; (e) in confidence, to banks and sources of finance and their advisors; (f) in confidence, to such Party's Affiliates; (g) in confidence (i) in connection with the performance of such Party's obligations, (ii) as reasonably necessary or useful in the exercise of such Party's rights under this Agreement, or (iii) in the case of Unidym, as reasonably necessary for Unidym's compliance with its obligations under the Unidym Inbound Agreements; (h) in the case of Samsung solely, in confidence, to actual or potential licensees, sublicensees or assignees as permitted hereunder; (i) in confidence, in connection with the enforcement of this Agreement or of such Party's rights under this Agreement; or (j) in confidence, in connection with a spin out, sale of stock, sale of assets, a merger or otherwise.

**11.4 Press Releases; Use of Names.** The Parties shall agree upon a press release to announce the execution of this Agreement in the form attached hereto as Exhibit K for use in responding to inquiries about the Agreement; thereafter, each Party may disclose to Third Parties solely the information contained in such press release without the need for further approval by the other Party. Subject to the other provisions of this Article 11, each Party may issue additional press releases solely with the prior written consent of the other Party (such consent not to be unreasonably withheld) or as required to comply with any law or by the rules of any stock exchange. Except in press releases permitted pursuant to this Section 11.4, neither Party shall use the name of the other Party in connection with this Agreement or its activities hereunder.

**11.5 Filing, Registration or Notification of the Agreement.** To the extent, if any, that a Party concludes in good faith that it is required by applicable law to file or register this Agreement or a notification thereof with any governmental authority, including the U.S. Securities and Exchange Commission and any foreign equivalent, such Party may do so, and the other Party shall cooperate in such filing or notification and shall execute all documents

reasonably required in connection therewith; provided, however, that such Party shall give reasonable advance notice to the other Party of such filing or notification and shall cooperate with the other Party to secure confidential treatment of any sensitive term or condition (including but not limited to financial information set forth in Article 5) identified by the other Party prior to its filing or notification. Furthermore, Samsung shall have the right to file this Agreement or a short form thereof with the U.S. Patent and Trademark Office and any equivalent foreign offices in connection with the Unidym In-Licensed Patents licensed to Samsung hereunder. Without limiting any of the foregoing, the filing Party shall request confidential treatment of sensitive provisions of the Agreement to the extent permitted by applicable laws and, as reasonably practicable, shall permit the other Party to review and approve the redacted copy of the Agreement prior to any such filing, registration or notification being made. The Parties shall promptly inform each other as to the activities or inquiries of any such governmental authority relating to this Agreement and shall cooperate to respond to any request for further information therefrom.

## 12. TERM AND TERMINATION

12.1 Term. This Agreement shall become effective on the Effective Date and shall continue thereafter until the last of the Unidym In-Licensed Patents licensed to Samsung hereunder expires.

12.2 Termination. This Agreement shall only be terminated as follows:

(a) Unidym may terminate this Agreement solely in the event of Samsung's failure to make the payment owed to Unidym under Section 4.1 by the date specified therein and Samsung has not remedied such failure to pay within thirty (30) Business Days of Samsung's receipt of Unidym's written notice of such failure.

(b) Samsung may terminate this Agreement upon written notice in the event of Unidym's material breach of this Agreement, which remains uncured thirty (30) Business Days after Samsung's written notice to Unidym specifying such breach. Notwithstanding termination of this Agreement by Samsung pursuant to Section 12.2(b), the license granted to Samsung under Section 3.1 shall survive such termination of this Agreement.

12.3 Liabilities Upon Termination. No termination shall release either Party hereto from any liability which at the time of such termination has already accrued to the other Party.

12.4 Return of Materials. Upon any termination of this Agreement, each Party shall promptly return or destroy all documents embodying or disclosing Confidential Information of the other Party, provided, however, that each Party shall be entitled to retain one archival copy of the other's Confidential Information for purposes of determining its obligations under this Agreement, and further provided, however, that the foregoing obligation to return or destroy shall not apply to Samsung solely with respect to any Confidential Information of Unidym that is necessary for Samsung to continue to exercise its surviving rights in the event of Samsung's termination of this Agreement pursuant to Section 12.2(b).

12.5 General Survival. The following Articles 1, 3, 6, 10, 11, 12 and 13 and Sections 14.2 through 14.11 shall survive any termination of this Agreement. The representations and warranties set forth in this Agreement shall survive execution, delivery and effectiveness of this Agreement and continue for the life of this Agreement.

12.6 Loss of Affiliate Status. Notwithstanding any Affiliate of Samsung ceasing to be an Affiliate of Samsung (a "Former Affiliate"), such Former Affiliate shall continue to have the right to retain a license granted to such Affiliate pursuant to Section 3.1, provided that (a) such Former Affiliate's license shall be limited to the Unidym In-Licensed Patents as they exist as of the date such entity becomes a Former Affiliate, and such license shall be subject to such Former Affiliate's continued compliance with the terms of this Agreement. Such Former Affiliate shall have the right to assign such license in connection with a sale of all or substantially all of such Former Affiliate's assets or business to which such sublicense relates (whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise).

### **13. DISPUTE RESOLUTION; ARBITRATION**

13.1 Party Consultation. In the event any Party claims breach of this Agreement, the Parties shall consult with each other in good faith on the most effective means to cure the breach and to achieve any necessary restitution of its consequences. This consultation shall be undertaken within a period of thirty (30) Business Days following the receipt of a written request to consult, and the consultation period shall not exceed forty-five (45) Business Days. During the consultation period, neither arbitration nor litigation may be pursued until attempts at consultative dispute resolution have been exhausted.

13.2 Arbitration. All disputes, controversies or claims between the Parties arising out of or in connection with this Agreement (including its existence, validity or termination) not resolved pursuant to Section 13.1 shall be finally resolved by arbitration to be held in the State of New York and Borough of Manhattan and conducted in English under the Rules of Arbitration of the International Chamber of Commerce. The arbitral award shall be final and binding on the Parties. Judgment upon the award rendered in arbitration may be entered and enforced in any court having jurisdiction. Except to the extent entry of judgment and any subsequent enforcement may require disclosure, all matters relating to the arbitration, including the award, shall be held in confidence.

Notwithstanding anything in this Article 13, nothing shall limit either Party's right to initiate any action, suit or proceeding for infringement of its intellectual property rights or to seek injunctive relief in any court of competent jurisdiction.

### **14. MISCELLANEOUS**

14.1 Assignment. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective permitted successors and assigns. Unidym shall not assign this Agreement or any of its rights and obligations under this Agreement without the prior written consent of Samsung, which shall not be unreasonably withheld. Samsung may assign this Agreement or any of its rights and obligations under this Agreement without the prior written consent of Unidym to (a) an Affiliate or (b) any entity that succeeds to all or substantially all of

Samsung's assets and business to which this Agreement relates (whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise). Any attempted assignment, delegation, or subcontracting by operation of law or otherwise (other than as expressly permitted herein) in contravention of the above provisions shall be void and ineffective. With respect to Unidym only, any change of control, whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise, shall be deemed an assignment hereunder.

14.2 Governing Law. This Agreement shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of New York, USA, without giving effect to the principles of conflicts of law thereof.

14.3 Force Majeure. Neither Party shall be liable for delay or failure in the performance of any of its obligations hereunder if such delay or failure is due to causes beyond its reasonable control, including natural disasters, strikes and labor disputes, acts of governments or governmental agencies, and acts of war, terrorism or civil unrest; provided, however, that the affected Party promptly notifies the other Party in writing and further provided that the affected Party shall use its commercially reasonable efforts to avoid or remove such causes of non-performance and to mitigate the effect of such occurrence, and shall continue performance with reasonable dispatch whenever such causes are removed.

14.4 Notice. All notices, consents, waivers and communications hereunder given by any Party to the other shall be in writing (including email) and delivered personally, by email (provided that receipt is confirmed and that a copy is provided in addition by personal delivery, by courier or by mail as provided herein), by a recognized overnight courier, or by dispatching the same by certified or registered air mail, return receipt requested, with postage prepaid, in each case addressed:

If to Samsung:

Samsung Electronics Co., Ltd.  
Intellectual Property Center  
Intellectual Property Strategy Team  
416 Maetan 3-dong, Yeongtong-gu  
Suwon-si, Gyeonggi-do 443-742  
Republic of Korea  
Attention: Hosik Jang, Vice President  
Email: \*\*\*

If to Unidym:

Unidym, Inc.  
1244 Reamwood Avenue  
Sunnyvale, CA 94089  
USA  
Attention: Mark Tilley, CEO  
Email: \*\*\*

or to such other address or addresses as Unidym or Samsung may from time to time designate by notice as provided herein, except that notices of changes of address shall be effective only upon receipt. All such notices, consents, waivers and communications shall: (a) when posted by certified or registered mail, postage prepaid, return receipt requested, be effective three (3) Business Days after dispatch, unless such communication is sent trans-Pacific, in which case it shall be deemed effective five (5) Business Days after dispatch, (b) when sent using a recognized overnight courier or in person, be effective upon receipt when delivered, or (c) when sent by email, upon receipt of confirmatory hard copies from the sender or return email from the recipient.

14.5 Independent Contractor. Nothing in this Agreement shall be construed to create: (a) a relationship of agency, partnership, joint venture or other joint business arrangement between the Parties; (b) any fiduciary duty owed by one Party to the other Party or any of its Affiliates; (c) a relationship of employer and employee between the Parties; or (d) any basis for any employee of one Party to claim that he or she is an employee of the other Party. No Party shall have the authority to commit the other Party contractually or otherwise to any obligations to Third Parties.

14.6 Amendment and Waivers. None of the terms of this Agreement shall be amended, supplemented or modified except in a writing signed by the Parties. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party or Parties waiving such term or condition. Neither the waiver by any Party of any term or condition of this Agreement nor the failure on the part of any Party, in one or more instances, to enforce any of the provisions of this Agreement or to exercise any right or privilege, shall be deemed or construed to be a waiver of such term or condition for any similar instance in the future or of any subsequent breach hereof. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be a limitation of any other remedy, right, undertaking, obligation or agreement.

14.7 Severability. If and solely to the extent that any provision of this Agreement shall be invalid or unenforceable, or shall render this entire Agreement to be invalid or unenforceable, such offending provision shall be of no effect and shall not affect the validity of the remainder of this Agreement or any of its provisions; provided, however, the Parties shall use their respective reasonable efforts to replace the invalid or unenforceable provision in a manner that best accomplishes the original intentions of the Parties.

14.8 Construction. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event any ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

14.9 Entire Agreement. This Agreement, together with the Exhibits and Schedules hereto (which are incorporated herein by reference), and the other Transaction Documents, constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede all prior agreements, understandings and negotiations, both written and oral, between the Parties with respect to the subject matter of this Agreement.

14.10 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

14.11 Bankruptcy. All licenses granted under this Agreement shall be deemed licenses of rights to intellectual property for purposes of Section 365(n) of the U.S. Bankruptcy Code and a licensee under this Agreement shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code.

14.12 Expenses. Except as otherwise expressly provided in this Agreement, Unidym and Samsung shall each pay their own expenses incident to this Agreement and the preparation for, and consummation of, the transactions provided for herein.

14.13 Further Assurances. Each Party agrees to do and perform all such further acts and things and shall execute and deliver such other agreements, certificates, instruments and documents necessary to carry out the intent and accomplish the purposes of this Agreement and to evidence, perfect or otherwise confirm its rights hereunder.

14.14 Compliance with Laws. Each of Unidym and Samsung shall, in the performance of this Agreement and its exercise of the rights and licenses granted hereunder, comply with all applicable laws, regulations and orders of the United States and any applicable foreign jurisdiction, including all applicable export and import control laws and regulations and all laws and regulations relating to the Foreign Corrupt Practices Act, 15 U.S.C. §§ 78dd-1 *et. seq.*, as amended. Unidym and Samsung shall not export or re-export any technical data pertaining to the Unidym In-Licensed Patents without all required United States and foreign government licenses.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their authorized officers as of the date first written above.

**UNIDYM, INC.**

**SAMSUNG ELECTRONICS CO., LTD.**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_



**EXHIBIT B**

**UNIDYM INBOUND AGREEMENTS**

License Agreement between Unidym and \*\*\*, dated \*\*\*, Amendment to License Agreement, dated \*\*\*

License Agreement between Carbon Nanotechnologies Inc. and \*\*\*, dated \*\*\*

License Agreement between Unidym and \*\*\*, dated \*\*\*

License Agreement between Unidym and \*\*\*, dated \*\*\*

License Agreement between Nanopolaris and \*\*\*, dated \*\*\*

License Agreement between Nanopolaris and \*\*\*, dated \*\*\*

License Agreement between Unidym and \*\*\*, dated \*\*\* for the license of technology of U.S. Patent Application \*\*\*

License Agreement between Carbon Nanotechnologies and \*\*\*, dated \*\*\* for the license of technology of U.S. Patent Application \*\*\*

License Agreement between Carbon Nanotechnologies and \*\*\*, dated \*\*\* for the license of technology of U.S. Patent Application \*\*\*

License Agreement between Carbon Nanotechnologies and \*\*\*, dated \*\*\* for the license of technology of U.S. Patent Application \*\*\*

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**EXHIBIT C**

**\*\*\* IN-LICENSOR CONSENT**

**[ATTACHED]**

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**EXHIBIT D**

**\*\*\* IN-LICENSOR CONSENT**

**[ATTACHED]**

**EXHIBIT E**

**\*\*\* IN-LICENSOR CONSENT**  
**U.S. APPLICATION \*\*\***

**[ATTACHED]**

EXHIBIT E-1

**\*\*\* IN-LICENSOR CONSENT**  
**U.S. APPLICATION \*\*\***

[ATTACHED]

EXHIBIT E-2

**\*\*\* IN-LICENSOR CONSENT**  
**U.S. APPLICATION \*\*\***

[ATTACHED]

EXHIBIT E-3

**\*\*\* IN-LICENSOR CONSENT**  
**U.S. APPLICATION \*\*\***

[ATTACHED]

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**EXHIBIT F**

**\*\*\* IN-LICENSOR CONSENT**

**[ATTACHED]**

**EXHIBIT G**

**\*\*\* IN-LICENSOR CONSENT**

**[ATTACHED]**

## EXHIBIT G-1

### **\*\*\* IN-LICENSOR CONSENT**

Samsung's rights and licenses under the Agreement to the Unidym In-Licensed Patents licensed by \*\*\* (the "\*\*\*\* In-Licensed Patents") are subject to the terms set forth in the \*\*\* In-Licensor Consent attached as Exhibit G, and changes to certain terms in the Agreement as set forth below.

#### 1.1 Definitions.

"Patent Rights" when used in reference to the \*\*\* In-Licensed Patents shall be limited to the definition of \*\*\* Patents as such term is defined in the License Agreement No. \*\*\* between Unidym and \*\*\* with an effective date of \*\*\*.

"Unidym In-Licensed Patents" when used in reference to the \*\*\* In-Licensed Patents shall be limited to the \*\*\* Patents as such term is defined in the License Agreement.

3.1 Licensed Grant under Unidym In-Licensed Patents. With respect to the \*\*\* In-Licensed Patents, Unidym's grant of license to Samsung under Section 3.1 is replaced with the following:

Subject to the terms and conditions of this Agreement and the \*\*\* In-Licensor Consent, Unidym hereby grants to Samsung a world-wide, non-exclusive, \*\*\* license (with the right to sublicense in accordance with Section 3.3(a) of this Agreement) under the \*\*\* In-Licensed Patents in the Field of Use to make, have made, use, import, offer for sale, sell, lease, or otherwise transfer \*\*\* Licensed Products.

3.3 Sublicensing. With respect to the \*\*\* In-Licensed Patents, Unidym's grant to Samsung of the right to grant sublicenses under Section 3.3(a) is replaced with the following:

- (a) Samsung shall have the right to grant further sublicenses of its rights to the \*\*\* In-Licensed Patents in the Field of Use to \*\*\* for \*\*\* Licensed Products, in each case, \*\*\*, provided that each \*\*\* sub-sublicensee must comply with the terms of this Agreement.
- (b) Except as otherwise agreed in writing by the Parties, Samsung shall not further sublicense all or any portion of its rights to the \*\*\* In-Licensed Patents under \*\*\*

**EXHIBIT H**

**\*\*\* IN-LICENSOR CONSENT**

**[ATTACHED]**

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**EXHIBIT I**

**\*\*\* IN-LICENSOR CONSENT**

**[ATTACHED]**

**EXHIBIT J**

**EXISTING UNIDYM OUTBOUND LICENSE AGREEMENTS**

Amended and Restated Collaboration and License Agreement between Unidym and \*\*\*, dated \*\*\*

License Agreement between Unidym and \*\*\*, dated \*\*\*

License Agreement between Unidym and \*\*\*, dated \*\*\*

**PRESS RELEASE**

**UNIDYM ANNOUNCES ALLIANCE WITH SAMSUNG ELECTRONICS**

Unidym, Inc., a majority owned subsidiary of Arrowhead Research, announced today that it has completed IP cooperation and license agreements with Samsung Electronics Co., Ltd. (“Samsung”). Under the agreements:

1. Unidym licensed to Samsung patents covering CNT materials, including fundamental patents on CNT compositions of matter, synthesis of CNTs, processing of CNTs, ink formulations, and transparent conductive films.
2. Unidym transferred certain patent rights to Samsung, primarily related to electronic devices incorporating CNTs. Samsung granted back to Unidym licenses to sell products under the transferred patent rights.
3. Unidym and Samsung will continue to work together to develop and commercialize CNT-based products.

“This is an important development in carbon-based electronics,” said Mark Tilley, President and CEO of Unidym. “We have worked with Samsung Electronics for several years, and we are now looking forward to this next phase in our relationship. We expect Samsung’s investment in this alliance and ongoing IP cooperation with Unidym will open the market for printable carbon electronics.”

**About Samsung Electronics Co., Ltd.**

Samsung Electronics Co., Ltd. is a global leader in semiconductor, telecommunication, digital media and digital convergence technologies with 2009 consolidated sales of US\$116.8 billion. Employing approximately 174,000 people in 193 offices across 66 countries, the company consists of eight independently operated business units: Visual Display, Mobile Communications, Telecommunication Systems, Digital Appliances, IT Solutions, Digital Imaging, Semiconductor and LCD. Recognized as one of the fastest growing global brands, Samsung Electronics is a leading producer of digital TVs, memory chips, mobile phones and TFT-LCDs. For more information, please visit <http://www.samsung.com>.

**About Unidym, Inc.**

Unidym is a leader in carbon nanotube-based transparent, conductive films (TCFs) for the electronics industry. TCFs are a critical component in devices such as touch panels, displays, and thin-film solar cells. For example, both touch panels and LCDs typically employ two TCF layers per device. Unidym’s TCFs offer substantial advantages over the incumbent technology, indium-based metal oxides, including: improved durability, lower processing costs, and lower overall cost structure. For more information, visit: <http://www.unidym.com>. Unidym is a majority-owned subsidiary of Arrowhead Research Corporation (NASDAQ: ARWR).

**EXHIBIT L**

**LICENSE AND ENFORCEMENT AGREEMENT DISCLOSURE SCHEDULES**

Schedule 6.1(f)(v)

Unidym has granted Third Parties license or other rights in the Unidym In-Licensed Patents in the following agreement:

- Patent License Agreement between Carbon Nanotechnologies and \*\*\*, dated \*\*\*, First Amendment to Patent License Agreement, dated \*\*\*
- License Agreement between Unidym and \*\*\*, dated July 13, 2009
- Amended and Restated Collaboration and License Agreement between Unidym and \*\*\*, dated \*\*\*
- License Agreement between Unidym and \*\*\*, dated \*\*\*
- License Agreement between Unidym and \*\*\*, dated \*\*\*
- License Agreement between Unidym and \*\*\*, dated \*\*\*
- License Agreement between Unidym and \*\*\*, dated \*\*\*
- License Agreement between Unidym and \*\*\*, dated \*\*\*

Schedule 10.1

- U.S. Patent No. \*\*\*
- U.S. Patent No. \*\*\*
- U.S. Patent No. \*\*\*
- U.S. Patent No. \*\*\*

**CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH “[\*\*\*]”. A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT UNDER RULE 406 OF THE SECURITIES ACT OF 1933.**

## **CNT PRODUCTION PATENT LICENSE AGREEMENT**

This CNT PRODUCTION PATENT LICENSE AGREEMENT (this “Agreement”), dated as of December \_\_, 2010, is entered into by and between Unidym, Inc., a Delaware Corporation having a principal place of business at 1244 Reamwood Avenue, Sunnyvale, CA 94089, USA (“Unidym”), and Samsung Electronics Co., Ltd., a company organized under the laws of the Republic of Korea and having a principal place of business at 416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, the Republic of Korea (“Samsung”). Unidym and Samsung may be referred to herein as a “Party” or, collectively, as the “Parties.”

**WHEREAS**, Unidym is engaged in the research, development, marketing and sale of certain carbon nanotube and graphene based products and technologies and is the owner of certain patents and patent applications relating to such carbon nanotube and graphene based technology;

**WHEREAS**, Samsung desires to obtain a sole license to certain patents and patent applications owned by Unidym, and Unidym desires to grant to Samsung such sole license, on and subject to the terms and conditions set forth herein;

**NOW THEREFORE**, in consideration of the mutual promises and covenants set forth herein, and, for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

### **1. DEFINITIONS**

#### **1.1 Definitions.**

“Affiliate” shall mean any entity directly or indirectly controlled by, controlling or under common control with, a Party to this Agreement. For purposes of this definition, “control” (including, with correlative meanings, “controlled by,” “controlling” and “under common control with”) means (a) possession, direct or indirect, of the power to direct or cause direction of the management or policies of an entity (whether through ownership of securities or other ownership interests, by contract or otherwise), or (b) beneficial ownership of \*\*\* percent (\*\*\*) or more of the voting securities or other ownership interest (whether directly or pursuant to any option, warrant or other similar arrangement) or other comparable equity interests of an entity.

“Business Day” shall mean a day other than a Saturday, Sunday, or bank or other public holiday in the State of California, USA or Seoul, Republic of Korea

“Claim” shall mean any claim, action, lawsuit or other proceeding.

“CNT Production Patent License Agreement Disclosure Schedules” shall mean the disclosure schedules attached hereto as Exhibit B.

“\*\*\*” shall mean \*\*\*

“Confidential Information” shall have the meaning set forth in Section 11.1.

“Contract” shall mean any contract, license, sublicense, purchase, sale, permit, loan, security, pledge, instrument and any other arrangement or any commitment to enter into any of the foregoing (in each case, whether written or oral).

“Control” shall mean, with respect to any intellectual property rights, ownership or possession of the legal authority or right of a Party hereto (or any of its Affiliates) to grant a license or sublicense of any such intellectual property right to the other Party or to otherwise disclose proprietary or trade secret information to the other Party, without breaching the terms of any Contract with a Third Party or infringing or misappropriating the intellectual property rights of a Third Party.

“Effective Date” shall have the meaning set forth in Section 2.1.

“Enforcement Action” shall mean any and all actions required to make a Claim.

“Field of Use” shall mean any and all fields of use, except as set forth in Section 6.1(f)(ii).

“Field of Therapeutics” shall mean the same defined in the License Agreement between \*\*\* and Unidym, dated \*\*\*, Unidym Agreement # \*\*\*, which is recited as follows:

the application of carbon nanotubes to the treatment of disease in humans, where either: (1) the carbon nanotubes are bound to drug molecules, either directly or through an intermediate agent, to form a complex that is inserted into the body to deliver the drug molecules to target cells through the bloodstream to treat such disease; or (2) the carbon nanotubes are inserted into the body to be delivered through the bloodstream to target cells and used to thermally eradicate the target cells to treat such disease. An example of a product in the Field of Therapeutics is a formulation comprising carbon nanotubes bound to a chemotherapy agent and subsequently injected into the body to treat cancer. Example applications outside the Field of Therapeutics include but are not limited to the use of carbon nanotubes to deliver substances to cells outside of the body, the use of carbon nanotubes in a device that is surgically implanted at a particular site in the body (e.g., a surgically implanted drug delivery device), and the use of carbon nanotubes in structural medical devices (e.g., catheters, stents, intravascular devices or spinal cord regeneration matrices). Notwithstanding any of the preceding, the use of carbon nanotubes in the context of, in connection with, or in combination with stem cells is outside the Field of Therapeutics.

“Intellectual Property Purchase and Business Cooperation Agreement” shall mean the agreement of even date herewith entered into by and between Unidym and Samsung relating to purchase and grant-back license of certain Patent Rights owned by Unidym and its Subsidiaries.

“License and Enforcement Agreement” shall mean the agreement of even date herewith entered into by and between Unidym and Samsung relating to license and enforcement of certain Patent Rights licensed to Unidym.

“Licensed Products” shall mean any products, processes or services covered by the Unidym CNT Production Patents.

“Liens” shall mean, with respect to any property or asset, any mortgage, pledge, security interest, encumbrance, claim, lien, or charge of any kind in respect of such property or asset (including, without limitation, any conditional sale or option), any sale of receivables with recourse against such seller, or any agreement to file any of the foregoing.

“Losses” shall have the meaning set forth in Section 10.1.

“Patent Rights” shall mean all patents, patent applications, patent disclosures and equivalents thereof, whether domestic or foreign, including all continuations, continuations-in-part, divisionals, provisionals and renewals, and letters patent granted with respect to any of the foregoing, and all reissues, re-examinations and extensions thereof.

“Recoveries” shall mean any awards, damages, payments (including royalties for any licenses granted) or other revenues generated from any exercise of Patent Rights.

“Sole License” shall mean an exclusive license, except that the licensor retains certain rights to operate under the licensed patent as set forth in Section 3.1.

“Subsidiary” shall mean, with respect to any specified Party, any entity of which securities or other interests having the power to elect a majority of that entity’s board of directors or similar governing body, or otherwise having the power to direct the business and policies of that entity (other than securities or other interests having such power only upon the happening of a contingency that has not occurred) are held by such specified Party or one or more Subsidiaries of such specified Party.

“Third Party” shall mean any person or entity other than one of the Parties or an Affiliate of a Party.

“Transaction Documents” shall mean, collectively, this Agreement, Intellectual Property Purchase and Business Cooperation Agreement and the License and Enforcement Agreement.

“Unidym CNT Production Patents” shall mean the patent(s) and patent application(s) owned by Unidym or its Subsidiaries as of the Effective Date and listed on Exhibit A.

1.2 Other Definitional and Interpretative Provisions. The words “hereof,” “herein” and “hereunder” and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The captions herein are included

for convenience of reference only and shall be ignored in the construction or interpretation hereof. References to Sections, Exhibits and Schedules are to Sections, Exhibits and Schedules of this Agreement unless otherwise specified. All Exhibits and Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein, shall have the meaning as defined in this Agreement. Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation,” whether or not they are in fact followed by those words or words of like import. When the words “not to be unreasonably withheld” are used in this Agreement, they shall be deemed to be followed by the phrase “, conditioned or delayed,” whether or not they are in fact followed by that phrase or a phrase of like import. References to any agreement or contract are to that agreement or contract as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof. References to any Third Party include the successors and permitted assigns of that Third Party. References from or through any date mean, unless otherwise specified, from and including or through and including, respectively. References to “law” or “laws” shall be deemed to include any and all applicable laws.

## 2. EFFECTIVENESS OF AGREEMENT

2.1 This Agreement shall come into effect upon receipt by Samsung of all deliverables set forth in Section 2.3 below, provided that the conditions set forth in Section 2.2 have also been met (the date of satisfaction of all such conditions and receipt of all such deliverables being the “Effective Date”). Samsung may in its sole and absolute discretion waive the satisfaction of any such conditions or the delivery of any such deliverables.

2.2 The effectiveness of this Agreement shall be subject to each of the following conditions:

(a) Accuracy of Representations and Warranties. The representations and warranties of Unidym set forth in Section 6.1 and of Samsung set forth in Section 6.2 shall be true and correct in all material respects as of the Effective Date.

(b) Litigation. As of the Effective Date, no action, suit, litigation, proceeding or investigation shall have been instituted, be pending or threatened against Unidym or any of its Affiliates challenging or seeking to make illegal, to delay or otherwise directly or indirectly to restrain or prohibit the consummation of the transactions contemplated by this Agreement and the other Transaction Documents, or seeking to obtain damages in connection with the transactions contemplated by this Agreement or the other Transaction Documents.

(c) No Loss or Destruction. As of the Effective Date, no material loss, damage, destruction, rejection or expiration shall have occurred to the Unidym CNT Production Patents regardless of whether covered by insurance.

2.3 The effectiveness of this Agreement shall be subject to Unidym having delivered to Samsung the following:

(a) a certificate signed on behalf of Unidym by its Chief Executive Officer, dated the Effective Date, certifying that the conditions specified in Sections 2.2(a) through (c) have been satisfied in all respects;

(b) a certificate signed by the corporate secretary of Unidym, dated the Effective Date, attaching the resolutions and consents of the board of directors of Unidym and, to the extent required, each of its Affiliates authorizing the execution and delivery of, and the consummation of the transactions contemplated by, this Agreement and the other Transaction Documents.

### 3. GRANT OF RIGHTS

3.1 Sole License under Unidym CNT Production Patents. On the Effective Date, Unidym hereby grants to Samsung, and Samsung hereby accepts from Unidym, a sole, \*\*\* license under the Unidym CNT Production Patents in the Field of Use to research, develop, make, have made, import, have imported, use, have used, sell, have sold, offer for sale, have offered for sale and otherwise exploit any Licensed Products. Unidym retains the right (with the right to grant a sublicense to \*\*\* only, pursuant to Section 9.2) under the Unidym CNT Production Patents to research, develop, make, have made, import, have imported, use, have used, sell, have sold, offer for sale, have offered for sale and otherwise exploit any Licensed Products for itself only. For the avoidance of doubt, any Recoveries procured from Samsung's exercise of its sole license right under the Unidym CNT Production Patents granted herein shall belong to Samsung except to the extent such Recoveries will be procured from \*\*\* pursuant to Section 9.2.

### 4. PAYMENTS

4.1 Subject to satisfaction of conditions in Section 2, Samsung shall pay to Unidym for the grant of license pursuant to Section 3.1 and for other obligations under this Agreement:

\* \*\*\* U.S. Dollars (US\$ \*\*\*) within thirty (30) Business Days from the Effective Date.

4.2 Unidym shall send Samsung an invoice for any payment to be made by Samsung to Unidym under this Agreement sufficiently early for Samsung to receive such invoice no later than thirty (30) Business Days before the due date specified for such payment herein. Each invoice shall clearly reference this Agreement and indicate the invoiced amount and what such amount relates to.

4.3 The payment hereunder by Samsung to Unidym shall be made by electronic transfer in immediately available funds via either a bank wire transfer or any other means of electronic funds transfer, at Samsung's election, to such bank account as Unidym may designate in a written notice at least thirty (30) Business Days before the payment is due.

### 5. TAX

5.1 Each Party shall be solely responsible for paying any and all taxes, levies, imposts, duties or fees (collectively, "Taxes") imposed by the United States in the case of Unidym and by the Republic of Korea in the case of Samsung in connection with the transactions contemplated by this Agreement and the performance of such Party's obligations under this Agreement.

5.2 With respect to withholding Taxes, Samsung shall, if applicable, pay the amount of Tax imposed by the Republic of Korea on any payments to Unidym under this Agreement, transmit such amount of withholding Tax to the appropriate authority, and promptly deliver to Unidym applicable certification or other evidence of such withholding Tax payments. Such withheld amount shall be treated for all purposes of this Agreement as having been paid to Unidym.

## 6. REPRESENTATIONS AND WARRANTIES

6.1 Representations and Warranties of Unidym. As of the Effective Date, Unidym hereby represents and warrants to Samsung, as a material inducement for Samsung's entry into this Agreement, as follows:

(a) Organization. Unidym is a corporation validly existing and in good standing under the laws of its jurisdiction of incorporation or formation.

(b) Authority. Unidym's execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby has been duly authorized by all necessary action on the part of Unidym and do not and shall not violate any provisions of its organizational documents. This Agreement constitutes the valid and binding agreement and obligation of Unidym, enforceable against Unidym in accordance with its terms, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect, and to general equitable principles.

(c) No Conflict or Violations. The execution and delivery of this Agreement, the consummation of the transactions contemplated hereby, and the performance of, fulfillment of and compliance with the terms and conditions hereof by Unidym does not and shall not: (i) violate any statute, law, rule, regulation, order, writ, injunction or decree of any court or governmental authority, including any applicable import, export and re-export laws and regulations; (ii) violate or conflict with or constitute a default under any Contract to which Unidym is a party as of the Effective Date; or (iii) result in the creation or imposition of any Lien upon any of the Unidym CNT Production Patents, except for any Lien created in favor of Samsung by this Agreement, the Intellectual Property Purchase and Business Cooperation Agreement, or the License and Enforcement Agreement.

(d) Governmental Consents. No consent, approval or authorization of, or designation, declaration or filing with, any governmental authority on the part of Unidym or any of its Affiliates is required in connection with the execution and delivery of this Agreement and the other Transaction Documents by Unidym, or the consummation by Unidym and its Affiliates of the transactions contemplated hereby or thereby.

(e) No Broker. To the extent Unidym or any of its Affiliates has engaged any corporation, firm or other Third Party who is entitled to any fee or commission as a finder

or a broker in connection with the negotiation of this Agreement or the other Transaction Documents or the consummation of the transactions contemplated hereby and thereby, Unidym shall be responsible for any such fee or commission.

(f) Unidym CNT Production Patents.

- (i) Unidym or its Subsidiaries (A) are the sole and exclusive owner, free and clear of any and all Liens, of all right, title and interest and in and to the Unidym CNT Production Patents and (B) have the full right, power and authority to grant to Samsung the license of Section 3.1.
- (ii) Except for the exclusive license to \*\*\* in the Field of Therapeutics pursuant to the License Agreement between \*\*\* and Unidym, dated \*\*\*, Unidym Agreement # \*\*\*, Unidym has not granted to any Third Party any ownership, license or other rights in the Unidym CNT Production Patents.
- (iii) The Unidym CNT Production Patents are valid and enforceable or, in the case of patent applications included therein, are the subject of valid and pending applications for letters patent. Unidym has taken all reasonable and necessary actions to maintain and protect the Unidym CNT Production Patents, including the payment of all maintenance and other fees when due and the recording of all statutorily required filings regarding its interests therein. Except as set forth in Schedule 6.1(f)(i) (“Six Month Action Items”), as of the Effective Date and for a period of six (6) months thereafter, no maintenance fees, responses to office actions or other responses or fees shall be due with respect to any of the Unidym CNT Production Patents. For the avoidance of doubt, \*\*\* shall be responsible for any and all maintenance fees.
- (iv) There are no claims, actions, suits, proceedings, investigations or inquiries before any court, arbitrator or governmental or regulatory official or office pending, or, to Unidym’s knowledge, threatened involving the Unidym CNT Production Patents, including any of the foregoing challenging the ownership, validity or enforceability of any of the Unidym CNT Production Patents. No Unidym CNT Production Patent is subject to any judgment, order or decree entered in any lawsuit or proceeding that would prohibit the grant to Samsung of the license of Section 3.1.
- (v) All listed inventors in the Unidym CNT Production Patents are the sole inventors of such Unidym CNT Production Patents, including as the term “inventor” is defined and interpreted under United States patent law or patent laws of any other relevant jurisdiction.

- (vi) Except as disclosed in Schedule 6.1(f)(ii), Unidym's use or practice of the Unidym CNT Production Patents has not and does not infringe, misappropriate, dilute or otherwise conflict with the intellectual property rights of any Third Party.
- (vii) Except as disclosed in Schedule 6.1(f)(iii), to Unidym's knowledge, no third party has infringed, misappropriated, diluted or otherwise conflicted with, or is infringing, misappropriating, diluting or otherwise conflicting with, any of the Unidym CNT Production Patents.

6.2 Representations and Warranties of Samsung. As of the Effective Date, Samsung hereby represents and warrants to Unidym, as a material inducement for Unidym's entry into this Agreement, as follows:

(a) Organization. Samsung is a corporation validly existing and in good standing under the laws of its jurisdiction of incorporation or formation.

(b) Authority. Samsung's execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of Samsung and do not and shall not violate any provisions of its organizational documents. This Agreement constitutes the valid and binding agreement and obligation of Samsung, enforceable against Samsung in accordance with its terms, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect, and to general equitable principles.

## 7. UNIDYM COVENANTS

7.1 Unidym shall take any and all actions and prepare, execute, deliver and file any and all documents or instruments which are necessary or desirable to diligently and actively prosecute and maintain the Unidym CNT Production Patents.

## 8. PROSECUTION

\*\*\* shall have sole responsibility over the preparation, filing, prosecution and maintenance of the Unidym CNT Production Patents. As between the Parties, \*\*\* shall bear all costs and expenses associated with the preparation, filing and prosecution of such Unidym CNT Production Patents, including all costs and expenses associated with the maintenance of any and all issued patents within such Unidym CNT Production Patents.

## 9. ENFORCEMENT

9.1 Samsung shall have the exclusive right, but not the obligation, to enforce Unidym CNT Production Patents at its own expense. Unidym shall (i) notify Samsung of any infringement by a Third Party of any Unidym CNT Production Patent of which it becomes aware, and (ii) provide all reasonably necessary cooperation and assistance in connection with any Enforcement Action involving any Unidym CNT Production Patent, including being joined

as a party-plaintiff if necessary to bring or maintain such lawsuit and having its employees testify and providing all relevant records, papers, information, samples, specimens and the like. Samsung shall pay Unidym's reasonable and documented out of pocket expenses incurred in connection with any such cooperation and assistance.

9.2 Subject to Section 3.1 herein, Samsung acknowledges that Unidym is currently negotiating with \*\*\* regarding license under the Unidym CNT Production Patents. Unidym may complete the license to \*\*\* in consultation with Samsung. In consideration of the past costs and future costs to be borne by Unidym in connection with such licensing efforts, any Recoveries procured from such licensing arrangements only shall be distributed between the Parties on a \*\*\* basis.

## 10. INDEMNIFICATION

10.1 Indemnification by Unidym. Unidym shall indemnify, defend and hold harmless Samsung and its Affiliates, and their directors, officers, employees, customers and agents (collectively, "**Samsung Indemnitees**"), from and against any and all liabilities, losses, costs, damages, fees or expenses (including reasonable legal expenses and attorneys' fees) (collectively, "Losses") arising out of or resulting from any Claim brought against any Samsung Indemnitees by a Third Party to the extent such Losses arise out of or result from: (a) a misrepresentation or breach by Unidym of any of its representations, warranties or covenants under this Agreement; and (b) Unidym's, its Affiliates', its other licensees' or its other sublicensees' (expressly excluding the Samsung Indemnitees) practice or use of the Unidym CNT Production Patents; and (c), except as set forth in Schedule 7.1(f), the infringement, misappropriation, dilution or other conflict with any intellectual property rights of a Third Party from the Samsung Indemnitees' practice or use of the Unidym CNT Production Patents; provided that (A) Unidym is notified promptly in writing by the Samsung Indemnitees of any Claim; (B) Unidym has the sole right to control and defend any litigation or settlement within the scope of this indemnity; and (C) all Samsung Indemnitees cooperate to the extent reasonably necessary in the defense of any such Claim at Unidym's reasonable expense.

10.2 Indemnification by Samsung. Samsung shall indemnify, defend and hold harmless Unidym and its Affiliates, and their directors, officers, trustees, students, employees, customers and agents (collectively, "Unidym Indemnitees"), from and against any and all Losses arising out of or resulting from any Claim brought against any Unidym Indemnitees by a Third Party to the extent such Losses arise out of or result from: (a) a misrepresentation or breach by Samsung of any of its representations or warranties under this Agreement; and (b) any liability or damages arising out of or related to the use of Licensed Products sold by Samsung where Samsung is also a named party in such Claim, except to the extent the Claim is the subject of Unidym's indemnification obligation under Section 10.1; provided that (i) Samsung is notified promptly in writing by the Unidym Indemnitees of any Claim; (ii) Samsung has the sole right to control and defend any litigation or settlement within the scope of this indemnity, and (iii) all Unidym Indemnitees cooperate to the extent reasonably necessary in the defense of any such Claim at Samsung's reasonable expense.

10.3 Limitation of Liability. EXCEPT TO THE EXTENT OF ANY SUCH DAMAGES PAID TO A THIRD PARTY IN CONNECTION WITH A THIRD PARTY

CLAIM UNDER SECTION 10.1 OR 10.2, AS APPLICABLE, OR IN CONNECTION WITH A BREACH OF SECTION 11, (A) IN NO EVENT SHALL EITHER PARTY OR ITS AFFILIATES BE LIABLE UNDER THIS AGREEMENT FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING LOSS OF PROFITS OR REVENUE, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, and (B) EACH PARTY'S TOTAL CUMULATIVE LIABILITY ARISING FROM OR RELATING TO THE TRANSACTION DOCUMENTS SHALL NOT EXCEED (1) \$ \*\*\* FOR EITHER PARTY UNTIL THERE IS A CHANGE OF CONTROL IN UNIDYM; AND (2) \$ \*\*\* FOR ANY SUCCESSOR OR ASSIGN OF EITHER PARTY PERMITTED HEREUNDER FROM THE OCCURRENCE OF UNIDYM'S CHANGE OF CONTROL TO THE EXPIRATION OF THE LAST OF THE UNIDYM PATENTS.

For the purpose of this provision, the term "Change of Control" shall mean (i) the direct or indirect sale or exchange by the stockholders of Unidym of all or substantially all of the stocks of Unidym or (ii) a merger or consolidation in which Unidym is a party. The foregoing limitation on liability shall not apply to Samsung's obligation to pay the amounts specified in Section 4.1.

## 11. CONFIDENTIAL INFORMATION

11.1 Confidential Information; Exceptions. Except as provided herein, each Party shall maintain in confidence, and shall not use for any purpose or disclose to any Third Party, information disclosed by the other Party in writing and marked "Confidential" or in a similar manner to indicate its confidential nature or that is disclosed orally and confirmed in writing as confidential within thirty (30) Business Days following such disclosure (collectively, "Confidential Information"). Confidential Information shall not include any information that is: (a) already known to the receiving Party at the time of disclosure hereunder, or (b) now or hereafter becomes publicly known other than through acts or omissions of the receiving Party in breach of this Agreement, or (c) disclosed to the receiving Party by a Third Party under no obligation of confidentiality to the disclosing Party, or (d) independently developed by the receiving Party without use of reliance on the Confidential Information of the disclosing Party.

11.2 Authorized Disclosure. Notwithstanding the provisions of Section 11.1 above, the receiving Party may use and disclose Confidential Information of the disclosing Party as follows: (a) under appropriate confidentiality provisions substantially equivalent to those in this Agreement (i) in connection with the performance of its obligations or as reasonably necessary or useful in the exercise of its rights under this Agreement, (ii) to its Affiliates, (iii) solely where Samsung is the receiving Party, to actual or potential licensees, sublicensees or assignees as permitted hereunder, (iv) to advisors (including lawyers, accountants and auditors); (b) to a government entity as is reasonably necessary (i) to file and prosecute Patent Rights and copyright and trademark applications in accordance with this Agreement, (ii) to prosecute or defend litigation relating to this Agreement or (iii) to comply with applicable law, governmental regulations or court order, provided that, in each case of (b)(i), (ii) and (iii), the receiving Party, to the extent it may legally do so, shall give reasonable advance notice to the disclosing Party of the disclosure and shall cooperate with the disclosing Party to secure confidential treatment of Confidential Information prior to its disclosure (whether through a protective order or otherwise); or (c) to the extent mutually agreed to by the Parties.

11.3 Confidentiality of Agreement. Each Party agrees that the existence and general nature of this Agreement (subject only to Section 11.4), and the terms and conditions this Agreement shall be treated as confidential, provided, however, that each Party may disclose the foregoing: (a) as required by any court or other governmental body; (b) as otherwise required by law; (c) to such Party's advisors (including lawyers, accountants and auditors); (d) subject to Section 11.5, in connection with the requirements of a public offering or securities filing or in filings with national stock exchanges; (e) in confidence, to banks and sources of finance and their advisors; (f) in confidence, to such Party's Affiliates; (g) in confidence (i) in connection with the performance of such Party's obligations, (ii) as reasonably necessary or useful in the exercise of such Party's rights under this Agreement; (h) in the case of Samsung solely, in confidence, to actual or potential licensees, sublicensees or assignees as permitted hereunder; (i) in confidence, in connection with the enforcement of this Agreement or of such Party's rights under this Agreement; or (j) in confidence, in connection with a spin out, sale of stock, sale of assets, a merger or otherwise.

11.4 Press Releases; Use of Names. Subject to the other provisions of this Section 11, each Party may issue press releases solely with the prior written consent of the other Party (such consent not to be unreasonably withheld) or as required to comply with any law or by the rules of any stock exchange. Except in press releases permitted pursuant to this Section 11.4, neither Party shall use the name of the other Party in connection with this Agreement or its activities hereunder.

11.5 Filing, Registration or Notification of the Agreement. To the extent, if any, that a Party concludes in good faith that it is required by applicable law to file or register this Agreement or a notification thereof with any governmental authority, including the U.S. Securities and Exchange Commission and any foreign equivalent, such Party may do so, and the other Party shall cooperate in such filing or notification and shall execute all documents reasonably required in connection therewith; provided, however, that such Party shall give reasonable advance notice to the other Party of such filing or notification and shall cooperate with the other Party to secure confidential treatment of any sensitive term or condition (including but not limited to financial information set forth in Section 4) identified by the other Party prior to its filing or notification. Furthermore, Samsung shall have the right to file this Agreement or a short form thereof with the U.S. Patent and Trademark Office and any equivalent foreign offices in connection with the Unidym CNT Production Patents licensed to Samsung hereunder. Without limiting any of the foregoing, the filing Party shall request confidential treatment of sensitive provisions of the Agreement to the extent permitted by applicable laws and, as reasonably practicable, shall permit the other Party to review and approve the redacted copy of the Agreement prior to any such filing, registration or notification being made. The Parties shall promptly inform each other as to the activities or inquiries of any such governmental authority relating to this Agreement and shall cooperate to respond to any request for further information therefrom.

## **12. TERM AND TERMINATION**

12.1 Term. This Agreement shall become effective on the Effective Date and shall continue thereafter until the last of the Unidym CNT Production Patents licensed to Samsung hereunder expires.

12.2 Termination. This Agreement shall only be terminated as follows:

(a) Unidym may terminate this Agreement solely in the event of Samsung's failure to make the payment owed to Unidym under Section 4.1 by the date specified therein and Samsung has not remedied such failure to pay within thirty (30) Business Days of Samsung's receipt of Unidym's written notice of such failure.

(b) Samsung may terminate this Agreement upon written notice in the event of Unidym's material breach of this Agreement, which remains uncured thirty (30) Business Days after Samsung's written notice to Unidym specifying such breach. Notwithstanding termination of this Agreement by Samsung pursuant to Section 12.2(b), the license granted to Samsung under Section 3.1 shall survive such termination of this Agreement.

12.3 Liabilities Upon Termination. No termination shall release either Party hereto from any liability which at the time of such termination has already accrued to the other Party.

12.4 Return of Materials. Upon any termination of this Agreement, each Party shall promptly return or destroy all documents embodying or disclosing Confidential Information of the other Party, provided, however, that each Party shall be entitled to retain one archival copy of the other's Confidential Information for purposes of determining its obligations under this Agreement, and further provided, however, that the foregoing obligation to return or destroy shall not apply to Samsung solely with respect to any Confidential Information of Unidym that is necessary for Samsung to continue to exercise its surviving rights in the event of Samsung's termination of this Agreement pursuant to Section 12.2(b).

12.5 General Survival. The following Articles 1, 3, 6, 10, 11 and 13 and Sections 14.2 through 14.14 shall survive any termination of this Agreement. The representations and warranties set forth in this Agreement shall survive execution, delivery and effectiveness of this Agreement and continue for the life of this Agreement.

### **13. DISPUTE RESOLUTION; ARBITRATION**

13.1 Party Consultation. In the event any Party claims breach of this Agreement, the Parties shall consult with each other in good faith on the most effective means to cure the breach and to achieve any necessary restitution of its consequences. This consultation shall be undertaken within a period of thirty (30) Business Days following the receipt of a written request to consult, and the consultation period shall not exceed forty-five (45) Business Days. During the consultation period, neither arbitration nor litigation may be pursued until attempts at consultative dispute resolution have been exhausted.

13.2 Arbitration. All disputes, controversies or claims between the Parties arising out of or in connection with this Agreement (including its existence, validity or termination) not resolved pursuant to Section 13.1 shall be finally resolved by arbitration to be held in the State of New York and Borough of Manhattan and conducted in English under the Rules of Arbitration of the International Chamber of Commerce. The arbitral award shall be final and binding on the Parties. Judgment upon the award rendered in arbitration may be entered and enforced in any court having jurisdiction. Except to the extent entry of judgment and any subsequent enforcement may require disclosure, all matters relating to the arbitration, including the award, shall be held in confidence.

Notwithstanding anything in this Article 13, nothing shall limit either Party's right to initiate any action, suit or proceeding for infringement of its intellectual property rights or to seek injunctive relief in any court of competent jurisdiction.

#### 14. MISCELLANEOUS

14.1 Assignment. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective permitted successors and assigns. Unidym shall not assign this Agreement or any of its rights and obligations under this Agreement without the prior written consent of Samsung, which shall not be unreasonably withheld. Samsung may assign this Agreement or any of its rights and obligations under this Agreement without the prior written consent of Unidym to (a) an Affiliate or (b) any entity that succeeds to all or substantially all of Samsung's assets and business to which this Agreement relates (whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise). Any attempted assignment, delegation, or subcontracting by operation of law or otherwise (other than as expressly permitted herein) in contravention of the above provisions shall be void and ineffective. With respect to Unidym only, any change of control, whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise, shall be deemed an assignment hereunder.

14.2 Governing Law. This Agreement shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of New York, USA, without giving effect to the principles of conflicts of law thereof.

14.3 Force Majeure. Neither Party shall be liable for delay or failure in the performance of any of its obligations hereunder if such delay or failure is due to causes beyond its reasonable control, including natural disasters, strikes and labor disputes, acts of governments or governmental agencies, and acts of war, terrorism or civil unrest; provided, however, that the affected Party promptly notifies the other Party in writing and further provided that the affected Party shall use its commercially reasonable efforts to avoid or remove such causes of non-performance and to mitigate the effect of such occurrence, and shall continue performance with reasonable dispatch whenever such causes are removed.

14.4 Notice. All notices, consents, waivers and communications hereunder given by any Party to the other shall be in writing (including email) and delivered personally, by email (provided that receipt is confirmed and that a copy is provided in addition by personal delivery, by courier or by mail as provided herein), by a recognized overnight courier, or by dispatching the same by certified or registered air mail, return receipt requested, with postage prepaid, in each case addressed:

If to Samsung:

Samsung Electronics Co., Ltd.  
Intellectual Property Center  
Intellectual Property Strategy Team}  
416 Maetan 3-dong, Yeongtong-gu

Suwon-si, Gyeonggi-do 443-742  
Republic of Korea  
Attention: Hosik Jang, Vice President  
Email: \*\*\*

If to Unidym:

Unidym, Inc.  
1244 Reamwood Avenue  
Sunnyvale, CA 94089  
USA  
Attention: Mark Tilley, CEO  
Email: \*\*\*

or to such other address or addresses as Unidym or Samsung may from time to time designate by notice as provided herein, except that notices of changes of address shall be effective only upon receipt. All such notices, consents, waivers and communications shall: (a) when posted by certified or registered mail, postage prepaid, return receipt requested, be effective three (3) Business Days after dispatch, unless such communication is sent trans-Pacific, in which case it shall be deemed effective five (5) Business Days after dispatch, (b) when sent using a recognized overnight courier or in person, be effective upon receipt when delivered, or (c) when sent by email, upon receipt of confirmatory hard copies from the sender or return email from the recipient.

14.5 Independent Contractor. Nothing in this Agreement shall be construed to create: (a) a relationship of agency, partnership, joint venture or other joint business arrangement between the Parties; (b) any fiduciary duty owed by one Party to the other Party or any of its Affiliates; (c) a relationship of employer and employee between the Parties; or (d) any basis for any employee of one Party to claim that he or she is an employee of the other Party. No Party shall have the authority to commit the other Party contractually or otherwise to any obligations to Third Parties.

14.6 Amendment and Waivers. None of the terms of this Agreement shall be amended, supplemented or modified except in a writing signed by the Parties. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party or Parties waiving such term or condition. Neither the waiver by any Party of any term or condition of this Agreement nor the failure on the part of any Party, in one or more instances, to enforce any of the provisions of this Agreement or to exercise any right or privilege, shall be deemed or construed to be a waiver of such term or condition for any similar instance in the future or of any subsequent breach hereof. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be a limitation of any other remedy, right, undertaking, obligation or agreement.

14.7 Severability. If and solely to the extent that any provision of this Agreement shall be invalid or unenforceable, or shall render this entire Agreement to be invalid or unenforceable,

such offending provision shall be of no effect and shall not affect the validity of the remainder of this Agreement or any of its provisions; provided, however, the Parties shall use their respective reasonable efforts to replace the invalid or unenforceable provision in a manner that best accomplishes the original intentions of the Parties.

14.8 Construction. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event any ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

14.9 Entire Agreement. This Agreement, together with the Exhibits and Schedules hereto (which are incorporated herein by reference), and the other Transaction Documents, constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede all prior agreements, understandings and negotiations, both written and oral, between the Parties with respect to the subject matter of this Agreement.

14.10 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

14.11 Bankruptcy. All licenses granted under this Agreement shall be deemed licenses of rights to intellectual property for purposes of Section 365(n) of the U.S. Bankruptcy Code and a licensee under this Agreement shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code.

14.12 Expenses. Except as otherwise expressly provided in this Agreement, Unidym and Samsung shall each pay their own expenses incident to this Agreement and the preparation for, and consummation of, the transactions provided for herein.

14.13 Further Assurances. Each Party agrees to do and perform all such further acts and things and shall execute and deliver such other agreements, certificates, instruments and documents necessary to carry out the intent and accomplish the purposes of this Agreement and to evidence, perfect or otherwise confirm its rights hereunder.

14.14 Compliance with Laws. Each of Unidym and Samsung shall, in the performance of this Agreement and its exercise of the rights and licenses granted hereunder, comply with all applicable laws, regulations and orders of the United States and any applicable foreign jurisdiction, including all applicable export and import control laws and regulations and all laws and regulations relating to the Foreign Corrupt Practices Act, 15 U.S.C. §§ 78dd-1 et. seq., as amended. Unidym and Samsung shall not export or re-export any technical data pertaining to the Unidym CNT Production Patents without all required United States and foreign government licenses.

\* \* \* \*

*[Signature Page Follows]*

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their authorized officers as of the date first written above.

**SAMSUNG ELECTRONICS CO., LTD.**

**UNIDYM, INC.**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

EXHIBIT A

UNIDYM CNT PRODUCTION PATENTS

<u>Country</u>	<u>App. Number</u>	<u>Pub. Number</u>	<u>Issue Number</u>	<u>Title</u>	<u>Ownership</u>	<u>Status</u>
***	***	***	***	***	***	***
***	***	***	***	***	***	***
***	***	***	***	***	***	***

EXHIBIT B

CNT PRODUCTION PATENT LICENSE AGREEMENT DISCLOSURE SCHEDULES

Schedule 6.1(f)(i)

<u>Country</u>	<u>App. Number</u>	<u>Pub. Number</u>	<u>Issue Number</u>	<u>Title</u>	<u>Ownership</u>	<u>Status</u>	<u>OA Responses / Fees Due</u>
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***
***	***	***	***	***	***	***	***

Schedule 6.1(f)(ii)

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Schedule 6.1(f)(iii)

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**CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH “[\*\*\*]”. A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT UNDER RULE 406 OF THE SECURITIES ACT OF 1933.**

**INTELLECTUAL PROPERTY PURCHASE AND BUSINESS COOPERATION  
AGREEMENT**

This **INTELLECTUAL PROPERTY PURCHASE AND BUSINESS COOPERATION AGREEMENT** (this “Agreement”), dated as of December \_\_, 2010, is entered into by and between Unidym, Inc., a Delaware corporation having a principal place of business at 1244 Reamwood Avenue, Sunnyvale, California 94089, USA (“Unidym”), and Samsung Electronics Co., Ltd., a company organized under the laws of the Republic of Korea and having a principal place of business at 416 Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, the Republic of Korea (“Samsung”). Unidym and Samsung may be referred to herein, individually, as a “Party” or, collectively, as the “Parties.”

**WHEREAS**, Unidym is engaged in the research, development, marketing and sale of certain carbon nanotube and graphene based products and technologies;

**WHEREAS**, Samsung desires to purchase certain present and future Patent Rights from Unidym relating to Unidym’s carbon nanotube and graphene based technologies; Unidym desires to sell such Patent Rights to Samsung on and subject to the terms and conditions set forth herein; and the Parties further desire to cooperate in further development and commercialization of Unidym’s carbon nanotube and graphene based technologies on and subject to the terms and conditions set forth herein.

**NOW, THEREFORE**, in consideration of the mutual promises and covenants set forth herein, and, for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, agree as follows:

**1. DEFINITIONS**

1.1 Definitions.

“Affiliate” shall mean any entity directly or indirectly controlled by, controlling or under common control with, a Party to this Agreement. For purposes of this definition, “control” (including, with correlative meanings, “controlled by,” “controlling” and “under common control with”) means (a) possession, direct or indirect, of the power to direct or cause direction of the management or policies of an entity (whether through ownership of securities or other ownership interests, by contract or otherwise), or (b) beneficial ownership of \*\*\* percent (\*\*\*) or more of the voting securities or other ownership interest (whether directly or pursuant to any option, warrant or other similar arrangement) or other comparable equity interests of an entity.

“Business Day” shall mean a day other than a Saturday, Sunday, or bank or other public holiday in the State of California, USA or Seoul, Republic of Korea.

“Claim” shall mean any claim, action, lawsuit or other proceeding.

“CNT Production Patent License Agreement” shall mean the agreement of even date herewith entered into by and between Unidym and Samsung relating to sole license of Unidym CNT Production Patents.

“Confidential Information” shall have the meaning set forth in Section 9.1.

“Contract” shall mean any contract, license, sublicense, purchase, sale, permit, loan, security, pledge, instrument and any other arrangement or any commitment to enter into any of the foregoing (in each case, whether written or oral).

“Control” shall mean, with respect to any intellectual property rights, ownership or possession of the legal authority or right of a Party hereto (or any of its Affiliates) to grant a license or sublicense of any such intellectual property right to the other Party or to otherwise disclose proprietary or trade secret information to the other Party, without breaching the terms of any Contract with a Third Party or infringing or misappropriating the intellectual property rights of a Third Party.

“Effective Date” shall have the meaning set forth in Section 2.1.

“Existing Unidym Outbound License Agreements” shall mean the contracts executed before the Effective Date and listed on Exhibit B, pursuant to which Third Parties have and continue to maintain in the future licenses to both Unidym In-Licensed Patents and patents owned by Unidym prior to this Transaction.

“Existing Unidym Patent License Agreements” shall mean the license agreements between Unidym and Third Parties executed prior to the Effective Date, pursuant to which Unidym licensed only Unidym Patents to Third Parties, listed on Exhibit C.

“Intellectual Property Purchase and Business Cooperation Agreement Disclosure Schedules” shall mean the disclosure schedules attached hereto as Exhibit F.

“License and Enforcement Agreement” shall mean the agreement of even date herewith entered into by and between Unidym and Samsung relating to license and enforcement of Unidym In-Licensed Patents.

“Licensed Products” shall mean any products, processes or services covered by the Unidym Patents or Unidym \*\*\* Patent Rights, as applicable.

“Liens” shall mean, with respect to any property or asset, any mortgage, pledge, security interest, encumbrance, claim, lien, or charge of any kind in respect of such property or asset (including, without limitation, any conditional sale or option), any sale of receivables with recourse against such seller, or any agreement to file any of the foregoing.

“Losses” shall have the meaning set forth in Section 8.1.

“Patent Rights” shall mean all patents, patent applications, patent disclosures and equivalents thereof, whether domestic or foreign, including all continuations, continuations-in-part, divisionals, provisionals and renewals, and letters patent granted with respect to any of the foregoing, and all reissues, re-examinations and extensions thereof.

“Subsidiary” shall mean, with respect to any specified Party, any entity of which securities or other interests having the power to elect a majority of that entity’s board of directors or similar governing body, or otherwise having the power to direct the business and policies of that entity (other than securities or other interests having such power only upon the happening of a contingency that has not occurred) are held by such specified Party or one or more Subsidiaries of such specified Party.

“Third Party” shall mean any person or entity other than one of the Parties or an Affiliate of a Party.

“Transaction Documents” shall mean, collectively, this Agreement, the License and Enforcement Agreement and the CNT Production Patent License Agreement.

“Unidym CNT Production Patents” shall mean the patent(s) and patent application(s) owned by Unidym or its Subsidiaries as of the Effective Date and listed on Exhibit A of CNT Production Patent License Agreement.

“Unidym \*\*\* Patent Rights” shall mean \*\*\*.

“Unidym Inbound Agreements” shall mean the Contracts listed on Exhibit B of the License and Enforcement Agreement pursuant to which Unidym in-licenses the Unidym In-Licensed Patents from the Unidym In-Licensors.

“Unidym In-Licensor” means any entity that has granted license to Unidym for the Unidym In-Licensed Patents.

“Unidym In-Licensor Consents” shall mean the three-party letter agreements between Unidym, Samsung and the licensors under the Unidym Inbound Agreements, together with corresponding amendments required by Samsung and specific to each such Unidym Inbound Agreement, in the form agreed to by Samsung, Unidym and the applicable licensor and attached to the License and Enforcement Agreement as Exhibits C through I.

“Unidym In-Licensed Patents” shall mean any and all Patent Rights licensed to Unidym by the Unidym In-Licensors pursuant to the Unidym Inbound Agreements, including the Patent Rights listed on Exhibit A of the License and Enforcement Agreement and further including any patents that may issue from, or claim priority to or through, the applications included in such Patent Rights.

“Unidym Patents” shall mean all Patent Rights existing anywhere in the world owned by Unidym or its Subsidiaries as of the Effective Date, including all the Patent Rights listed on Exhibit A, and further including any patents that may issue from, or claim priority to or through, the applications included in such Patent Rights, except for the Unidym CNT Production Patents which will be retained by Unidym.

1.2 **Other Definitional and Interpretative Provisions.** The words “hereof,” “herein” and “hereunder” and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. References to Sections, Exhibits and Schedules are to Sections, Exhibits and Schedules of this Agreement unless otherwise specified. All Exhibits and Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein, shall have the meaning as defined in this Agreement. Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation,” whether or not they are in fact followed by those words or words of like import. When the words “not to be unreasonably withheld” are used in this Agreement, they shall be deemed to be followed by the phrase “, conditioned or delayed,” whether or not they are in fact followed by that phrase or a phrase of like import. References to any agreement or contract are to that agreement or contract as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof. References to any Third Party include the successors and permitted assigns of that Third Party. References from or through any date mean, unless otherwise specified, from and including or through and including, respectively. References to “law” or “laws” shall be deemed to include any and all applicable laws.

## 2. EFFECTIVENESS OF AGREEMENT

2.1 This Agreement shall come into effect upon receipt by Samsung of all deliverables set forth in Section 2.3 below, provided that the conditions set forth in Section 2.2 have also been met (the date of satisfaction of all such conditions and receipt of all such deliverables being the “Effective Date”).

2.2 The effectiveness of this Agreement shall be subject to each of the following conditions:

(a) Accuracy of Representations and Warranties. The representations and warranties of Unidym set forth in Section 7.1 and of Samsung set forth in Section 7.2 shall be true and correct in all material respects as of the Effective Date.

(b) Litigation. As of the Effective Date, no action, suit, litigation, proceeding or investigation shall have been instituted, be pending or threatened against Unidym or its Affiliates challenging or seeking to make illegal, to delay or otherwise directly or indirectly to restrain or prohibit the consummation of the transactions contemplated by this Agreement and the other Transaction Documents, or seeking to obtain damages in connection with the transactions contemplated by this Agreement or the other Transaction Documents.

(c) No Loss or Destruction. As of the Effective Date, no material loss, damage, destruction, rejection or expiration shall have occurred to the Unidym Patents, regardless of whether covered by insurance.

(d) Transaction Documents. Each of the Transaction Documents shall be executed simultaneously with this Agreement as of the Effective Date.

2.3 The effectiveness of this Agreement shall be subject to Unidym having delivered to Samsung the following on the Effective Date:

(a) a certificate signed on behalf of Unidym by its Chief Executive Officer, dated the Effective Date, certifying that the conditions specified in Sections 2.2(a) through (d) have been satisfied in all respects;

(b) a certificate signed on behalf of Unidym by its Chief Executive Officer, dated the Effective Date, certifying that all the documents required under Section 3.2 will have been delivered to Samsung by the indicated time period and the list of such documents;

(c) a duly-executed Patent Assignment Agreement for the assignment of the Unidym Patents in the form attached hereto as Exhibit D (the "Patent Assignment Agreement");

(d) a certificate signed by the corporate secretary of Unidym, dated the Effective Date, attaching the resolutions and consents of the board of directors of Unidym and, to the extent required, each of its Affiliates authorizing the execution and delivery of, and the consummation of the transactions contemplated by, this Agreement and the other Transaction Documents;

(e) all Unidym In-Licensor Consents, duly executed and delivered by all parties thereto (other than Samsung);

(f) a duly-executed consent from \*\*\*; and

(g) a duly-executed letter from \*\*\*.

### **3. ASSIGNMENT OF UNIDYM PATENTS**

3.1 Assignment of Unidym Patents. On the Effective Date, Unidym shall sell, convey, assign, transfer and deliver to Samsung the entire right, title and interest of Unidym and each of its Subsidiaries in, to and under the Unidym Patents, together with all income, royalties, damages and payments due or payable as of the Effective Date and thereafter, and all of Unidym's and its Subsidiaries' causes of action, lawsuits, judgments and other claims or demands of any nature with respect to the Unidym Patents, including the right to sue and recover for past, present and future infringement thereof. For the avoidance of doubt, Unidym shall retain certain rights to the Unidym Patents only necessary for the purpose of not breaching its obligations under the Existing Unidym Outbound License Agreements and/or Existing Unidym Patent License Agreements, and Samsung shall be entitled to (a) one hundred percent (100%) of

all income, royalties and payments due to Unidym under the Existing Unidym Patent License Agreements and, (b) to other income, royalties and payments due to Unidym under the Existing Unidym Outbound License Agreements, as agreed between the Parties pursuant to the License and Enforcement Agreement.

3.2 Delivery of Certificates and Records. Unidym shall, within one (1) week from the Effective Date, deliver to Samsung (a) all letters patent and all other registrations and certificates for the Unidym Patents; (b) all records whether tangible or intangible relating to the conception and/or reduction to practice of any inventions included or claimed in the Unidym Patents; (c) all files, records and documentation pertaining to the enforcement of the Unidym Patents, including any correspondence, memoranda, non-infringement/validity opinion letters, or other documentation pertaining to any infringement, validity or enforceability issues as they relate to the Unidym Patents; and (d) a complete copy of the prosecution file for each patent and pending patent application in the Unidym Patents, including: (i) all documents received from, or sent to, the patent office in which such patent issued or such patent application is pending, (ii) all correspondence between Unidym and the patent attorney(s) or agent(s) handling the prosecution of such patent or pending patent application, and (iii) all documents and materials supplied to such attorney(s) or agent(s) to assist with such prosecution. Unidym shall deliver on the Effective Date a list of the foregoing documents.

3.3 No Liabilities Assumed. The Unidym Patents shall be assigned, transferred, conveyed and delivered to Samsung free and clear of any and all Liens. Except as expressly set forth herein and in Schedule 3.3, Samsung does not assume, and shall not be deemed to have assumed, any Contract, liability, debt or obligation relating to the Unidym Patents.

3.4 Cooperation for Patent Registration. Unidym shall provide any necessary and prompt support to Samsung, at Samsung's request, for the valid transfer of the Unidym Patents including, without limitation, Samsung's registration for the assignment of the Unidym Patents around the world.

3.5 Grant-back License under Unidym Patents. Upon execution of this Agreement and effective as of the Effective Date, Samsung hereby grants to Unidym only, and Unidym hereby accepts from Samsung, a nontransferable, non-assignable, non-sublicensable, non-exclusive, \*\*\* license under the Unidym Patents to research, develop, make, have made, import, have imported, use, have used, sell, have sold, offer for sale, have offered for sale and otherwise exploit any products or processes covered by the Unidym Patents.

3.6 Unidym Customers. Samsung agrees not to enforce Unidym Patents against any Third Party that purchases Licensed Products from Unidym, provided: (a) \*\*\*; (b) \*\*\*; and (c) \*\*\*. For the avoidance of doubt, Samsung retains its rights to enforce against any Third Party for \*\*\*.

#### **4. BUSINESS COOPERATION**

4.1 Continued Development and Commercialization. Unidym and its Subsidiaries will continue to use their best efforts to develop new technologies supporting commercialization of transparent, conductive films based on carbon nanotube and graphene technologies ("CNT Products").

(a) Preferred Supplier. Subject to: (1) \*\*\*; (2) \*\*\*; (3) \*\*\*; and (4) \*\*\*, Samsung will, in its sole discretion, consider purchasing \*\*\* CNT Products from Unidym \*\*\*.

(b) Pre-paid Purchase of CNT Products. Within twelve (12) months of the Effective Date, upon submission of a purchase order by Samsung, at Samsung's request and in its sole discretion, Unidym shall deliver to Samsung \*\*\* liters of CNT Ink. \*\*\* shall serve as pre-payment for the CNT Ink. The title to and the risk of loss and/or damage for the CNT Inks purchased by Samsung shall be passed from Unidym to Samsung upon completion of the delivery thereof. For the avoidance of doubt, with respect to the above paragraphs (a) and (b) of this Section 4.1, Unidym acknowledges and agrees that Samsung has no legal obligations to perform any activities described therein.

(c) Assignment of Unidym \*\*\* Patent Rights. For \*\*\* years from the Effective Date (the "Transfer Period"), if Unidym or its Subsidiaries files Unidym \*\*\* Patent Rights, Unidym or its Subsidiaries, as the case may be, hereby shall fully transfer and assign to Samsung all its worldwide rights, title and interest in and to all Unidym Improvement Patent Rights. Unidym or its Subsidiaries shall reasonably assist and cooperate with Samsung, at the expense of Samsung, to enable Samsung to acquire, maintain, and perfect its ownership rights in and to the Unidym \*\*\* Patent Rights.

(d) Grant-back License. Subsequent to the assignment of the Unidym \*\*\* Patent Rights to Samsung under Section 4.2(a), Samsung shall grant to Unidym a nontransferable, non-assignable, non-sublicensable, non-exclusive, \*\*\* license under the Unidym \*\*\* Patent Rights to research, develop, make, have made, import, have imported, use, have used, sell, have sold, offer for sale, have offered for sale and otherwise exploit any products or processes covered by the Unidym \*\*\* Patent Rights.

4.2 Unidym Customers. Samsung agrees not to enforce Unidym \*\*\* Patent Rights against any Third Party that purchases Licensed Products from Unidym, provided: (a) \*\*\*; (b) \*\*\*; and (c) \*\*\*. For the avoidance of doubt, Samsung retains its rights to enforce against any Third Party \*\*\*.

4.3 License of Unidym \*\*\* Patent Rights. After the Transfer Period, Unidym shall grant to Samsung a non-exclusive, fully paid up, royalty-free, worldwide license under the Unidym \*\*\* Patent Rights to research, develop, make, have made, import, have imported, use, have used, sell, have sold, offer for sale, have offered for sale and otherwise exploit any products or processes covered by the Unidym \*\*\* Patent Rights for the next \*\*\* years.

## 5. PAYMENTS

5.1 Subject to satisfaction of conditions in Section 2 and Sections 3.1, 3.2 and 3.4, Samsung shall pay to Unidym according to the following schedule:

(a)\*\*\* US Dollars (US\$ \*\*\*) within thirty (30) Business Days from the Effective Date; and

(b)\*\*\* US Dollars (US\$ \*\*\*) within three (3) months after the completion of Samsung's registration for the assignment of the Unidym Patents pursuant to Section 3.4.

5.2 Unidym shall send Samsung an invoice for any payment to be made by Samsung to Unidym under this Agreement sufficiently early for Samsung to receive such invoice no later than thirty (30) Business Days before the due date specified for such payment herein. Each invoice shall clearly reference this Agreement and indicate the invoiced amount and what such amount relates to.

5.3 The payment hereunder by Samsung to Unidym shall be made by electronic transfer in immediately available funds via either a bank wire transfer or any other means of electronic funds transfer, at Samsung's election, to such bank account as Unidym may designate in a written notice at least thirty (30) Business Days before the payment is due.

## **6. TAX**

6.1 Each Party shall be solely responsible for paying any and all taxes, levies, imposts, duties or fees (collectively, "Taxes") imposed by the United States in the case of Unidym and by the Republic of Korea in the case of Samsung in connection with the transactions contemplated by this Agreement or any of the other Transaction Documents and the performance of such Party's obligations under this Agreement or any of the other Transaction Documents.

6.2 With respect to withholding Taxes, Samsung shall, if applicable, pay the amount of applicable withholding Tax imposed by the Republic of Korea on any payments to Unidym under this Agreement, transmit such amount of withholding Tax to the appropriate authority, and promptly deliver to Unidym applicable certification or other evidence of such withholding Tax payments. Such withheld amount shall be treated for all purposes of this Agreement as having been paid to Unidym.

## **7. REPRESENTATIONS AND WARRANTIES**

7.1 Representations and Warranties of Unidym. As of the Effective Date, Unidym hereby represents and warrants to Samsung, as a material inducement for Samsung's entry into this Agreement, as follows:

(a) Organization. Unidym is a corporation validly existing and in good standing under the laws of its jurisdiction of incorporation or formation.

(b) Authority. Unidym's execution, delivery and performance of this Agreement and the other Transaction Documents and the consummation of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of Unidym and do not and shall not violate any provisions of its organizational documents. This Agreement constitutes the valid and binding agreement and obligation of Unidym, enforceable against Unidym in accordance with its terms, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect, and to general equitable principles.

(c) **No Conflict or Violations.** The execution and delivery of this Agreement and the Transaction Documents, the consummation of the transactions contemplated hereby and thereby, including the performance of, fulfillment of and compliance with the terms and conditions hereof and thereof by Unidym does not and shall not: (i) violate any statute, law, rule, regulation, order, writ, injunction or decree of any court or governmental authority, including any applicable import, export and re-export laws and regulations; (ii) violate or conflict with or constitute a default under any Contract to which Unidym is a party as of the Effective Date; and (iii) result in the creation or imposition of any Lien upon any of the Unidym Patents.

(d) **Governmental Consents.** No consent, approval or authorization of, or designation, declaration or filing with, any governmental authority on the part of Unidym or any of its Affiliates is required in connection with the execution and delivery of this Agreement and the other Transaction Documents, or the consummation by Unidym and its Subsidiaries of the transactions contemplated hereby or thereby.

(e) **No Broker.** To the extent Unidym or any of its Affiliates has engaged any corporation, firm or other Third Party who is entitled to any fee or commission as a finder or a broker in connection with the negotiation of this Agreement or the other Transaction Documents or the consummation of the transactions contemplated hereby and thereby, Unidym shall be responsible for any such fee or commission

(f) **Unidym Patents.**

- (i) **Except as disclosed in Schedule 7.1(f)(i), Unidym or its Affiliates are the sole and exclusive owner, free and clear of any and all Liens, of all right, title and interest in and to the Unidym Patents.**
- (ii) **Except as disclosed in Schedule 7.1(f)(i), Unidym or its Affiliates have not granted to any Third Party any ownership, license or other rights in any of the Unidym Patents.**
- (iii) **The Unidym Patents are valid and enforceable or, in the case of patent applications included therein, are the subject of valid and pending applications for letters patent. Unidym has taken all reasonable and necessary actions to maintain and protect the Unidym Patents, including the payment of all maintenance and other fees when due and the recording of all statutorily required filings regarding its interests therein. Except as set forth in Schedule 7.1(f)(i), as of the Effective Date and for a period of six (6) months thereafter, no maintenance fees, responses to office actions or other responses or fees shall be due with respect to any of the Unidym Patents. For the**

avoidance of doubt, Unidym shall be responsible for any and all maintenance fees for which Unidym has received a notice or invoice from relevant patent authorities before the Effective Date.

- (iv) There are no claims, actions, suits, proceedings, investigations or inquiries before any court, arbitrator or governmental or regulatory official or office pending, or, to Unidym's knowledge, threatened involving the Unidym Patents, including any of the foregoing challenging the ownership, validity or enforceability of any of the Unidym Patents. No Unidym Patent is subject to any judgment, order or decree entered in any lawsuit or proceeding that would prohibit the transfer and assignment of such Unidym Patent to Samsung under this Agreement.
- (v) All listed inventors in the Unidym Patents are the sole inventors of such Unidym Patents, including as the term "inventor" is defined and interpreted under United States patent law or patent laws of any other relevant jurisdiction.
- (vi) Except as disclosed in Schedule 7.1(f)(ii), Unidym's use or practice of the Unidym Patents has not and does not infringe, misappropriate, dilute or otherwise conflict with the Intellectual Property Rights of any Third Party.
- (vii) Except as disclosed in Schedule 7.1(f)(iii), to Unidym's knowledge, no third party has infringed, misappropriated, diluted or otherwise conflicted with, or is infringing, misappropriating, diluting or otherwise conflicting with, any of the Unidym Patents.
- (viii) Under the Technology License Agreement that Unidym entered into with \*\*\* on \*\*\*, \*\*\* does not have a right to sublicense under the applicable Unidym Patents to any Third Party except \*\*\*'s Subsidiaries and to any Third Party solely for the purpose of having the Third Party make products or provide services for \*\*\* or \*\*\* Subsidiaries.
- (ix) There is no contractual obligation for Unidym, Nanoconduction, or any Unidym or Nanoconduction inventors of the Unidym Patents co-owned by \*\*\* and Unidym to obtain consent from \*\*\* to transfer its partial ownership interest in the Unidym Patents co-owned by \*\*\* and Unidym to Samsung.

7.2 Representations and Warranties of Samsung. As of the Effective Date, Samsung hereby represents and warrants to Unidym, as a material inducement for Unidym's entry into this Agreement, as follows:

(a) Organization. Samsung is a corporation validly existing and in good standing under the laws of its jurisdiction of incorporation or formation.

(b) Authority. Samsung's execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of Samsung and do not and shall not violate any provisions of its organizational documents. This Agreement constitutes the valid and binding agreement and obligation of Samsung, enforceable against Samsung in accordance with its terms, subject to applicable bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally from time to time in effect, and to general equitable principles.

## 8. INDEMNIFICATION

8.1 Indemnification by Unidym. Unidym shall indemnify, defend and hold harmless Samsung and its Affiliates, and their directors, officers, employees, customers and agents (collectively, "Samsung Indemnitees"), from and against any and all liabilities, losses, costs, damages, fees or expenses (including reasonable legal expenses and attorneys' fees) (collectively, "Losses") arising out of or resulting from (a) the misrepresentation or breach of any representation, warranty or covenant of Unidym under this Agreement; and (b) any liability, debt or obligation arising prior to the Effective Date and directly attributable to the Unidym Patents; provided that (A) Unidym is notified promptly in writing by the Samsung Indemnitees of any Claim for which the Samsung Indemnitees are entitled to indemnification under this Section 8.1; (B) Unidym has the sole right to control and defend any litigation or settlement within the scope of this indemnity; and (C) all Samsung Indemnitees cooperate to the extent reasonably necessary in the defense of any such Claim at Unidym's reasonable expense.

8.2 Indemnification by Samsung. Samsung shall indemnify, defend and hold harmless Unidym and its Subsidiaries, and their directors, officers, employees, customers and agents (collectively, "Unidym Indemnitees"), from and against any and all Losses arising out of or resulting from the misrepresentation or breach of any representation or warranty of Samsung under this Agreement, provided that (i) Samsung is notified promptly in writing by the Unidym Indemnitees of any Claim for which the Unidym Indemnitees are entitled to indemnification under this Section 8.2, (ii) Samsung has the sole right to control and defend any litigation or settlement within the scope of this indemnity, and (iii) all Unidym Indemnitees cooperate to the extent reasonably necessary in the defense of any such Claim at Samsung's reasonable expense.

8.3 Limitation of Liability. EXCEPT TO THE EXTENT OF ANY SUCH DAMAGES PAID TO A THIRD PARTY IN CONNECTION WITH A THIRD PARTY CLAIM UNDER SECTION 8.1 OR 8.2, AS APPLICABLE, OR IN CONNECTION WITH A BREACH OF SECTION 9, (A) IN NO EVENT SHALL EITHER PARTY OR ITS AFFILIATES BE LIABLE UNDER THIS AGREEMENT FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT,

WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING LOSS OF PROFITS OR REVENUE, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, and (B) EACH PARTY'S TOTAL CUMULATIVE LIABILITY ARISING FROM OR RELATING TO THIS AGREEMENT SHALL NOT EXCEED (1) \$ \*\*\* FOR EITHER PARTY UNTIL THERE IS A CHANGE OF CONTROL IN UNIDYM; AND (2) \$ \*\*\* FOR ANY SUCCESSOR OR ASSIGN OF EITHER PARTY FROM THE OCCURRENCE OF UNIDYM'S CHANGE OF CONTROL TO THE EXPIRATION OF THE LAST OF THE UNIDYM PATENTS.

For the purpose of this provision, the term "Change of Control" shall mean (i) the direct or indirect sale or exchange by the stockholders of Unidym of all or substantially all of the stocks of Unidym or (ii) a merger or consolidation in which Unidym is a party. The foregoing limitation on liability shall not apply to Samsung's obligation to pay the amounts specified in [Section 5.1](#).

## 9. CONFIDENTIAL INFORMATION

9.1 Confidential Information; Exceptions. Except as provided herein, each Party shall maintain in confidence, and shall not use for any purpose or disclose to any Third Party, information disclosed by the other Party in writing and marked "Confidential" or in a similar manner to indicate its confidential nature or that is disclosed orally and confirmed in writing as confidential within thirty (30) Business Days following such disclosure (collectively, "Confidential Information"). Confidential Information shall not include any information that is: (a) already known to the receiving Party at the time of disclosure hereunder, or (b) now or hereafter becomes publicly known other than through acts or omissions of the receiving Party in breach of this Agreement, or (c) disclosed to the receiving Party by a Third Party under no obligation of confidentiality to the disclosing Party, or (d) independently developed by the receiving Party without use of reliance on the Confidential Information of the disclosing Party.

9.2 Authorized Disclosure. Notwithstanding the provisions of [Section 9.1](#) above, the receiving Party may use and disclose Confidential Information of the disclosing Party as follows: (a) under appropriate confidentiality provisions substantially equivalent to those in this Agreement (i) in connection with the performance of its obligations or as reasonably necessary or useful in the exercise of its rights under this Agreement, (ii) to its Affiliates, (iii) to advisors (including lawyers, accountants and auditors); (b) to a government entity as is reasonably necessary to comply with applicable law, governmental regulations or court order, provided that, the receiving Party, to the extent it may legally do so, shall give reasonable advance notice to the disclosing Party of the disclosure and shall cooperate with the disclosing Party to secure confidential treatment of Confidential Information prior to its disclosure (whether through a protective order or otherwise); or (c) to the extent mutually agreed to by the Parties.

9.3 Confidentiality of Agreement. Each Party agrees that the existence and general nature of this Agreement (subject only to [Section 9.4](#)), and the terms and conditions this Agreement shall be treated as confidential, provided, however, that each Party may disclose the foregoing: (a) as required by any court or other governmental body; (b) as otherwise required by law; (c) to such Party's advisors (including lawyers, accountants and auditors); (d) subject to [Section 9.5](#), in connection with the requirements of a public offering or securities filing or in

filings with national stock exchanges; (e) in confidence, to banks and sources of finance and their advisors; (f) in confidence, to such Party's Affiliates; (g) in confidence, in connection with the performance of such Party's obligations, or as reasonably necessary or useful in the exercise of such Party's rights under this Agreement; (h) in confidence, in connection with the enforcement of this Agreement or of such Party's rights under this Agreement; or (i) in confidence, in connection with a spin out, sale of stock, sale of assets, a merger or otherwise.

9.4 Press Releases; Use of Names. The Parties shall agree upon a press release to announce the execution of this Agreement in the form attached hereto as Exhibit E for use in responding to inquiries about the Agreement; thereafter, each Party may disclose to Third Parties solely the information contained in such press release without the need for further approval by the other Party. Subject to the other provisions of this Section 9, each Party may issue additional press releases solely with the prior written consent of the other Party (such consent not to be unreasonably withheld) or as required to comply with any law or by the rules of any stock exchange. Except in press releases permitted pursuant to this Section 9.4, neither Party shall use the name of the other Party in connection with this Agreement or its activities hereunder.

9.5 Filing, Registration or Notification of the Agreement. To the extent, if any, that a Party concludes in good faith that it is required by applicable law to file or register this Agreement or a notification thereof with any governmental authority, including the U.S. Securities and Exchange Commission and any foreign equivalent, such Party may do so, and the other Party shall cooperate in such filing or notification and shall execute all documents reasonably required in connection therewith; provided, however, that such Party shall give reasonable advance notice to the other Party of such filing or notification and shall cooperate with the other Party to secure confidential treatment of any sensitive term or condition identified by the other Party prior to its filing or notification. Without limiting any of the foregoing, the filing Party shall request confidential treatment of sensitive provisions of the Agreement to the extent permitted by applicable laws and, as reasonably practicable, shall permit the other Party to review and approve the redacted copy of the Agreement prior to any such filing, registration or notification being made. The Parties shall promptly inform each other as to the activities or inquiries of any such governmental authority relating to this Agreement and shall cooperate to respond to any request for further information therefrom.

## 10. TERM AND TERMINATION

10.1 Term. This Agreement shall become effective on the Effective Date and shall continue thereafter until the last of the Unidym Patents hereunder expires.

10.2 Termination. This Agreement shall only be terminated as follows:

(a) Unidym may terminate this Agreement solely in the event of Samsung's failure to make the payment owed to Unidym under Section 5.1 by the date specified therein and Samsung has not remedied such failure to pay within thirty (30) Business Days of Samsung's receipt of Unidym's written notice of such failure.

(b) Samsung may terminate this Agreement upon written notice in the event of Unidym's material breach of this Agreement, which remains uncured thirty (30) Business Days after Samsung's written notice to Unidym specifying such breach.

10.3 Liabilities Upon Termination. No termination shall release either Party hereto from any liability which at the time of such termination has already accrued to the other Party.

10.4 Return of Materials. Upon any termination of this Agreement, each Party shall promptly return or destroy all documents embodying or disclosing Confidential Information of the other Party, provided, however, that each Party shall be entitled to retain one archival copy of the other's Confidential Information for purposes of determining its obligations under this Agreement, and further provided, however, that the foregoing obligation to return or destroy shall not apply to Samsung solely with respect to any Confidential Information of Unidym that is necessary for Samsung to continue to exercise its surviving rights in the event of Samsung's termination of this Agreement pursuant to Section 10.2(b).

10.5 General Survival. The following Articles 1, 3, 11 and 12 and Sections 4.1(c), 4.1(d), 4.2, 4.3, 7, 8, 9, 10.3, and 10.4 shall survive any termination or expiration of this Agreement. The representations and warranties set forth in this Agreement shall survive execution, delivery and effectiveness of this Agreement and continue for the life of this Agreement.

## **11. DISPUTE RESOLUTION; ARBITRATION**

11.1 Party Consultation. In the event any Party claims breach of this Agreement, the Parties shall consult with each other in good faith on the most effective means to cure the breach and to achieve any necessary restitution of its consequences. This consultation shall be undertaken within a period of thirty (30) Business Days following the receipt of a written request to consult, and the consultation period shall not exceed forty-five (45) Business Days. During the consultation period, neither arbitration nor litigation may be pursued until attempts at consultative dispute resolution have been exhausted.

11.2 Arbitration. All disputes, controversies or claims between the Parties arising out of or in connection with this Agreement (including its existence, validity or termination) not resolved pursuant to Section 11.1 shall be finally resolved by arbitration to be held in the State of New York and Borough of Manhattan and conducted in English under the Rules of Arbitration of the International Chamber of Commerce. The arbitral award shall be final and binding on the Parties. Judgment upon the award rendered in arbitration may be entered and enforced in any court having jurisdiction. Except to the extent entry of judgment and any subsequent enforcement may require disclosure, all matters relating to the arbitration, including the award, shall be held in confidence.

Notwithstanding anything in this Article 11, nothing shall limit either Party's right to seek injunctive relief in any court of competent jurisdiction.

## 12. MISCELLANEOUS

12.1 Assignment. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective permitted successors and assigns. Unidym shall not assign this Agreement or any of its rights and obligations under this Agreement \*\*\*. Samsung may assign this Agreement or any of its rights and obligations under this Agreement without the prior written consent of Unidym to (a) an Affiliate or (b) any entity that succeeds to all or substantially all of Samsung's assets and business to which this Agreement relates (whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise). Any attempted assignment, delegation, or subcontracting by operation of law or otherwise (other than as expressly permitted herein) in contravention of the above provisions shall be void and ineffective. With respect to Unidym only, any change of control, whether pursuant to a spin out, sale of stock, sale of assets, a merger or otherwise, shall be deemed an assignment hereunder.

12.2 Governing Law. This Agreement shall be governed by and construed, interpreted and enforced in accordance with the laws of the State of New York, USA, without giving effect to the principles of conflicts of law thereof.

12.3 Force Majeure. Neither Party shall be liable for delay or failure in the performance of any of its obligations hereunder if such delay or failure is due to causes beyond its reasonable control, including natural disasters, strikes and labor disputes, acts of governments or governmental agencies, and acts of war, terrorism or civil unrest; provided, however, that the affected Party promptly notifies the other Party in writing and further provided that the affected Party shall use its commercially reasonable efforts to avoid or remove such causes of non-performance and to mitigate the effect of such occurrence, and shall continue performance with reasonable dispatch whenever such causes are removed.

12.4 Notice. All notices, consents, waivers and communications hereunder given by any Party to the other shall be in writing (including email) and delivered personally, by email (provided that receipt is confirmed and that a copy is provided in addition by personal delivery, by courier or by mail as provided herein), by a recognized overnight courier, or by dispatching the same by certified or registered air mail, return receipt requested, with postage prepaid, in each case addressed:

If to Samsung:

Samsung Electronics Co., Ltd.  
Intellectual Property Center  
Intellectual Property Strategy Team  
416 Maetan 3-dong, yeongtong-gu  
Suwon-si, Gyeonggi-do 443-742  
Republic of Korea  
Attention: Hosik Jang, Vice President  
Email: \*\*\*

If to Unidym:

Unidym, Inc.  
1244 Reamwood Avenue  
Sunnyvale, CA 94089  
USA  
Attention: Mark Tilley, CEO  
Email: \*\*\*

or to such other address or addresses as Unidym or Samsung may from time to time designate by notice as provided herein, except that notices of changes of address shall be effective only upon receipt. All such notices, consents, waivers and communications shall: (a) when posted by certified or registered mail, postage prepaid, return receipt requested, be effective three (3) Business Days after dispatch, unless such communication is sent trans-Pacific, in which case it shall be deemed effective five (5) Business Days after dispatch, (b) when sent using a recognized overnight courier or in person, be effective upon receipt when delivered, or (c) when sent by email, upon receipt of confirmatory hard copies from the sender or return email from the recipient.

12.5 Independent Contractor. Nothing in this Agreement shall be construed to create: (a) a relationship of agency, partnership, joint venture or other joint business arrangement between the Parties; (b) any fiduciary duty owed by one Party to the other Party or any of its Affiliates; (c) a relationship of employer and employee between the Parties; or (d) any basis for any employee of one Party to claim that he or she is an employee of the other Party. No Party shall have the authority to commit the other Party contractually or otherwise to any obligations to Third Parties.

12.6 Amendment and Waivers. None of the terms of this Agreement shall be amended, supplemented or modified except in a writing signed by the Parties. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party or Parties waiving such term or condition. Neither the waiver by any Party of any term or condition of this Agreement nor the failure on the part of any Party, in one or more instances, to enforce any of the provisions of this Agreement or to exercise any right or privilege, shall be deemed or construed to be a waiver of such term or condition for any similar instance in the future or of any subsequent breach hereof. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be a limitation of any other remedy, right, undertaking, obligation or agreement.

12.7 Severability. If and solely to the extent that any provision of this Agreement shall be invalid or unenforceable, or shall render this entire Agreement to be invalid or unenforceable, such offending provision shall be of no effect and shall not affect the validity of the remainder of this Agreement or any of its provisions; provided, however, the Parties shall use their respective reasonable efforts to replace the invalid or unenforceable provision in a manner that best accomplishes the original intentions of the Parties.

12.8 Construction. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event any ambiguity or question of intent or interpretation arises, this

Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

12.9 Entire Agreement. This Agreement, together with the Exhibits and Schedules hereto (which are incorporated herein by reference) and the other Transaction Documents constitute the entire agreement between the Parties with respect to the subject matter hereof and supersede all prior agreements, understandings and negotiations, both written and oral, between the Parties with respect to the subject matter of this Agreement.

12.10 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

12.11 Expenses. Except as otherwise expressly provided in this Agreement, Unidym and Samsung shall each pay their own expenses incident to this Agreement and the preparation for, and consummation of, the transactions provided for herein.

12.12 Further Assurances. Each Party agrees to do and perform all such further acts and things and shall execute and deliver such other agreements, certificates, instruments and documents necessary to carry out the intent and accomplish the purposes of this Agreement and to evidence, perfect or otherwise confirm its rights hereunder.

12.13 Compliance with Laws. Each of Unidym and Samsung shall, in the performance of this Agreement and its exercise of the rights and licenses granted hereunder, comply with all applicable laws, regulations and orders of the United States and any applicable foreign jurisdiction, including all applicable export and import control laws and regulations and all laws and regulations relating to the Foreign Corrupt Practices Act, 15 U.S.C. §§ 78dd-1 et. seq., as amended.

\* \* \* \*

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their authorized officers as of the date first written above.

**UNIDYM, INC.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**SAMSUNG ELECTRONICS CO., LTD.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_



**EXHIBIT B**

**EXISTING UNIDYM OUTBOUND LICENSE AGREEMENTS**

Amended and Restated Collaboration and License Agreement between Unidym and \*\*\*, dated \*\*\*.

License Agreement between Unidym and \*\*\*, dated \*\*\*.

**EXHIBIT C**

**EXISTING UNIDYM PATENT LICENSE AGREEMENTS**

License Agreement between Nanoconduction and \*\*\*, dated \*\*\*.

License Agreement between Nanoconduction and \*\*\*, dated \*\*\*.

Agreement Regarding Intellectual Property and Waiver of Put Options Between Unidym and \*\*\*, dated \*\*\*.

**EXHIBIT D**

**PATENT ASSIGNMENT AGREEMENT**

**THIS PATENT ASSIGNMENT** ("Assignment") is made and entered into as of this \_\_ day of \_\_\_\_\_, 2010, ("Effective Date"), by and between **UNIDYM, INC.**, a Delaware corporation ("Assignor") and **SAMSUNG ELECTRONICS CO., LTD.**, a company incorporated under the laws of the Republic of Korea ("Assignee").

**WHEREAS**, Assignor and Assignee are parties to that certain Intellectual Property Purchase and Business Cooperation Agreement dated as of \_\_\_\_\_, 2010 ("Purchase Agreement"), pursuant to which Assignor has agreed to sell and Assignee has agreed to purchase certain assets as defined in the Purchase Agreement;

**WHEREAS**, Assignor is the sole and exclusive owner of the entire right, title and interest in, to and under those United States patents and patent applications identified and set forth on Schedule A and the foreign patents and patent applications identified and set forth on Schedule B (together, the "Patents"); and

**WHEREAS**, Assignee wishes to acquire and Assignor wishes to assign all right, title and interest in and to the Patents.

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby sell, convey, assign, transfer and deliver to Assignee, the entire right, title and interest in and to the Patents, for the United States and for all foreign countries, including any continuations, divisions, continuations in part, reissues, reexaminations, extensions or foreign equivalents thereof, and including the subject matter of all claims which may be obtained therefrom for Assignee's own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment and sale had not been made; together with all income, royalties, damages and payments due or payable as of the Effective Date or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the Patents, with the right to sue for, and collect the same for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns, or other legal representatives.

Assignor authorizes and requests the Commissioner of Patents and Trademarks and the equivalent official or institution in each country throughout the world to record Assignee as owner of the Patents, including any continuations, divisions, continuations-in part, reissues, reexaminations or extensions thereof, and to issue any and all letters patent of the United States (or such other country) thereon to Assignee, as assignee of the entire right, title and interest in, to and under the same, for the sole use and enjoyment of Assignee, its successors, assigns or other legal representatives.

Assignor hereby represents and warrants that its right, title and interest in, to and under the Patents are free and clear of any liens and encumbrances, that it has full right to assign all of its right, title and interests therein, and that it has not executed and will not execute any agreement or other instrument in conflict herewith.

Assignor shall provide Assignee and its successors, assigns or other legal representatives, cooperation and assistance at Assignee's request and expense (including the execution and delivery of any and all affidavits, declarations, oaths, exhibits, assignments, powers of attorney or other documentation as may be reasonably required): (1) in the preparation and prosecution of any applications covering the inventions assigned herein; (2) in the prosecution or defense of any interference, opposition, reexamination, reissue, infringement or other proceedings that may arise in connection with any of the patent rights assigned herein, including, but not limited to, testifying as to any facts relating to the patent rights assigned herein and this Assignment; (3) in obtaining any additional patent protection that Assignee may deem appropriate which may be secured under the laws now or hereafter in effect in the United States or any other country; and (4) in the implementation or perfection of this Assignment throughout the world.

Assignor shall take all further actions, and provide Assignee, Assignee's successors, assigns or other legal representatives, all such cooperation and assistance (including, without limitation, the execution and delivery of any and all affidavits, declarations, oaths, exhibits, assignments, powers of attorney or other documentation), reasonably requested by Assignee to more fully and effectively effectuate the purposes of this Assignment.

Where Assignee is unable because of Assignor's unavailability, dissolution or for any other reason, to secure Assignor's signature to apply for or to pursue any application for, or recordal of assignment of, any United States or foreign patents or patent applications, then Assignor hereby irrevocably designates and appoints Assignee and its duly authorized officers and agents as Assignor's agent and attorney in fact, to act for and in Assignor's behalf and stead to execute and file and pursue any such applications and to do all other lawfully permitted acts further the prosecution and issuance of patents and the recordal of assignment thereof with the same legal force and effect as if executed by Assignor.

This Assignment may be executed in counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

\* \* \* \* \*

**IN TESTIMONY WHEREOF**, the Assignor and Assignee have caused this Assignment to be signed and executed by the undersigned officers thereunto duly authorized on the date specified below with each of the parties intended to be legally bound hereby.

**UNIDYM, INC.**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF                    )  
                                  ) SS.  
COUNTY OF                )

On this \_\_ day of \_\_\_\_\_, 2010, there appeared before me \_\_\_\_\_, personally known to me, who acknowledged that he signed the foregoing Assignment as his voluntary act and deed on behalf and with full authority of \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF )  
 ) SS.  
COUNTY OF )

On this \_\_ day of \_\_\_\_\_, 2010, there appeared before me \_\_\_\_\_, personally known to me, who acknowledged that he signed the foregoing Assignment as his voluntary act and deed on behalf and with full authority of \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

Schedule A – US Patents and Patent Applications

<u>Country</u>	<u>App. No.</u>	<u>Pub. No.</u>	<u>Issued No.</u>	<u>Title</u>	<u>Third Party License Rights</u>	<u>Assignee</u>	<u>Status</u>	<u>Fees &amp; Responses To Office Actions Deadlines</u>
***	***	***	***	***	***	***	***	***
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Schedule B – Foreign Patents and Patent Applications

<u>Country</u>	<u>App. No.</u>	<u>Pub. No.</u>	<u>Issued No.</u>	<u>Title</u>	<u>Third Party License Rights</u>	<u>Assignee</u>	<u>Status</u>	<u>Fees &amp; Responses To Office Actions Deadlines</u>
***	***	***	***	***	***	***	***	***
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**EXHIBIT E**

**PRESS RELEASE**

**UNIDYM ANNOUNCES ALLIANCE WITH SAMSUNG ELECTRONICS**

Unidym, Inc., a majority owned subsidiary of Arrowhead Research, announced today that it has completed IP cooperation and license agreements with Samsung Electronics Co., Ltd. (“Samsung”). Under the agreements:

1. Unidym licensed to Samsung patents covering CNT materials, including fundamental patents on CNT compositions of matter, synthesis of CNTs, processing of CNTs, ink formulations, and transparent conductive films.
2. Unidym transferred certain patent rights to Samsung, primarily related to electronic devices incorporating CNTs. Samsung granted back to Unidym licenses to sell products under the transferred patent rights.
3. Unidym and Samsung will continue to work together to develop and commercialize CNT-based products.

“This is an important development in carbon-based electronics,” said Mark Tilley, President and CEO of Unidym. “We have worked with Samsung Electronics for several years, and we are now looking forward to this next phase in our relationship. We expect Samsung’s investment in this alliance and ongoing IP cooperation with Unidym will open the market for printable carbon electronics.”

**About Samsung Electronics Co., Ltd.**

Samsung Electronics Co., Ltd. is a global leader in semiconductor, telecommunication, digital media and digital convergence technologies with 2009 consolidated sales of US\$116.8 billion. Employing approximately 174,000 people in 193 offices across 66 countries, the company consists of eight independently operated business units: Visual Display, Mobile Communications, Telecommunication Systems, Digital Appliances, IT Solutions, Digital Imaging, Semiconductor and LCD. Recognized as one of the fastest growing global brands, Samsung Electronics is a leading producer of digital TVs, memory chips, mobile phones and TFT-LCDs. For more information, please visit <http://www.samsung.com>.

**About Unidym, Inc.**

Unidym is a leader in carbon nanotube-based transparent, conductive films (TCFs) for the electronics industry. TCFs are a critical component in devices such as touch panels, displays, and thin-film solar cells. For example, both touch panels and LCDs typically employ two TCF layers per device. Unidym’s TCFs offer substantial advantages over the incumbent technology, indium-based metal oxides, including: improved durability, lower processing costs, and lower overall cost structure. For more information, visit: <http://www.unidym.com>. Unidym is a majority-owned subsidiary of Arrowhead Research Corporation (NASDAQ: ARWR).

**EXHIBIT F**

**INTELLECTUAL PROPERTY PURCHASE AND BUSINESS COOPERATION  
AGREEMENT DISCLOSURE SCHEDULES**

Schedule 3.3

With respect to the Unidym Patents co-owned by Unidym and \*\*\*, Samsung assumes the following rights and obligations of Unidym under Section 1.15 of the Asset Purchase Agreement by and between Unidym ("Seller") and \*\*\* ("Buyer") dated \*\*\*:

- (a) Patent Prosecution. Buyer and Seller shall cooperate to prosecute and maintain the [Unidym Patents co-owned by Unidym and \*\*\*].
- (b) Patent Costs. Buyer and Seller shall share equally all costs associated with prosecuting and maintaining the patents and patent applications in the [Unidym Patents co-owned by Unidym and \*\*\*]. If either Buyer or Seller wishes to stop the payment of its share of the maintenance fees or prosecution costs associated with a patent or patent application in any country in the [Unidym Patents co-owned by Unidym and \*\*\*], the other Party may take over the payment of such share. The Party discontinuing to pay its share shall transfer to the other Party which continues such payments, its title to, rights and interests in such patent or patent applications for the countries concerned. The rights of third parties under already existing licenses and agreements shall not be prejudiced.
- (c) Enforcement. If either Buyer or Seller wishes to file a lawsuit using the [Unidym Patents co-owned by Unidym and \*\*\*] against a third party, the other Party shall cooperate as necessary, including joining of the lawsuit. The Party that files the lawsuit shall pay for all reasonable costs and expenses incurred by the other Party. The Party that files the lawsuit shall be entitled to \*\*\* percent (\*\*\*) of any net proceeds after such costs and expenses resulting from the lawsuit, and the other Party shall be entitled to \*\*\*. (\*\*\*) of any such net proceeds resulting from the lawsuit. Neither Party shall assert issued patents in the [Unidym Patents co-owned by Unidym and \*\*\*] against any third party that Buyer or Seller has entered a license or non-assertion agreement with respect to those issued patents.
- (d) Licensing. With [respect] to licensing the patents and patent applications in the [Unidym Patents co-owned by Unidym and \*\*\*] to third parties, Buyer and Seller agree as follows:
  - (i) Buyer shall not license patents and patent applications in the [Unidym Patents co-owned by Unidym and \*\*\*] to any other party in any field of use that Seller has already exclusively licensed such patents and patent applications prior to the Closing Date.

(ii) Subject to Section 1.15(d)(i), either Party may sublicense the patents and patent applications in the [Unidym Patents co-owned by Unidym and \*\*\*] to third parties so long as such sublicensing party shall pay to the other Party \*\*\* percent (\*\*\*) of any licensing fees resulting from such sublicense, and provided, further, the following:

- (A) Buyer shall not license patents and patent applications in the [Unidym Patents co-owned by Unidym and \*\*\*] to any competitors of Seller in the \*\*\* Business so long as (i) an exclusive contract manufacturing agreement relating to the sale of \*\*\* product in Sellers' \*\*\* Business between Seller and Buyer is in full force and effect and (ii) Seller is not in breach of such contract manufacturing agreement; and
- (B) Seller will not be required to pay any licensing fees to Buyer with respect to any sublicensing arrangements directly related to Seller's Inks and Films Business.



Schedule 7.1(f)(ii)

- U.S. Patent No. \*\*\*
- U.S. Patent No. \*\*\*
- U.S. Patent No. \*\*\*
- U.S. Patent Application \*\*\*
- U.S. Patent Application \*\*\*

Schedule 7.1(f)(iii)

\*\*\*

**CERTAIN CONFIDENTIAL PORTIONS OF THIS EXHIBIT WERE OMITTED AND REPLACED WITH “[\*\*\*]”. A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECRETARY OF THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO AN APPLICATION REQUESTING CONFIDENTIAL TREATMENT UNDER RULE 406 OF THE SECURITIES ACT OF 1933.**

### **PATENT AND TECHNOLOGY LICENSE AGREEMENT**

This AGREEMENT (“AGREEMENT”) is made on this 14th day of December, 2010, by and between THE BOARD OF REGENTS (“BOARD”) of THE UNIVERSITY OF TEXAS SYSTEM (“SYSTEM”), an agency of the State of Texas, whose address is 201 West 7th Street, Austin, Texas 78701, on behalf of THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER (“UTMDACC”), a member institution of SYSTEM, and ARROWHEAD RESEARCH CORPORATION a Delaware corporation having a principal place of business located at 201 South Lake Avenue, Suite 703, Pasadena, CA 91101 (“LICENSEE”).

#### **RECITALS**

- A. BOARD owns certain PATENT RIGHTS and TECHNOLOGY RIGHTS related to LICENSED SUBJECT MATTER developed at UTMDACC.
- B. BOARD, through UTMDACC, desires to have the LICENSED SUBJECT MATTER developed in the LICENSED FIELD and used for the benefit of LICENSEE, BOARD, SYSTEM, UTMDACC, the inventor(s), and the public as outlined in BOARD’s Intellectual Property Policy.
- C. LICENSEE wishes to obtain a license from BOARD to practice LICENSED SUBJECT MATTER.

NOW, THEREFORE, in consideration of the mutual covenants and promises herein contained, the parties agree as follows:

#### **I. EFFECTIVE DATE**

- 1.1 This AGREEMENT is effective as of the date written above (“EFFECTIVE DATE”) which is the date fully executed by all parties.

## II. DEFINITIONS

As used in this AGREEMENT, the following terms have the meanings indicated:

- 2.1 **AFFILIATE** means any business entity more than fifty percent (50%) owned by LICENSEE, any business entity which owns more than fifty percent (50%) of LICENSEE, or any business entity that is more than fifty percent (50%) owned by a business entity that owns more than fifty percent (50%) of LICENSEE.
- 2.2 **IMPROVEMENT(s)** means BOARD's rights in any invention that is an improvement or modification to the PATENT RIGHTS in the LICENSED FIELD, that cannot be practiced without infringing a claim of any issued patent or pending application under the PATENT RIGHTS, and that:
- (1) is conceived and reduced to practice solely by Wadih Arap, M.D., Ph.D. and/or Renata Pasqualini, Ph.D., and/or any UTMDACC lab personnel working solely under the supervision of either of them, while both are employed solely by UTMDACC, and is conceived and reduced to practice solely at UTMDACC-owned facilities; and
  - (2) is conceived and reduced to practice within five (5) years of the EFFECTIVE DATE; and
  - (3) is not obligated, in whole or in part, to a third party in any field of use and is owned solely by the BOARD; and
  - (4) is disclosed to UTMDACC's Office of Technology Commercialization "OTC" in accordance with UTMDACC's Intellectual Property Policy or is otherwise disclosed to OTC.

Notwithstanding the foregoing, IMPROVEMENTS shall not include any improvement or modification involving or related to the EXCLUDED PEPTIDES/FRAGMENTS.

- 2.3 **IND** means the application submitted to the United States Food and Drug Administration (“FDA”) for approval to conduct a clinical investigation with an investigational new drug, as more specifically defined by 21 C.F.R. §312 et seq., or any future revisions or substitutes thereof, or an equivalent application filed with any equivalent regulatory agency or governmental authority in any jurisdiction other than the United States.
- 2.4 **LICENSED FIELD** means the fields of: (A) therapeutics, diagnostics and research products and services that satisfy both of the following criteria: (1) the products and services incorporate peptides that specifically target receptors on adipose tissue or vasculature associated with adipose tissue; and (2) the products and services are used to treat, diagnose or research solely the following: (a) obesity and overweight; and/or (b) metabolic conditions related to, caused by, and/or associated with obesity and overweight; and (B) cancer therapeutics, cancer diagnostics and cancer research products and services, involving the direct or indirect use of any of the \*\*\* peptide, any functional fragments thereof, or any derivatives or functional analogs of any such peptides or fragments. Notwithstanding the foregoing, the LICENSED FIELD shall not include any field that involves the direct or indirect use of any of the following peptides, any functional fragments thereof, or any derivatives, or analogs of any such peptides or fragments (including any compositions, products, processes,

methods, or services comprising or incorporating any of the foregoing peptides, fragments, derivatives or analogs (collectively, the \*\*\*): (1) the \*\*\*; (2) the \*\*\*; (3) the \*\*\*; (4) the \*\*\*; (5) the \*\*\*; and (6) the \*\*\*.

- 2.5 **LICENSED PRODUCTS** means any product or service sold by LICENSEE or its AFFILIATES or their sublicensees comprising LICENSED SUBJECT MATTER pursuant to this AGREEMENT.
- 2.6 **LICENSED SUBJECT MATTER** means inventions and discoveries covered by PATENT RIGHTS or TECHNOLOGY RIGHTS within LICENSED FIELD.
- 2.7 **LICENSED TERRITORY** means worldwide.
- 2.8 **MARKETING APPROVAL** means the approval required by the United States Food and Drug Administration (“FDA”) in the United States, or an equivalent regulatory agency or governmental authority in any jurisdiction other than the United States, to market and sell a LICENSED PRODUCT in such jurisdiction.
- 2.9 **NDA** means a New Drug Application or Biologics License Application filed with the FDA in connection with obtaining MARKETING APPROVAL, or an equivalent application filed with any equivalent regulatory agency or governmental authority in any jurisdiction other than the United States.
- 2.10 **NET SALES** means the gross revenues received by LICENSEE or its AFFILIATES or their sublicensees from a SALE less sales discounts actually granted, sales and/or use taxes actually paid, import and/or export duties actually

paid, outbound transportation actually prepaid or allowed, and amounts actually allowed or credited due to returns (not exceeding the original billing or invoice amount), all as recorded by LICENSEE or its AFFILIATES or their sublicensees in their official books and records in accordance with generally accepted accounting practices and consistent with their published financial statements and/or regulatory filings with the United States Securities and Exchange Commission.

- 2.11 **PATENT RIGHTS** means BOARD's rights in the information or discoveries described in invention disclosures, or claimed in any patents and/or patent applications, whether domestic or foreign, as identified in Exhibit I attached hereto, and all divisionals, continuations, continuations-in-part (to the extent the claims of such continuations-in-part are entitled to claim priority to the aforesaid patents and/or patent applications identified in Exhibit I), reissues, reexaminations or extensions of the patents and/or patent applications identified in Exhibit I, and any letters patent, domestic or foreign, that issue thereon.
- 2.12 **PHASE I CLINICAL STUDY** means: (a) that portion of the FDA submission and approval process which provides for the first introduction into humans of a product with the purpose of determining human toxicity, metabolism, absorption, elimination and other pharmacological action, as more fully defined by the rules and regulations of the FDA, including 21 C.F.R. § 312.21(a) or any future revisions or substitutes therefor; or (b) a similar clinical study in any jurisdiction other than the United States.

- 2.13 **PHASE II CLINICAL STUDY** means: (a) that portion of the FDA submission and approval process which provides for early controlled clinical studies conducted to obtain preliminary data on the effectiveness of a product for a particular indication, as more specifically defined by the rules and regulations of the FDA, including 21 C.F.R. § 312.21(b) or any future revisions or substitutes therefor; or (b) a similar clinical study in any jurisdiction other than the United States.
- 2.14 **PHASE III CLINICAL STUDY** means: (a) that portion of the FDA submission and approval process in which expanded clinical trials are conducted to gather the additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of a product, as more specifically defined by the rules and regulations of the FDA, including 21 C.F.R. § 312.21(c) or any future revisions or substitutes therefor; or (b) a similar clinical study in any jurisdiction other than the United States.
- 2.15 **SALE** or **SOLD** means the transfer or disposition of a LICENSED PRODUCT for value to a party other than LICENSEE, an AFFILIATE or a ROYALTY-FREE PRACTITIONER. As used herein, "ROYALTY-FREE PRACTITIONER" means UTMDACC and the following individuals: Wadih Arap, M.D., Ph.D. and Amado Zurita-Saavedra, M.D. ("PHYSICIAN INVENTORS"), and any partner or associate who practices medicine with one or more of the PHYSICIAN INVENTORS, but with respect to such partner or associate, only for such time as he/she is engaged in a bona fide medical practice with one or more of the PHYSICIAN INVENTORS.

- 2.16 **TECHNOLOGY RIGHTS** means BOARD's rights in any technical information, know-how, processes, procedures, compositions, devices, methods, formulae, protocols, techniques, software, designs, drawings or data created by the inventor(s) listed in Exhibit I at UTMDACC before the EFFECTIVE DATE, which are not claimed in PATENT RIGHTS but that are necessary for practicing PATENT RIGHTS.
- 2.17 **VALID CLAIM** means: (a) a claim of any issued, unexpired patent that has not been revoked or held unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (b) a claim of any pending or published patent application that that has not been cancelled, withdrawn or abandoned and that has not been pending for more than five (5) years from the filing date of the earliest patent application from which the pending or published application containing such claim claims priority. For purposes of clarification, if a claim in an application has been pending for more than five (5) years from its priority date, and a patent subsequently issues containing such claim, then upon issuance of the patent, the claim shall thereafter be considered a VALID CLAIM.

### III. LICENSE

- 3.1 BOARD, through UTMDACC, hereby grants to LICENSEE a royalty-bearing, exclusive license under LICENSED SUBJECT MATTER to manufacture, have manufactured, use, import, offer to sell and/or sell LICENSED PRODUCTS within LICENSED TERRITORY for use within LICENSED FIELD. This grant is subject to Sections 14.1, 14.2 and 14.3 hereinbelow, the payment by LICENSEE to UTMDACC of all consideration as provided herein, the timely payment of all amounts due hereunder, and is further subject to the following rights retained by BOARD and UTMDACC to:
- (a) Publish the general scientific findings from research related to LICENSED SUBJECT MATTER, subject to the terms of ARTICLE XI—Confidential Information and Publication; and
  - (b) Use LICENSED SUBJECT MATTER for: (1) commercial and non-commercial research; and (2) teaching, patient care, and other academically-related purposes; provided however, that BOARD and UTMDACC shall not engage in commercial research that is specifically directed to the use of PATENT RIGHTS and/or TECHNOLOGY RIGHTS in the LICENSED FIELD. BOARD and UTMDACC may engage in general commercial research with respect to PATENT RIGHTS and TECHNOLOGY RIGHTS and in commercial research in fields of use other than the LICENSED FIELD.

- 3.2 LICENSEE may extend the license granted herein to any AFFILIATE provided that the AFFILIATE consents in writing to be bound by this AGREEMENT to the same extent as LICENSEE. LICENSEE agrees to deliver such contract to UTMDACC within thirty (30) calendar days following execution thereof.
- 3.3 LICENSEE may grant sublicenses under LICENSED SUBJECT MATTER consistent with the terms of this AGREEMENT provided that LICENSEE is responsible for its sublicensees relevant to this AGREEMENT, and for diligently collecting all amounts due LICENSEE from sublicensees. If a sublicensee pursuant hereto becomes bankrupt, insolvent or is placed in the hands of a receiver or trustee, LICENSEE, to the extent allowed under applicable law and in a timely manner, agrees to use its best commercially reasonable efforts to collect all consideration owed to LICENSEE and to have the sublicense agreement confirmed or rejected by a court of proper jurisdiction.
- 3.4 LICENSEE must deliver to UTMDACC a true and correct copy of each sublicense granted by LICENSEE, and any modification or termination thereof, within sixty (60) calendar days after execution, modification, or termination.
- 3.5 If this AGREEMENT is terminated pursuant to ARTICLE XIII-Term and Termination, BOARD and UTMDACC agree to accept as successors to LICENSEE, existing sublicensees in good standing at the date of termination provided that each such sublicensee consents in writing to be bound by all of the terms and conditions of this AGREEMENT.

3.6 UTMDACC shall promptly disclose any IMPROVEMENTS to LICENSEE. LICENSEE shall have ninety (90) days from the date of such disclosure to notify UTMDACC in writing whether LICENSEE desires to include such IMPROVEMENTS under this AGREEMENT. If LICENSEE desires to include a disclosed IMPROVEMENT in this AGREEMENT, the parties shall enter into an amendment to this AGREEMENT adding BOARD's rights in such IMPROVEMENT to Exhibit I, giving LICENSEE a license to such IMPROVEMENT in the LICENSED FIELD. LICENSEE will reimburse UTMDACC for all documented legal and filing fees incurred by UTMDACC relating to any IMPROVEMENT added to this AGREEMENT. If LICENSEE does not send written notice to UTMDACC of its desire to add the IMPROVEMENT to the AGREEMENT prior to expiration of the ninety (90) day period, then thereafter UTMDACC shall have the right to freely license the IMPROVEMENT to third parties, with no further obligation or consideration due to LICENSEE. In the event an IMPROVEMENT is added to the AGREEMENT pursuant to this Section 3.6, the term "EFFECTIVE DATE" as used in Section 2.16 for purposes of defining the TECHNOLOGY RIGHTS related to such IMPROVEMENT shall be deemed to be the effective date of the amendment adding such IMPROVEMENT to this AGREEMENT.

#### IV. CONSIDERATION, PAYMENTS AND REPORTS

- 4.1 In consideration of rights granted by BOARD to LICENSEE under this AGREEMENT, LICENSEE agrees to pay UTMDACC the following:
- (a) All documented legal and filing fees incurred by UTMDACC after the EFFECTIVE DATE in filing, prosecuting, and maintaining PATENT RIGHTS, and all such future expenses incurred by UTMDACC, for so long as, and in such countries as this AGREEMENT remains in effect ("PATENT EXPENSES"). Notwithstanding the foregoing, in the event that there are other entities with licenses to both of the technologies listed on Exhibit I in other fields of use ("ADDITIONAL LICENSEES"), then LICENSEE shall be obligated to pay only a pro rata share of the PATENT EXPENSES as follows. LICENSEE's pro rata share shall be calculated by dividing the total amount of PATENT EXPENSES by the total number of ADDITIONAL LICENSEES with active licenses plus one (for LICENSEE). In the event ADDITIONAL LICENSEES are added after LICENSEE has paid an invoice, LICENSEE shall not be entitled to a refund of any past payments for PATENT EXPENSES. However, LICENSEE shall be entitled to reduce the amount of prospective payments due to UTMDACC by an amount that will result in LICENSEE'S share of PATENT EXPENSES being equal to the pro rata share of the PATENT EXPENSES divided by the number of then currently active ADDITIONAL LICENSEES plus one (for LICENSEE). UTMDACC will invoice LICENSEE on a quarterly basis for PATENT EXPENSES and will indicate in the invoice the total number of ADDITIONAL LICENSEES with active licenses and specify the amount owed by LICENSEE. Any invoiced amounts will be due and payable by LICENSEE within thirty (30) calendar days of invoice. With respect to patent expenses incurred prior to the EFFECTIVE DATE, it is understood and agreed that certain patent expenses incurred prior to the EFFECTIVE

DATE have been paid by LICENSEE and that the Option Fee of \*\*\* paid by LICENSEE pursuant to the Option Agreement between the parties dated June 15, 2010 has been applied towards patent expenses incurred prior to the EFFECTIVE DATE. LICENSEE understands and agrees that LICENSEE is not entitled to any refund of such payments, nor is LICENSEE entitled to apply or credit any such past payments (including, but not limited to the Option Fee) towards any amounts due under this AGREEMENT; and

- (b) A one-time nonrefundable license documentation fee in the amount of \$2,000,000.00. This fee will not reduce the amount of any other payment provided for in this ARTICLE IV, and is due and payable within thirty (30) calendar days after the AGREEMENT has been fully executed by all parties and LICENSEE has received an invoice for the amount from UTMDACC. This license documentation fee is not subject to the thirty (30) day cure period set forth in Section 13.3(b); and
- (c) The following nonrefundable annual maintenance fees (each an "Annual Maintenance Fee") due and payable (without invoice) within thirty (30) calendar days of each anniversary of the EFFECTIVE DATE until the first SALE as follows:
  - (1) an Annual Maintenance Fee of \*\*\* shall be due and payable within thirty (30) calendar days of the first anniversary of the EFFECTIVE DATE;

- (2) thereafter, the Annual Maintenance Fee will increase by \*\*\* each year up to a maximum of \*\*\*. For example, an Annual Maintenance Fee of \*\*\* will be due and payable within thirty (30) calendar days of the second anniversary of the EFFECTIVE DATE; an Annual Maintenance Fee of \*\*\* will be due and payable within thirty (30) calendar days of the third anniversary of the EFFECTIVE DATE, and so on. The Annual Maintenance Fee may be credited against milestone payments due under Section 4.1(f). Otherwise, the Annual Maintenance Fee will not reduce the amount of any other payment provided for in this ARTICLE IV; and
- (d) Running royalties to be calculated on a country-by-country basis as follows:
  - (1) a running royalty equal to \*\*\* of NET SALES of LICENSED PRODUCTS covered by a VALID CLAIM in the jurisdiction of SALE at the time of SALE; and
  - (2) a running royalty equal to \*\*\* of NET SALES of LICENSED PRODUCTS not covered by a VALID CLAIM in the jurisdiction of SALE at the time of SALE, unless LICENSEE declined to pay or failed to pay the applicable PATENT EXPENSES for pursuing and obtaining a VALID CLAIM in the jurisdiction of SALE, in which case a running royalty equal to \*\*\* of NET SALES of LICENSED PRODUCTS shall apply; and

- (e) After the first SALE, minimum annual royalties (“Minimum Annual Royalties”) of \*\*\*, due and payable (without invoice) within thirty (30) calendar days of the first and subsequent anniversaries of the EFFECTIVE DATE which follow the first SALE. Running royalties accrued under Section 4.1(d) and paid to UTMDACC during the one year period preceding an anniversary of the EFFECTIVE DATE shall be credited against the Minimum Annual Royalties due on that anniversary date; and
- (f) The following one-time milestone payments, due and payable to UTMDACC regardless of whether the milestone is achieved by LICENSEE, a sublicensee or AFFILIATE:
- (1) Commencement of the first PHASE I CLINICAL STUDY in any jurisdiction for a LICENSED PRODUCT that is covered by a VALID CLAIM in at least one jurisdiction: \*\*\*;
  - (2) Commencement of the first PHASE II CLINICAL STUDY in any jurisdiction for a LICENSED PRODUCT that is covered by a VALID CLAIM in at least one jurisdiction: \*\*\*;
  - (3) Commencement of the first PHASE III CLINICAL STUDY in any jurisdiction for a LICENSED PRODUCT that is covered by a VALID CLAIM in at least one jurisdiction: \*\*\*;
  - (4) submission of the first NDA in any jurisdiction for a LICENSED PRODUCT that is covered by a VALID CLAIM in at least one jurisdiction: \*\*\*;

- (5) receipt of MARKETING APPROVAL in the United States for the first LICENSED PRODUCT that is covered by a VALID CLAIM in any jurisdiction: \*\*\*;
- (6) receipt of MARKETING APPROVAL in Europe for the first LICENSED PRODUCT that is covered by a VALID CLAIM in any jurisdiction: \*\*\*; and
- (7) receipt of MARKETING APPROVAL in Japan for the first LICENSED PRODUCT that is covered by a VALID CLAIM in any jurisdiction: \*\*\*.

“Commencement” of a clinical study as used in this AGREEMENT shall be deemed to occur upon the first administration of a LICENSED PRODUCT or placebo to any individual enrolled in the applicable clinical study. Each of the foregoing milestone payments shall be made by LICENSEE to UTMDACC (without invoice) within thirty (30) calendar days of achieving the milestone event and shall not reduce the amount of any other payment provided for in this ARTICLE IV. LICENSEE will promptly advise UTMDACC when each milestone is achieved; and

- (g) The following percentages of all consideration (other than research and development money, royalties for NET SALES, and consideration for the purchase of LICENSEE’s stock or other securities not in excess of fair market value) received by the LICENSEE from a sublicensee pursuant to Sections 3.3 and 3.4 hereinabove, including, but not limited to, up-front payments, marketing, distribution, franchise, option, license, or documentation fees, bonus, milestone payments and equity securities:
  - (1) \*\*\* of all such consideration received on or before completion of a PHASE I CLINICAL STUDY in any jurisdiction sponsored by LICENSEE for a LICENSED PRODUCT covered by a VALID CLAIM in at least one jurisdiction;

- (2) \*\*\* of all such consideration received after completion of a PHASE I CLINICAL STUDY in any jurisdiction sponsored by LICENSEE for a LICENSED PRODUCT covered by a VALID CLAIM in at least one jurisdiction, but on or before completion of a PHASE II CLINICAL STUDY in any jurisdiction sponsored by LICENSEE for a LICENSED PRODUCT covered by a VALID CLAIM in at least one jurisdiction; and
  - (3) \*\*\* of all such consideration received after completion of a PHASE II CLINICAL STUDY in any jurisdiction sponsored by LICENSEE for a LICENSED PRODUCT covered by a VALID CLAIM in at least one jurisdiction; and
- (h) In the event this AGREEMENT or any sublicense under this AGREEMENT is assigned to a third party (other than an AFFILIATE), the following percentage of all consideration received for the assignment of rights under this AGREEMENT/sublicense shall be payable to UTMDACC (in partial consideration for UTMDACC's allowing the assignment) on or before the effective date of the assignment:
- (1) \*\*\* of all consideration received on or before completion of a PHASE I CLINICAL STUDY for a LICENSED PRODUCT sponsored by LICENSEE;

- (2) \*\*\* of all consideration received after completion of a PHASE I CLINICAL STUDY for a LICENSED PRODUCT sponsored by LICENSEE, but on or before completion of a PHASE II CLINICAL STUDY for a LICENSED PRODUCT sponsored by LICENSEE; and
- (3) \*\*\* of all consideration received after completion of a PHASE II CLINICAL STUDY for a LICENSED PRODUCT sponsored by LICENSEE.

4.2 Unless otherwise provided, all such payments are payable within thirty (30) calendar days after March 31, June 30, September 30, and December 31 of each year during the term of this AGREEMENT, at which time LICENSEE will also deliver to UTMDACC a true and accurate report, giving such particulars of the business conducted by LICENSEE, its AFFILIATES and its sublicensees, if any exist, during the preceding three (3) calendar months under this AGREEMENT as necessary for UTMDACC to account for LICENSEE's payments hereunder. This report will include pertinent data, including, but not limited to:

- (a) the accounting methodologies used to account for and calculate the items included in the report and any differences in such accounting methodologies used by LICENSEE since the previous report; and

- (b) a list of LICENSED PRODUCTS produced for the three (3) preceding calendar months categorized by the technology it relates to under PATENT RIGHTS; and
- (c) the total quantities of LICENSED PRODUCTS produced by the category listed in Section 4.2(b); and
- (d) the total SALES by the category listed in Section 4.2(b); and
- (e) the calculation of NET SALES by the category listed in Section 4.2(b); and
- (f) the royalties so computed and due UTMDACC by the category listed in Section 4.2(b) and/or minimum royalties; and
- (g) all consideration received from each sublicensee or assignee and payments due UTMDACC; and
- (h) all other amounts due UTMDACC herein.

Simultaneously with the delivery of each such report, LICENSEE agrees to pay UTMDACC the amount due, if any, for the period of such report. These reports are required even if no payments are due.

- 4.3 During the term of this AGREEMENT and for one (1) year thereafter, LICENSEE agrees to keep complete and accurate records of its, its AFFILIATES' and its sublicensees' SALES and NET SALES in sufficient detail to enable the royalties and other payments due hereunder to be determined. LICENSEE agrees

to permit UTMDACC or its representatives, at UTMDACC's expense, to periodically examine LICENSEE's books, ledgers, and records during regular business hours for the purpose of and to the extent necessary to verify any report required under this AGREEMENT. If any amounts due UTMDACC are determined to have been underpaid in an amount equal to or greater than ten percent (10%) of the total amount due during the period so examined, then LICENSEE will pay the cost of the examination plus accrued interest at the highest allowable rate.

- 4.4 Within thirty (30) calendar days following each anniversary of the EFFECTIVE DATE, LICENSEE will deliver to UTMDACC a written progress report as to LICENSEE's (and any sublicensee's) efforts and accomplishments during the preceding year in diligently commercializing LICENSED SUBJECT MATTER in the LICENSED TERRITORY and LICENSEE's (and sublicensees') commercialization plans for the upcoming year.
- 4.5 All amounts payable hereunder by LICENSEE will be paid in United States funds without deductions for taxes, assessments, fees, or charges of any kind. Checks are to be made payable to The University of Texas M. D. Anderson Cancer Center, and sent by United States mail to Box 4390, Houston, Texas 77210-4390, or by wire transfer to:

JPMorgan Chase Bank, N.A.

910 Travis

Houston, Texas 77002

SWIFT: CHASUS33 (for international wires only)

ABA ROUTING NO: 021000021

ACCOUNT NAME: Univ. of Texas M. D. Anderson Cancer Center

ACCOUNT NO.: 1586838979

REFERENCE: include title and EFFECTIVE DATE of AGREEMENT and type of payment (e.g., license documentation fee, milestone payment, royalty [including applicable patent/application identified by MDA reference number and patent number or application serial number], or annual maintenance fee, etc.).

- 4.6 No payments due or royalty rates owed under this AGREEMENT will be reduced as the result of co-ownership of LICENSED SUBJECT MATTER by BOARD and another party, including, but not limited to, LICENSEE.

#### **V. SPONSORED RESEARCH**

- 5.1 If LICENSEE desires to sponsor research for or related to the LICENSED SUBJECT MATTER, and particularly where LICENSEE receives payments for sponsored research pursuant to a sublicense under this AGREEMENT, LICENSEE (a) will notify UTMDACC in writing of all opportunities to conduct this sponsored research (including clinical trials, if applicable), (b) will solicit research and/or clinical proposals from UTMDACC for this purpose, and (c) will give good faith consideration to funding the proposals at UTMDACC.

#### **VI. PATENTS AND INVENTIONS**

- 6.1 If after consultation with LICENSEE both parties agree that a new patent application should be filed for LICENSED SUBJECT MATTER, UTMDACC will prepare and file appropriate patent applications, and LICENSEE will pay the cost of searching, preparing, filing, prosecuting and maintaining same. If LICENSEE notifies UTMDACC that it does not intend to pay the cost of filing, prosecuting or maintaining a patent application or patent directed to the PATENT RIGHTS, or if LICENSEE fails to promptly confirm its intent to pay the cost of filing, prosecuting or maintaining a patent application or patent upon inquiry from UTMDACC, or if LICENSEE is in arrears on any expense payments due under

Section 4.1(a), then UTMDACC may take any action it deems appropriate with respect to such patent application or patent. By way of example, and not by way of limitation, UTMDACC may elect to file, not file, continue prosecution or maintenance, or abandon such patent application or patent at its own expense without further notice to LICENSEE. In the event UTMDACC files or continues prosecution or maintenance of such patent application or patent at UTMDACC's expense, then LICENSEE's rights to such invention under this AGREEMENT shall terminate in their entirety. UTMDACC will provide LICENSEE with a copy of any applications and substantive filings and correspondence with or to a patent office with respect to any patent application or patent for which LICENSEE has paid and is continuing to pay PATENT EXPENSES in accordance with Section 4.1(a). UTMDACC will use reasonable efforts to provide copies of such applications, substantive filings and correspondence to be sent to or filed with a patent office sufficiently in advance of submission so as to give LICENSEE a reasonable opportunity to comment thereon. BOARD and UTMDACC shall consider LICENSEE's comments in good faith, but shall not be required to implement them. The parties agree that they share a common legal interest to get valid enforceable patents and that LICENSEE will keep all privileged information received pursuant to this Section confidential.

## VII. INFRINGEMENT BY THIRD PARTIES

- 7.1 To the extent not prohibited by the Pre-Existing Agreements as defined in Section 7.3, below, LICENSEE, at its expense, shall have the first right to, but is not obligated to, enforce any patent exclusively licensed hereunder against infringement by third parties in the LICENSED FIELD and is entitled to retain recovery from such enforcement. After reimbursement of LICENSEE's reasonable legal costs and expenses related to such recovery, LICENSEE agrees to pay UTMDACC either: (a) \*\*\* of any monetary recovery that is for lost sales due to the infringement and \*\*\* of any related enhanced, increased or punitive damages; or (b) \*\*\* of any monetary recovery that is for reasonable royalties or lost profits and \*\*\* of any related enhanced, increased or punitive damages. LICENSEE must notify UTMDACC in writing of any potential infringement in the LICENSED FIELD within thirty (30) calendar days of knowledge thereof. If LICENSEE does not file suit against a substantial infringer in the LICENSED FIELD within nine (9) months of knowledge thereof, then BOARD or UTMDACC may, at its sole discretion, enforce any patent licensed hereunder on behalf of itself and LICENSEE, with UTMDACC retaining all recoveries from such enforcement, and/or reduce the license granted hereunder to non-exclusive.
- 7.2 In any suit or dispute involving an infringer, the parties agree to cooperate fully with each other, and, if applicable, with licensees in other fields of use. At the request and expense of the party bringing suit, the other party will permit access during regular business hours, to all relevant personnel, records, papers, information, samples, specimens, and the like in its possession.

- 7.3 Notwithstanding any other provision herein to the contrary, LICENSEE understands that BOARD and UTMDACC have previously entered into license agreements with third parties granting licenses to the PATENT RIGHTS and/or TECHNOLOGY RIGHTS in other fields of use outside of the LICENSED FIELD (“Pre-Existing Agreements”). These Pre-Existing Agreements contain language regarding the third parties’ rights and obligations in the event of infringement of the PATENT RIGHTS. To the extent the provisions of this ARTICLE VII conflict with these Pre-Existing Agreements, LICENSEE understands and agrees that the Pre-Existing Agreements shall control.

#### **VIII. PATENT MARKING**

- 8.1 LICENSEE agrees that all packaging containing individual LICENSED PRODUCT(S), documentation therefor, and, when possible, actual LICENSED PRODUCT(S) sold by LICENSEE, AFFILIATES, and/or sublicensees of LICENSEE will be permanently and legibly marked with the number of any applicable patent(s) licensed hereunder in accordance with each country’s patent laws, including Title 35, United States Code, to the extent such marking is necessary or required to fully preserve PATENT RIGHTS in each such country.

#### **IX. INDEMNIFICATION AND INSURANCE**

- 9.1 LICENSEE agrees to hold harmless and indemnify BOARD, SYSTEM, UTMDACC, their Regents, officers, employees (including inventors), students and agents from and against any claims, demands, or causes of action whatsoever, costs of suit and reasonable attorney’s fees, including without limitation, those costs arising on account of any injury or death of persons or damage to property caused by, or arising out of, or resulting from, the exercise or practice of the rights granted hereunder by LICENSEE, its officers, its AFFILIATES or their officers, employees, agents or representatives.

9.2 IN NO EVENT SHALL BOARD, SYSTEM OR UTMDACC BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY, OR PUNITIVE DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS OR REVENUE) ARISING OUT OF OR IN CONNECTION WITH THE AGREEMENT OR ITS SUBJECT MATTER, REGARDLESS OF WHETHER ANY SUCH PARTY KNOWS OR SHOULD KNOW OF THE POSSIBILITY OF SUCH DAMAGES. OTHER THAN FOR CLAIMS AGAINST LICENSEE FOR INDEMNIFICATION (SECTION 9.1) OR FOR MISUSE OR MISAPPROPRIATION OR INFRINGEMENT OF BOARD AND/OR UTMDACC'S INTELLECTUAL PROPERTY RIGHTS, LICENSEE WILL NOT BE LIABLE TO BOARD AND/OR UTMDACC FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS OR REVENUE) ARISING OUT OF OR IN CONNECTION WITH THE AGREEMENT OR ITS SUBJECT MATTER, REGARDLESS OF WHETHER LICENSEE KNOWS OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES.

- 9.3 Beginning at the time when any LICENSED SUBJECT MATTER is being distributed or sold (including for the purpose of obtaining regulatory approvals) by LICENSEE, an AFFILIATE, or by a sublicensee, LICENSEE shall, at its sole cost and expense, procure and maintain commercial general liability insurance in amounts not less than \$2,000,000 per incident and \$2,000,000 annual aggregate, and LICENSEE shall use reasonable efforts to have the BOARD, SYSTEM, UTMDACC, their Regents, officers, employees, students and agents named as additional insureds. Such commercial general liability insurance shall provide: (i) product liability coverage; (ii) broad form contractual liability coverage for LICENSEE's indemnification under this AGREEMENT; and (iii) coverage for litigation costs. The minimum amounts of insurance coverage required herein shall not be construed to create a limit of LICENSEE's liability with respect to its indemnification under this AGREEMENT.
- 9.4 LICENSEE shall provide UTMDACC with written evidence of such insurance within thirty (30) calendar days of its procurement. Additionally, LICENSEE shall provide UTMDACC with written notice of at least fifteen (15) calendar days prior to the cancellation, non-renewal or material change in such insurance.
- 9.5 LICENSEE shall maintain such commercial general liability insurance beyond the expiration or termination of this AGREEMENT during: (i) the period that any LICENSED SUBJECT MATTER developed pursuant to this AGREEMENT is being commercially distributed or sold by LICENSEE, an AFFILIATE or by a sublicensee or agent of LICENSEE; and (ii) the five (5) year period immediately after such period.

**X. USE OF BOARD AND UTMDACC'S NAME**

10.1 LICENSEE will not use the name of (or the name of any employee of) UTMDACC, SYSTEM or BOARD in any advertising, promotional or sales literature, on its Web site, or for the purpose of raising capital without the advance express written consent of BOARD secured through:

The University of Texas  
M. D. Anderson Cancer Center  
Legal Services, Unit 0537  
P.O. Box 301439  
Houston, TX 77230-1439  
ATTENTION: \*\*\*  
Email: \*\*\*

Notwithstanding the above, LICENSEE may use the name of (or name of employee of) UTMDACC, SYSTEM or BOARD in routine business correspondence, or as needed in appropriate regulatory submissions without express written consent.

**XI. CONFIDENTIAL INFORMATION AND PUBLICATION**

11.1 UTMDACC, LICENSEE, and any AFFILIATE(s) to whom this AGREEMENT is extended in accordance with Section 3.2, each agree that all information contained in documents marked "confidential" and forwarded to one by the other (i) are to be received in strict confidence, (ii) are to be used only for the purposes of this AGREEMENT, and (iii) will not be disclosed by the recipient party (except as required by law or court order), its agents (which include counsel, consultants, accountants and financial advisors) or employees without the prior written consent of the disclosing party, except to the extent that the recipient party can establish by competent written proof that such information:

- (a) was in the public domain at the time of disclosure; or
- (b) later became part of the public domain through no act or omission of the recipient party, its employees, agents, successors or assigns; or

- (c) was lawfully disclosed to the recipient party by a third party having the right to disclose it; or
- (d) was already known by the recipient party at the time of disclosure; or
- (e) was independently developed by the recipient party without use of the disclosing party's confidential information; or
- (f) is required by law or regulation to be disclosed.

11.2 Each party's obligation of confidence hereunder will be fulfilled by using at least the same degree of care with the disclosing party's confidential information as it uses to protect its own confidential information, but always at least a reasonable degree of care. This obligation will exist while this AGREEMENT is in force and for a period of three (3) years thereafter.

11.3 To the extent authorized by the Constitution and laws of the State of Texas and subject to the statutory duties of the Texas Attorney General, the parties agree as follows: If either party is required by law to disclose any confidential information of the other party, it will provide the other party with reasonable notice of such potential disclosure to afford the other party an opportunity to obtain a protective order or other appropriate remedy. In any event, the party being required to make the disclosure will disclose only that portion of the confidential information which is legally required and will use best efforts to assure that confidential treatment is afforded to any confidential information so disclosed.

11.4 UTMDACC reserves the right to publish the general scientific findings from research related to LICENSED SUBJECT MATTER, with due regard to the protection of LICENSEE's confidential information. UTMDACC will submit the manuscript of any proposed publication to LICENSEE at least thirty (30) calendar days before submission for publication, and LICENSEE shall have the right to review and comment upon the publication in order to protect LICENSEE's confidential information. Upon LICENSEE's request, submission shall be delayed up to sixty (60) additional calendar days to enable LICENSEE to secure adequate intellectual property protection of LICENSEE's confidential information that would otherwise be affected by the publication.

## **XII. ASSIGNMENT**

12.1 Except in connection with the sale of substantially all of LICENSEE's assets to a third party, this AGREEMENT may not be assigned by LICENSEE without the prior written consent of UTMDACC, which will not be unreasonably withheld. For any assignment of this AGREEMENT to be effective: (a) the LICENSEE must timely pay UTMDACC the assignment consideration specified in Section 4.1(h); and (b) the assignee must assume in writing (a copy of which writing will be provided to UTMDACC) all of LICENSEE's interests, rights, duties, and obligations under the AGREEMENT and agree to comply with all terms and conditions of the AGREEMENT as if the assignee were the original party (i.e., the LICENSEE) to the AGREEMENT. Notwithstanding the foregoing, LICENSEE may make a one-time assignment of this AGREEMENT (including any amendments thereto) to an AFFILIATE without prior written consent of UTMDACC provided that all of the conditions set forth above in subpart (b) are satisfied.

### XIII. TERM AND TERMINATION

- 13.1 Subject to Sections 13.3 and 13.4 hereinbelow, the term of this AGREEMENT is from the EFFECTIVE DATE to the full end of the term or terms for which a VALID CLAIM of the PATENT RIGHTS exists, or if only TECHNOLOGY RIGHTS are licensed and no PATENT RIGHTS are applicable, for a term of fifteen (15) years from the EFFECTIVE DATE.
- 13.2 (a) Any time after three (3) years from the EFFECTIVE DATE, BOARD or UTMDACC have the right to terminate this license in any national political jurisdiction within the LICENSED TERRITORY if LICENSEE, within ninety (90) calendar days after receiving written notice from UTMDACC of the intended termination, fails to provide written evidence satisfactory to UTMDACC that LICENSEE or its sublicensee(s) has commercialized or is actively and effectively attempting to commercialize a licensed invention in such jurisdiction(s). The following definitions apply to Section 13.2: (a) "commercialized" means having SALES in such jurisdiction; and (b) "actively and effectively attempting to commercialize" means having an effective, ongoing and active research, development, manufacturing, marketing or sales program as appropriate, directed toward obtaining regulatory approval, and/or production and/or SALES in any jurisdiction, and has provided plans acceptable to UTMDACC, in its sole discretion, to commercialize licensed inventions in the jurisdiction(s) that UTMDACC intends to terminate.

(b) In addition to the foregoing, UTMDACC shall have the right to terminate this AGREEMENT if LICENSEE (directly, or indirectly through its AFFILIATES or sublicensees) fails to meet any of the following commercial diligence milestones (each, a "DILIGENCE MILESTONE") with respect to the LICENSED SUBJECT MATTER:

- (1) Submission to UTMDACC of a protocol for a PHASE II CLINICAL STUDY for a LICENSED PRODUCT within two (2) years of approval of an IND;
- (2) Commencement of a PHASE II CLINICAL STUDY for a LICENSED PRODUCT within four (4) years of approval of an IND; and
- (3) Commencement of a PHASE III CLINICAL STUDY for a LICENSED PRODUCT within seven (7) years of approval of an IND.

LICENSEE may extend any of the deadlines for meeting the DILIGENCE MILESTONES forth in this Section 13.2(b) above, upon written notice to UTMDACC requesting an extension and full payment of the EXTENSION FEE, as defined below, prior to expiration of the applicable deadline. For purposes of this Section 13.2(b), the term "EXTENSION FEE" shall mean \*\*\* for the first year extension. Thereafter, the EXTENSION FEE will double in price, i.e., \*\*\* shall be due for the second year extension, \*\*\* shall be due for the third year extension, \*\*\* shall be due for the fourth year extension, and so on. Upon payment of each EXTENSION FEE with respect to any of the DILIGENCE MILESTONES, an additional year will be added to the time for completion of such DILIGENCE MILESTONE and all other as yet unmet DILIGENCE MILESTONES. It is understood and agreed that time is of the essence with respect to payment of the EXTENSION FEE, and failure to timely pay an EXTENSION FEE shall not be subject to any cure period.

(c) In addition to the foregoing, UTMDACC shall have the right to terminate this AGREEMENT with respect to any IMPROVEMENT added under Section 3.6, if LICENSEE fails to meet any of the following commercial diligence milestones with respect to that IMPROVEMENT (each, an "IMPROVEMENT MILESTONE"):

- (1) On or before the seventh anniversary of the EFFECTIVE DATE, LICENSEE will initiate a commercialization path for a LICENSED PRODUCT incorporating the IMPROVEMENT. LICENSEE may satisfy this milestone by providing written evidence satisfactory to UTMDACC that LICENSEE or its sublicensee(s) has commercialized or is actively and effectively attempting to commercialize a LICENSED PRODUCT incorporating the IMPROVEMENT;
- (2) On or before the tenth anniversary of the EFFECTIVE DATE, LICENSEE will submit an IND to the FDA for a LICENSED PRODUCT incorporating the IMPROVEMENT; and
- (3) On or before the twelfth anniversary of the EFFECTIVE DATE, LICENSEE will Commence a PHASE I CLINICAL STUDY of a LICENSED PRODUCT incorporating the IMPROVEMENT.

LICENSEE may extend any of the deadlines for meeting the IMPROVEMENT MILESTONES forth in this Section 13.2(c) above, upon written notice to UTMDACC requesting an extension and full payment of the IMPROVEMENT EXTENSION FEE, as defined below, prior to expiration of the applicable deadline. For purposes of this Section 13.2(c), the term "IMPROVEMENT EXTENSION FEE" shall mean \*\*\* for the first year extension. Thereafter, the IMPROVEMENT EXTENSION FEE will double in price, i.e, \*\*\* shall be due for the second year extension, \*\*\* shall be due for the third year extension, \*\*\* shall be due for the fourth year extension, and so on. Upon payment of each IMPROVEMENT EXTENSION FEE with respect to any of the IMPROVEMENT MILESTONES, an additional year will be added to the time for completion of such IMPROVEMENT MILESTONE and all other as yet unmet IMPROVEMENT MILESTONES. It is understood and agreed that time is of the essence with respect to payment of the IMPROVEMENT EXTENSION FEE, and failure to timely pay an IMPROVEMENT EXTENSION FEE shall not be subject to any cure period.

13.3 Subject to any rights herein which survive termination, this AGREEMENT will earlier terminate in its entirety:

- (a) automatically, if LICENSEE files for bankruptcy or is declared bankrupt, and/or if LICENSEE is unable to pay its bills as they come due, and/or if the business of LICENSEE shall be placed in the hands of a receiver, assignee, or trustee, whether by voluntary act of LICENSEE or otherwise; or

- (b) upon thirty (30) calendar days written notice from UTMDACC, if LICENSEE breaches or defaults on the payment or report obligations of ARTICLE IV (excluding the license documentation fee specified in Section 4.1(b) for which no cure period applies), or use of name obligations of ARTICLE X, unless, before the end of the such thirty (30)-calendar day notice period, LICENSEE has cured the default or breach to UTMDACC's satisfaction, and so notifies UTMDACC, stating the manner of the cure; or
- (c) upon ninety (90) calendar days written notice from UTMDACC if LICENSEE breaches or defaults on any other obligation under this AGREEMENT, unless, before the end of the such ninety (90) calendar-day notice period, LICENSEE has cured the default or breach to UTMDACC's satisfaction and so notifies UTMDACC, stating the manner of the cure; or
- (d) at any time by mutual written agreement between LICENSEE and UTMDACC upon one hundred eighty (180) calendar days written notice to all parties and subject to any terms herein which survive termination; or
- (e) if Section 13.2 or 15.9 is invoked; or
- (f) if LICENSEE has defaulted or been late on its payment obligations pursuant to the terms of this AGREEMENT on any three (3) occasions in a twelve (12) month period; or
- (g) immediately, upon written notice from UTMDACC, if LICENSEE fails to timely pay the license documentation fee specified in Section 4.1(b).

13.4 Upon termination of this AGREEMENT:

- (a) nothing herein will be construed to release either party of any obligation maturing prior to the effective date of the termination; and
- (b) LICENSEE covenants and agrees to be bound by the provisions of ARTICLES IX (Indemnification and Insurance), X (Use of Board and UTMDACC's Name) and XI (Confidential Information and Publication) of this AGREEMENT; and
- (c) LICENSEE may, for a period of one year after the effective date of the termination, sell all LICENSED PRODUCTS and parts therefor that it has on hand at the date of termination, if LICENSEE pays the earned royalty thereon and any other amounts due pursuant to ARTICLE IV of this AGREEMENT; and
- (d) Subject to Section 13.4(c), LICENSEE agrees to cease and desist any use and all SALE of the LICENSED SUBJECT MATTER and LICENSED PRODUCTS upon termination of this AGREEMENT; and
- (e) LICENSEE grants to BOARD and UTMDACC a nonexclusive royalty bearing license with the right to sublicense others with respect to improvements made by LICENSEE (including improvements licensed by LICENSEE from third parties) in the LICENSED SUBJECT MATTER. LICENSEE and UTMDACC agree to negotiate in good faith the royalty rate for the nonexclusive license. BOARD's and UTMDACC's right to sublicense others hereunder is solely for the purpose of permitting others to develop and commercialize the entire technology package.

#### XIV. WARRANTY: SUPERIOR-RIGHTS

- 14.1 LICENSEE understands that the LICENSED SUBJECT MATTER may have been developed under a funding agreement with the Government of the United States of America ("Government") and, if so, that the Government may have certain rights relative thereto. This AGREEMENT is explicitly made subject to the Government's rights under any such agreement and any applicable law or regulation. To the extent that there is a conflict between any such agreement, applicable law or regulation and this AGREEMENT, the terms of such Government agreement, applicable law or regulation shall prevail. LICENSEE agrees that LICENSED PRODUCTS used or SOLD in the United States will be manufactured substantially in the United States, unless a written waiver is obtained in advance from the GOVERNMENT. LICENSEE will promptly advise UTMDACC if such a written waiver is requested and/or obtained.
- 14.2 Except for the rights, if any, of the Government of the United States of America as set forth above, to the knowledge of UTMDACC's Office of Technology Commercialization: (a) BOARD is the owner of the entire right, title, and interest in and to LICENSED SUBJECT MATTER; (b) BOARD has the sole right to grant licenses thereunder; and (c) BOARD has not knowingly granted licenses thereunder to any other entity in the LICENSED FIELD that would restrict rights granted hereunder except as stated herein.

- 14.3 LICENSEE understands and agrees that, except as stated in Section 14.2, BOARD and UTMDACC, by this AGREEMENT, are licensing the LICENSED SUBJECT MATTER “as is” in all respects. BOARD and UTMDACC, by this AGREEMENT, make no representation as to the validity and reproducibility of any data relating to the LICENSED SUBJECT MATTER, the scientific merit, operability or fitness for any use, safety, efficacy, toxicity, approvability by regulatory authorities, time and cost of development, patentability, and/or breadth of the LICENSED SUBJECT MATTER. BOARD and UTMDACC, by this AGREEMENT, also make no representation as to whether any patent covered by PATENT RIGHTS is valid or as to whether there are any patents now held, or which will be held, by others or by BOARD or UTMDACC in the LICENSED FIELD, nor do BOARD and UTMDACC make any representation that the inventions contained in PATENT RIGHTS do not infringe any other patents or other intellectual property rights now held or that will be held by others or by BOARD. LICENSEE understands and agrees that the license granted herein is limited to BOARD’s rights only, and that LICENSEE may have to obtain a license from third parties to practice the rights granted herein.
- 14.4 LICENSEE, by execution hereof, acknowledges, covenants and agrees that LICENSEE has not been induced in any way by BOARD, SYSTEM, UTMDACC or employees thereof to enter into this AGREEMENT, and further warrants and represents that (a) LICENSEE is entering into this AGREEMENT voluntarily; (b) LICENSEE has conducted its own due diligence (including its own scientific investigation) with respect to all items and issues pertaining to this AGREEMENT; (c) LICENSEE is not relying on any statements or information provided by BOARD, UTMDACC or any inventor (or any employee, representative or agent of any of the foregoing) with respect to the validity,

reproducibility, scientific merit or operability of the LICENSED SUBJECT MATTER; and (d) LICENSEE has adequate knowledge and expertise, or has used knowledgeable and expert consultants, to adequately conduct its own due diligence, and agrees to accept all risks inherent herein.

#### XV. GENERAL

15.1 This AGREEMENT constitutes the entire and only agreement between the parties for LICENSED SUBJECT MATTER and all other prior negotiations, representations, agreements and understandings are superseded hereby. No agreements altering or supplementing the terms hereof will be made except by a written document signed by both parties.

15.2 Any notice required by this AGREEMENT must be given by prepaid, first class, certified mail, return receipt requested, and addressed in the case of UTMDACC to:

The University of Texas M. D. Anderson Cancer Center  
Office of Technology Commercialization  
7515 S. Main, Suite 490, Unit 0510  
Houston, Texas 77030  
ATTENTION: Christopher C. Capelli, M.D.

or in the case of LICENSEE to:

Arrowhead Research Corporation  
201 South Lake Avenue  
Suite 703  
Pasadena, California 91101  
ATTENTION: Christopher Anzalone, CEO

or other addresses as may be given from time to time under the terms of this notice provision.

- 15.3 LICENSEE must comply with all applicable federal, state and local laws and regulations in connection with its activities pursuant to this AGREEMENT. LICENSEE acknowledges that the LICENSED SUBJECT MATTER is subject to U. S. export control jurisdiction. LICENSEE agrees to comply with all applicable international and national laws that apply to the LICENSED SUBJECT MATTER, including U.S. Export Administration Regulations, as well as end-user, end-use, and destination restrictions applied by the United States.
- 15.4 This AGREEMENT will be construed and enforced in accordance with the laws of the United States of America and of the State of Texas, without regard to its conflict of law provisions. The Texas State Courts of Harris County, Texas (or, if there is exclusive federal jurisdiction, the United States District Court for the Southern District of Texas) shall have exclusive jurisdiction and venue over any dispute arising out of this AGREEMENT, and LICENSEE consents to the jurisdiction and venue of such courts and hereby explicitly waives the rights to any other venue to which it might be entitled by cause of action, domicile or otherwise. Nothing in this AGREEMENT shall be deemed as a waiver by BOARD, SYSTEM or UTMDACC of its sovereign immunity.
- 15.5 Any dispute or controversy arising out of or relating to this AGREEMENT, its construction or its actual or alleged breach will be decided by mediation. If the mediation does not result in a resolution of such dispute or controversy, it will be finally decided by an appropriate method of alternate dispute resolution, including without limitation, arbitration, conducted in the city of Houston, Harris County, Texas, in accordance with the applicable, then-current procedures of the

American Arbitration Association. The arbitration panel will include members knowledgeable in the evaluation of the LICENSED SUBJECT MATTER. Judgment upon the award rendered may be entered in the highest court or forum having jurisdiction, state or federal. The provisions of this Section 15.5 will not apply to decisions on the validity of patent claims or to any dispute or controversy as to which any treaty or law prohibits such arbitration. The decision of the arbitration must be sanctioned by a court of law having jurisdiction to be binding upon and enforceable by the parties.

- 15.6 Failure of BOARD or UTMDACC to enforce a right under this AGREEMENT will not act as a waiver of right or the ability to later assert that right relative to the particular situation involved.
- 15.7 Headings included herein are for convenience only and will not be used to construe this AGREEMENT.
- 15.8 If any part of this AGREEMENT is for any reason found to be unenforceable, all other parts nevertheless will remain enforceable.
- 15.9 In the event that LICENSEE brings an action before any court, agency or tribunal seeking to invalidate or otherwise challenge the enforceability of or BOARD's ownership of any patent included in the PATENT RIGHTS, then UTMDACC may immediately terminate this AGREEMENT upon written notice to LICENSEE. Any dispute regarding the validity, enforceability or ownership of any patent included in the PATENT RIGHTS shall be litigated in the courts located in Houston, Texas, and LICENSEE agrees not to challenge personal jurisdiction in that forum. To the extent that LICENSEE unsuccessfully

challenges the validity or enforceability of any patent included in the PATENT RIGHTS, LICENSEE agrees to reimburse UTMDACC and BOARD for all costs and fees (including attorney's fees) paid by UTMDACC and BOARD in defending against such challenge. LICENSEE understands and agrees that, in the event LICENSEE successfully challenges the validity or enforceability of any patent included in the PATENT RIGHTS, all payments or other consideration made or otherwise provided by LICENSEE to UTMDACC prior to a final, non-appealable adjudication of invalidity and/or unenforceability shall be non-refundable. The obligations of this Section shall survive the expiration or termination of this AGREEMENT.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized representatives to execute this AGREEMENT.

BOARD OF REGENTS OF THE  
UNIVERSITY OF TEXAS SYSTEM

ARROWHEAD RESEARCH  
CORPORATION

By /s/ John Mendelsohn  
John Mendelsohn, M.D.  
President  
The University of Texas  
M. D. Anderson Cancer Center

By /s/ Christopher Anzalone  
Printed Name: Christopher Anzalone  
Title: President and CEO

Date: December 14, 2010

Date: November 24, 2010

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER  
CENTER

By /s/ Leon Leach  
Leon Leach  
Executive Vice President  
The University of Texas  
M. D. Anderson Cancer Center

Date: December 14, 2010

Approved as to Content:

By /s/ Christopher C. Capelli  
Christopher C. Capelli, M.D.  
Vice President, Technology Based Ventures  
Office of Technology Commercialization  
M. D. Anderson Cancer Center

Date: November 29, 2010

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

I, Christopher Anzalone, Chief Executive Officer of Arrowhead Research Corporation, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: February 10, 2011

/s/ CHRISTOPHER ANZALONE

**Christopher Anzalone**  
**Chief Executive Officer**

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

I, Kenneth A. Myszkowski, Chief Financial Officer of Arrowhead Research Corporation, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: February 10, 2011

/s/ Kenneth A. Myszkowski

**Kenneth A. Myszkowski,  
Chief Financial Officer**

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

I, Christopher Anzalone, Chief Executive Officer of Arrowhead Research Corporation (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended June 30, 2010, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: February 10, 2010

/s/ CHRISTOPHER ANZALONE

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**Christopher Anzalone**  
**Chief Executive Officer**

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

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

I, Kenneth A. Myszkowski, Chief Financial Officer of Arrowhead Research Corporation (the "Company"), certify, pursuant to Rule 13(a)-14(b) or Rule 15(d)-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that (i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended June 30, 2010, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: February 10, 2010

/s/ Kenneth A. Myszkowski

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**Kenneth A. Myszkowski**  
**Chief Financial Officer**

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