UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2009

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE EXCHANGE ACT**

For the transition period from to

Commission file number 001-14895

AVI BIOPHARMA, INC.
(Exact name of registrant as specified in its charter)

Oregon (State or other jurisdiction of incorporation or organization)	**93-0797222** (I.R.S. Employer Identification No.)
4575 SW Research Way, Suite 200, Corvallis, Oregon (Address of principal executive offices)	**97333** (Zip Code)

Issuer's telephone number, including area code: **541-753-3635**

Indicate by check mark whether the issuer (1) 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 x No o

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 o No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Securities Exchange Act of 1934 (Check one):

Large accelerated filer o	Accelerated filer x
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller Reporting Company o

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock with $.0001 par value (Class)	**85,644,698** (Outstanding at May 8, 2009)

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AVI BIOPHARMA, INC.
(A Development Stage Company)
BALANCE SHEETS
(unaudited)
(in thousands, except per share data)

	March 31, 2009	December 31, 2008
Assets		
Current Assets:		
Cash and cash equivalents	$ 24,723	$ 11,192
Short-term securities—available-for-sale	285	282
Accounts receivable	3,126	4,971
Other current assets	645	599
Total Current Assets	28,779	17,044
Property and Equipment, net of accumulated depreciation and amortization of $13,207 and $12,919	4,934	5,189
Patent Costs, net of accumulated amortization of $1,959 and $1,927	3,269	3,268
Other assets	35	35
Total Assets	$ 37,017	$ 25,536
Liabilities and Shareholders' Equity		
Current Liabilities:		
Accounts payable	$ 1,279	$ 2,014
Accrued employee compensation	964	1,306

Long-term debt, current portion	75	74
Warrant liability	6,815	1,254
Deferred revenue	2,159	2,190
Other liabilities	324	450
Total Current Liabilities	11,616	7,288
Commitments and Contingencies		
Long-term debt, non-current portion	1,981	2,001
Other long-term liabilities	530	515
Shareholders' Equity:		
Preferred stock, $.0001 par value, 20,000,000 shares authorized; none issued and outstanding	—	—
Common stock, $.0001 par value, 200,000,000 shares authorized; 85,644,698 and 71,101,738 issued and outstanding	9	7
Additional paid-in capital	274,118	266,035
Accumulated other comprehensive income		
Deficit accumulated during the development stage	(251,237)	(250,310)
Total Shareholders' Equity	22,890	15,732
Total Liabilities and Shareholders' Equity	$ 37,017	$ 25,536

See accompanying notes to financial statements

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AVI BIOPHARMA, INC.
(A Development Stage Company)
STATEMENTS OF OPERATIONS
(unaudited)
(in thousands, except per share amounts)

	Three months ended March 31,		July 22, 1980 (Inception) through
	2009	2008	March 31, 2009
Revenues from license fees, grants and research contracts	$ 3,150	$ 5,625	$ 45,374
Operating expenses:			
Research and development	4,495	6,903	210,531
General and administrative	2,220	2,553	67,544
Acquired in-process research and development		9,916	29,461
	6,715	19,372	307,536
Other income (loss):			
Interest income and other, net	16	167	8,793
Gain (loss) on warrant liability	2,622	(1,435)	15,270
Realized gain on sale of short-term securities— available-for-sale	—	—	3,863
Write-down of short-term securities— available-for-sale	—	—	(17,001)
	2,638	(1,268)	10,925
Net loss	$ (927)	$ (15,015)	$ (251,237)
Net loss per share - basic and diluted	$ (0.01)	$ (0.23)	
Weighted average number of common shares outstanding for computing basic and diluted loss per share (in thousands)	80,759	65,188	

See accompanying notes to financial statements.

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AVI BIOPHARMA, INC.
(A Development Stage Company)
STATEMENTS OF CASH FLOWS
(unaudited)
(in thousands)

	Three months ended March 31,	For the Period July 22, 1980 (Inception) through

	2009	2008	March 31, 2009
Cash flows from operating activities:			
Net loss	$ (927)	$ (15,015)	$ (251,237)
Adjustments to reconcile net loss to net cash flows used in operating activities:			
Depreciation and amortization	367	349	16,670
Loss on disposal of assets	183	1	1,141
Realized gain on sale of short-term securities—available-for-sale	—	—	(3,863)
Write-down of short-term securities—available-for-sale	—	—	17,001
Impairment charge on real estate owned	—	—	800
Issuance of common stock and warrants to vendors	—	—	2,903
Compensation expense on issuance of common stock and partnership units	45	118	1,073
Compensation expense to non-employees on issuance of options and warrants to purchase common stock or partnership units	78	104	3,213
Stock-based compensation	442	1,279	13,699
Conversion of interest accrued to common stock	—	—	8
Acquired in-process research and development	—	9,916	29,461
(Gain) loss on warrant liability	(2,622)	1,435	(15,270)
(Increase) decrease in:			
Accounts receivable and other current assets	1,799	(1,408)	(3,687)
Other assets	—	—	(35)
Net increase in accounts payable, accrued employee compensation, and other liabilities	(980)	(1,205)	3,982
Net cash used in operating activities	(1,615)	(4,426)	(184,141)
Cash flows from investing activities:			
Purchase of property and equipment	(37)	(150)	(16,975)
Patent costs	(259)	(189)	(6,439)
Purchase of marketable securities	(3)	(2)	(112,989)
Sale of marketable securities	—	—	117,613
Acquisition costs	—	(12)	(2,389)
Net cash used in investing activities	(299)	(353)	(21,179)
Cash flows from financing activities:			
Proceeds from sale of common stock, warrants, and partnership units, net of offering costs, and exercise of options and warrants	15,464	—	230,561
Repayments of long-term debt	(19)	(63)	(132)
Buyback of common stock pursuant to rescission offering	—	—	(289)
Withdrawal of partnership net assets	—	—	(177)
Issuance of convertible debt	—	—	80
Net cash provided by (used in) financing activities	15,445	(63)	230,043
Increase (decrease) in cash and cash equivalents	13,531	(4,842)	24,723
Cash and cash equivalents:			
Beginning of period	11,192	24,803	—
End of period	$ 24,723	$ 19,961	$ 24,723
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the year for interest	$ 24	$ 25	$ 232
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING ACTIVITIES AND FINANCING ACTIVITIES:			
Short-term securities—available-for-sale received in connection with the private offering	$ —	$ —	$ 17,897
Issuance of common stock and warrants in satisfaction of liabilities	$ —	$ —	$ 545
Issuance of common stock for building purchase	$ —	$ —	$ 750
Assumption of long-term debt for building purchase	$ —	$ —	$ 2,200
Issuance of common stock for Ercole assets	$ —	$ 8,075	$ 8,075
Assumption of liabilities for Ercole assets	$ —	$ 2,124	$ 2,124
Issuance of common stock and warrants in satisfaction of employee bonuses	$ 239	$ —	$ 239

See accompanying notes to financial statements.

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements.

AVI BIOPHARMA, INC.
NOTES TO FINANCIAL STATEMENTS

Note 1. Basis of Presentation

The financial information included herein for the three-month period ended March 31, 2009 and 2008 and the financial information as of March 31, 2009 is unaudited; however, such information reflects all adjustments consisting only of normal recurring adjustments, which, in the opinion of management, are necessary for a fair presentation of the financial position, results of operations and cash flows for the interim periods. The financial information as of December 31, 2008 is derived from AVI BioPharma, Inc.'s (the "Company's") Form 10-K. The interim financial statements should be read in conjunction with the financial statements and the notes thereto included in the Company's Form 10-K. The results of operations for the interim periods presented are not necessarily indicative of the results to be expected for the full year.

Reclassifications. Certain prior year amounts have been reclassified to conform to current year presentation. These changes did not have a significant impact on Company's net loss, assets, liabilities, shareholders' equity or cash flows.

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

Commitments and Contingencies. In the normal course of business, the Company may be named as a party to various legal claims, actions and complaints, including matters involving employment, intellectual property, effects from the use of drugs utilizing our technology, or others. It is impossible to predict with certainty whether any resulting liability would have a material adverse effect on the Company's financial position, results of operations or cash flows.

Note 2. Fair Value Measurements

The Company measures at fair value certain financial assets and liabilities. SFAS No. 157, "Fair Value Measurements" (SFAS No. 157), specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair-value hierarchy:

Level 1—Quoted prices for identical instruments in active markets;

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Level 2—Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets; and

Level 3—Valuations derived from valuation techniques in which one or more significant value drivers are unobservable.

The Company's assets measured at fair value on a recurring basis consisted of the following as of March 31, 2009:

	Fair Value Measurement as of March 31, 2009			
(in thousands)	Total	Level 1	Level 2	Level 3
Short-term securities—available-for-sale	$ 285	$ 285	—	—
Total	$ 285	$ 285	$ —	$ —

The Company's liabilities measured at fair value on a recurring basis consisted of the following as of the date indicated:

	Fair Value Measurement as of March 31, 2009			
(in thousands)	Total	Level 1	Level 2	Level 3
Warrants	$ 6,815	—	—	$ 6,815
Total	$ 6,815	$ —	$ —	$ 6,815

A reconciliation of the change in value of the Company's warrants for the three months ended March 31, 2009 is as follows:

(in thousands)	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
Balance at January 1, 2009	$ 1,254
Total unrealized gains included in earnings	(2,622)
Issuances	8,183
Balance at March 31, 2009	$ 6,815
The amount of total gains for the period included in earnings attributable to the change in unrealized gains relating to warrants still held at March 31, 2009	$ 2,622

The carrying amounts reported in the balance sheets for cash and cash equivalents, accounts receivable, accounts payable, and other current monetary assets and liabilities approximate fair value because of the immediate or short-term maturity of these financial instruments.

Note 3. Revenue Recognition

Government Research Contract Revenue. The Company recognizes revenues from federal research contracts during the period in which the related expenditures are incurred. The Company presents these revenues and related expenses at gross in the consolidated financial statements in accordance with EITF 99-19 "*Reporting Revenue Gross as a Principal versus Net as an Agent*."

License Arrangements. License arrangements may consist of non-refundable upfront license fees, data transfer fees, research reimbursement payments, exclusive licensed rights to patented or patent pending compounds, technology access fees, various performance or sales milestones and future product royalty payments. Some of these arrangements are multiple element arrangements.

The Company defers recognition of non-refundable upfront fees if it has continuing performance obligations without which the technology, right, product or service conveyed in conjunction with the non-refundable fee has no utility to the licensee that is separate and independent of Company performance under the other elements of the arrangement. In addition, if the Company has continuing involvement through research and development services that are required because its know-how and expertise related to the technology is proprietary to the Company, or can only be performed by the Company, then such up-front fees are deferred and recognized over the period of continuing involvement. At March 31, 2009, the Company had deferred revenue of $2.2 million, which represents up-front fees received from third parties pursuant to certain contractual arrangements. The Company will recognize the revenue from these contracts upon the achievement of certain performance milestones, as specified in the agreements.

Payments related to substantive, performance-based milestones in a research and development arrangement are recognized as revenue upon the achievement of the milestones as specified in the underlying agreements when they represent the culmination of the earnings process.

Note 4. Patents

Patent costs consist primarily of legal and filing fees incurred to file patents on proprietary technology developed by the Company. Patent costs are amortized on a straight-line basis over the shorter of the estimated economic lives or the legal lives of the patents, generally 17 years.

Note 5. Acquisition of Ercole

On March 20, 2008, the Company acquired all of the stock of Ercole Biotechnology, Inc. ("Ercole") in exchange for 5,811,721 shares of AVI common stock. The transaction included the assumption of approximately $1.8 million in liabilities of Ercole. The AVI common stock was valued at approximately $8.4 million. AVI also issued warrants to purchase AVI stock to settle certain outstanding warrants held in Ercole, which were valued at $436,535. These warrants are classified in equity. The acquisition was aimed at consolidating AVI's position in directed alternative RNA splicing therapeutics. Ercole and the Company had been collaborating since 2006 to develop drug candidates, including AVI-4658, currently in clinical testing in the United Kingdom for the treatment of Duchenne muscular dystrophy. Ercole has other ongoing discovery research programs.

The total estimated purchase price of $10.3 million has been allocated as follows:

Cash	$	54,000
A/R	$	76,000
Prepaid Expenses	$	7,000
Fixed Assets	$	10,000
Patents	$	190,000
Acquired In-Process Research and Development	$	9,916,000

The pending patents acquired as part of the Ercole acquisition have an expected expiration date of 2026. Acquired in-process research and development consists of other discovery research programs in areas including beta thalassemia and soluble tumor necrosis factor receptor. As these programs were in development at the time of acquisition, there were significant risks associated with completing these projects, and there were no alternative future uses for these projects, the associated value has been considered acquired in-process research and development.

Ercole has been a development stage company since inception and does not have a product for sale. The Company has retained a limited number of Ercole employees and plans on incorporating in-process technology of Ercole into the Company's processes. The acquisition of Ercole did not meet the definition of a business under EITF 98-3, "Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets or of a Business," and, therefore, is being accounted for as an asset acquisition.

Note 6. Other Current Assets

Amounts included in other current assets are as follows:

(in thousands)	March 31, 2009	December 31, 2008
Prepaid expenses	$ 253	$ 316
Prepaid rents	108	—
Restricted cash	284	283
Other current assets	$ 645	$ 599

Starting in April 2006, the Company was required to pledge $150,000 as collateral for company credit cards

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issued to certain employees. Starting in April 2007 the Company was required to pledge $125,000 as collateral for payments on long-term debt. The Company classifies these amounts as restricted cash. As of March 31, 2009, restricted cash including accrued interest was $285,000. The remaining components of other current assets include normally occurring prepaid expenses and rents.

Note 7. Liquidity

The Company is in the development stage. Since its inception in 1980 through March 31, 2009, the Company has incurred losses of approximately $251 million, substantially all of which resulted from expenditures related to research and development, general and administrative charges and acquired in-process research and development reflecting two acquisitions. The Company has not generated any material revenue from product sales to date, and there can be no assurance that revenues from product sales will be achieved. Moreover, even if the Company does achieve revenues from product sales, the Company expects to incur operating losses over the next several years.

The financial statements have been prepared assuming that the Company will continue as a going concern. The Company's ability to achieve a profitable level of operations in the future will depend in large part on completing product development of its antisense products, obtaining regulatory approvals for such products, and bringing these products to market. During the period required to develop these products, the Company may require substantial additional financing. There can be no assurance that such financing will be available when needed or that the Company's planned products will be commercially successful. The Company believes it has sufficient cash to fund operations at least through the following twelve months, exclusive of future receipts from billings on existing government contracts. For 2009, the Company expects expenditures for operations, net of government funding, including collaborative efforts and GMP facilities to be approximately $10 to $12 million. This could increase if the Company undertakes additional collaborative efforts. However, if necessary in 2009, the Company believes it can reduce its expenditures because a significant amount of its costs are variable. Those estimated expenditures include amounts necessary to fulfill the Company's obligations under its various collaborative, research and licensing agreements during 2009. The Company believes it will be awarded additional government funds to pursue the advanced development of its antiviral compounds and has assumed certain revenues from these awards in providing this guidance. Should the Company not receive the additional awards, or should the timing be delayed, it may have a significant negative impact on these projections.

In December 2006, the Company announced the execution of a two-year $28 million research contract with the Defense Threat Reduction Agency (DTRA), an agency of the United States Department of Defense (DoD). The contract is directed toward funding the Company's development of antisense therapeutics to treat the effects of Ebola, Marburg and Junin hemorrhagic viruses, which are seen by DoD as potential biological warfare and bioterrorism agents. During the quarters ended March 31, 2009 and 2008, the Company recognized $1.7 million and $3.9 million, respectively, in research contract revenue from this contract. To date, the Company has recognized revenues of $26.5 million from this contract. Funding of the remainder of the contract is anticipated in 2009.

In January 2006, the Company announced that the final version of the 2006 defense appropriations act had been approved, which included an allocation of $11.0 million to fund the Company's ongoing defense-related programs. Net of government administrative costs, it is anticipated that the Company will receive up to $9.8 million under this allocation. The Company's technology is expected to be used to continue developing therapeutic agents against Ebola, Marburg and dengue viruses, as well as to continue developing countermeasures for anthrax exposure and antidotes for ricin toxin. The Company has received signed contracts

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for all four of these projects. The Company expects that funding under these signed contracts will be completed over the next 12 months. During the quarters ended March 31, 2009 and 2008, the Company recognized $1.4 million and $1.6 million, respectively, in research contract revenue from these contracts. To date, the Company has recognized revenues of $8.3 million on these contracts. Funding of the remainder of these contracts is anticipated in 2009.

The likelihood of the long-term success of the Company must be considered in light of the expenses, difficulties and delays frequently encountered in the development and commercialization of new pharmaceutical products, competitive factors in the marketplace as well as the complex regulatory environment in which the Company operates. There can be no assurance that the Company will ever achieve significant revenues or profitable operations.

Note 8. Stock Compensation

Stock-based compensation costs are generally based on the fair value calculated from the Black-Scholes option-pricing model on the date of grant for stock options and on the date of enrollment for the Plan. The fair value of stock grants is amortized as compensation expense on a straight-line basis over the vesting period of the grants. Stock options granted to employees are service-based and typically vest over three years.

The fair market values of stock options granted during the periods presented were measured on the date of grant using the Black-Scholes option-pricing model, with the following weighted average assumptions:

Three Months Ended March 31,	2009	2008
Risk-free interest rate	1.2%-1.4%	1.9%-2.4%
Expected dividend yield	0%	0%
Expected lives	9.0 years	3.6-9.1 years
Expected volatility	92.0%-92.8%	81.0%-90.3%

The risk-free interest rate is estimated using an average of treasury bill interest rates. The expected dividend yield is zero as the Company has not paid any dividends to date and does not expect to pay dividends in the future. The expected lives are estimated using expected and historical exercise behavior. The expected volatility is estimated using historical calculated volatility and considers factors such as future events or circumstances that could impact volatility.

As part of the requirements of SFAS 123R, the Company is required to estimate potential forfeiture of stock grants and adjust compensation cost recorded accordingly. The estimate of forfeitures is adjusted over the requisite service period to the extent that actual forfeitures differ, or are expected to differ, from such estimates. Changes in estimated forfeitures are recognized through a cumulative catch-up in the period of change and impact the amount of stock compensation expense to be recognized in future periods.

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A summary of the Company's stock option compensation activity with respect to the fiscal quarter ended March 31, 2009 follows:

Stock Options	Shares		Weighted Average Exercise Price	Weighted Average Remaining Contractual Term		Aggregate Intrinsic Value
Outstanding at January 1, 2009	7,540,873	$	3.34			
Granted	1,874,000	$	1.01			
Exercised	—	$	—			
Canceled or expired	(834,221)	$	2.96			
Outstanding at March 31, 2009	8,580,652	$	2.87	6.76	$	—
Vested at March 31, 2009 and expected to vest	8,507,722	$	2.88	3.91	$	—
Exercisable at March 31, 2009	4,934,162	$	4.09	4.87	$	—

The weighted average fair value per share of stock-based payments granted to employees during the three months ended March 31, 2009 and March 31, 2008 was $0.86 and $0.99, respectively. During the same periods, the total intrinsic value of stock options exercised were $0 and $0, and the total fair value of stock options that vested was $442,000 and $877,000, respectively.

As of March 31, 2009, there was $3,255,000 of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the Plan. These costs are expected to be recognized over a weighted-average period of 2.5 years.

During the first quarter of fiscal 2009, no stock options were exercised. The Company is obligated to issue shares reserved under the 2002 Equity Incentive Plan upon the exercise of stock options. The Company does not currently expect to repurchase shares from any source to satisfy its obligations under the Plan.

The following are the stock-based compensation costs recognized in the Company's statements of operations:

(in thousands)		Three Months Ended March 31, 2009		Three Months Ended March 31, 2008
Research and development	$	278	$	504
General and administrative		164		373
Total	$	442	$	877

The 2000 Employee Stock Purchase Plan (ESPP) provides that eligible employees may contribute, through payroll, deductions of up to 10% of their earnings toward the purchase of the Company's Common Stock at 85% of the fair market value at specific dates. On January 1, 2006, the Company adopted SFAS 123R, which requires the measurement and recognition of compensation expense for all share-based payment awards made to the Company's employees and directors related to the ESPP, based on estimated fair values. During the three-month periods ended March 31, 2009 and 2008, the total compensation expense for participants in the ESPP was immaterial.

After the acquisition of Ercole in the first quarter of 2008, the Company recognized severance payments to certain Ercole employees of $617,000 paid using the Company's common stock.

In the first quarter of 2009, the Company granted 60,000 shares of restricted stock to its Chief Medical Officer. These shares vest over a period of 181 days. During the three-month period ended March 31, 2009, the Company recognized compensation expense related to these shares of $29,000.

In the first quarter of 2008, the Company granted 333,000 shares of restricted stock to its new Chief Executive Officer. Of these shares, 100,000 vested immediately and the remaining 233,000 vest over a period of four years. During the three-month periods ended March 31, 2009 and 2008, the Company recognized compensation expense related to these shares of $16,000 and $118,000, respectively.

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The Company records the fair value of stock options granted to non-employees in exchange for services in accordance with EITF 96-18, "*Accounting for Equity Instruments That are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*." The fair value of the options granted is expensed when the measurement date is known. The performance for services was satisfied on the grant date for stock options granted to non-employees. The total fair value of the options granted to non-employees during the three months ended March 31, 2009 and 2008 was $78,000 and $104000, respectively, which was expensed to research and development.

Note 9. Warrants

Certain of the Company's warrants issued in connection with financing arrangements are classified as liabilities in accordance with EITF 00-19, "*Accounting for derivative financial instruments indexed to, and potentially settled in, a Company's own stock*." The fair market value of these warrants is recorded on the balance sheet at issuance and marked to market at each financial reporting period. The change in the fair value of the warrants is recorded in the Statement of Operations as a gain (loss) and is estimated using the Black-Scholes option-pricing model with the following weighted average assumptions:

Three Months Ended March 31,	2009	2008
Risk-free interest rate	0.2%-1.9%	1.6%-2.5%
Expected dividend yield	0%	0%
Expected lives	0.3-5.5 years	0.7-4.7 years
Expected volatility	83.2%-140.6%	61.2%-77.0%
Warrants classified as liabilities	22,645,157	9,607,866
Warrants classified as equity	2,129,530	4,694,530
Market value of stock at beginning of year	$ 0.66	$ 1.41
Market value of stock at end of period	$ 0.66	$ 1.84

The risk-free interest rate is estimated using an average of treasury bill interest rates. The expected dividend yield is zero as the Company has not paid any dividends to date and does not expect to pay dividends in the future. The expected lives are based on the remaining contractual lives of the related warrants. The expected volatility is estimated using historical calculated volatility and considers factors such as future events or circumstances that could impact volatility.

For warrants classified as permanent equity in accordance with EITF 00-19, the fair value of the warrants is recorded as additional paid-in capital and no further adjustments are made.

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A summary of the Company's warrant activity with respect to the three months ended March 31, 2009 is as follows:

Warrants	Shares	Weighted Average Exercisable Price	Weighted Average Remaining Contractual Term
Outstanding at January 1, 2009	10,123,759	$ 8.54	
Granted (Note 12)	14,650,928	$ 1.17	
Canceled or expired	—	$ —	
Outstanding at March 31, 2009	24,774,687	$ 4.18	4.11

Note 10. Earnings Per Share

Basic EPS is calculated using the weighted average number of common shares outstanding for the period and diluted EPS is computed using the weighted average number of common shares and dilutive common equivalent shares outstanding. Given that the Company is in a loss position, there is no difference between basic EPS and diluted EPS since the common stock equivalents would be antidilutive.

Three Months Ended March 31, (amounts in thousands, except per-share data)	2009	2008
Net loss	$ (927)	$ (15,015)
Weighted average number of shares of common stock and common stock equivalents outstanding:		
Weighted average number of common shares outstanding for computing basic earnings per share	80,759	65,188
Dilutive effect of warrants and stock options after application of the treasury stock method	*	*
Weighted average number of common shares outstanding for computing diluted earnings per share	80,759	65,188
Net loss per share - basic and diluted	$ (0.01)	$ (0.23)

* Warrants and stock options to purchase 33,355,341and 21,499,569 shares of common stock as of March 31, 2009 and 2008, respectively, were excluded from the earnings per share calculation as their effect would have been anti-dilutive.

Note 11. Comprehensive Loss and Securities Available for Sale

Comprehensive loss includes charges or credits to equity that did not result from transactions with shareholders. The Company's only component of "other comprehensive loss" is unrealized gain (loss) on cash equivalents and short-term securities—available-for-sale. Accordingly, such investment securities are stated on the balance sheet at their fair market value. The Company classifies its investment securities with an original maturity of three months or less from the date of purchase as cash equivalents. The Company classifies its investment securities with an original maturity of more than three months from the date of purchase as short-term securities—available-for-sale. Any unrealized difference between the adjusted cost and the fair market value of these securities is reflected as a separate component of shareholders' equity. At March 31, 2009 and December 31, 2008, the Company's investments in

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marketable securities had gross unrealized gains (losses) of $0 and $0, respectively. The following table sets forth the calculation of comprehensive income for the period indicated:

(in thousands)	Three Months Ended March 31, 2009	2008

Net loss	$ (927)	$ (15,015)
Unrealized loss on marketable securities	—	—
Total comprehensive loss	$ (927)	$ (15,015)

Note 12. Equity Financing

On January 30, 2009, the Company closed a registered equity financing for net proceeds of $15.5 million with several institutional investors. The Company sold 14,224,202 shares of common stock at $1.16 per share, and also issued warrants for the purchase of 14,224,202 common shares at $1.16 per share. These warrants are exercisable starting July 30, 2009 and expire on July 30, 2014. In connection with the equity financing, the placement agent received a warrant for the purchase of an additional 426,726 common shares at $1.45 per share. This warrant is exercisable starting January 30, 2009 and expires on January 30, 2014. All of these warrants have been classified as liabilities as discussed in Note 9.

The Company plans to use the net proceeds from the offering to fund clinical trials for its lead product candidates, to fund the advancement of its pre-clinical programs, and for other research and development and general corporate purposes.

Note 13. Income Taxes

The Company adopted the provisions of FASB interpretation No. 48, "Accounting for the Uncertainty in Income Taxes, an interpretation of SFAS 109" ("FIN 48") on January 1, 2007. The adoption of FIN 48 did not materially impact its consolidated financial statements, and no unrecognized tax benefits were recorded as of the date of adoption. As a result of the implementation of FIN 48, the Company did not recognize any liability for unrecognized tax benefits. There are no unrecognized tax benefits included in the balance sheet that would, if recognized, affect the effective tax rate.

The Company's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had no accrual for interest or penalties on its balance sheet at March 31, 2009 and at December 31, 2008, and has not recognized interest and/or penalties in the statement of operations for the three months ended March 31, 2009.

At March 31, 2009, the Company had net deferred tax assets of approximately $103 million. The deferred tax assets are primarily composed of federal and state tax net operating loss carryforwards, federal and state R&D credit carryforwards, share-based compensation expense and intangibles. Due to uncertainties surrounding its ability to generate future taxable income to realize these assets, a full valuation allowance has been established to offset its net deferred tax asset. Additionally, the Internal Revenue Code rules under Section 382 could limit the future use of its net operating loss and R&D credit carryforwards to offset future taxable income based on ownership changes and the value of the Company's stock.

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Note 14. Recent Accounting Pronouncements

During the first fiscal quarter of 2009, the Financial Accounting Standards Board issued Staff Positions SFAS No. 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability has Significantly Decreased and the Identifying Transactions That Are Not Orderly", SFAS No. 115-2 and SFAS No. 124-2, "Recognition and Presentation of Other- Than-Temporary Impairments", and SFAS No. 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments". These Staff Positions were issued to clarify the application of SFAS No. 157, "Fair Value Measurements" in the current economic environment, modify the recognition of other-than-temporary impairments of debt securities, and require companies to disclose the fair value of financial instruments in interim periods. The Staff Positions are effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009, if all three Staff Positions or both the fair-value measurement and other-than-temporary impairment Staff Positions are adopted simultaneously. The Company plans to adopt the Staff Positions in the second quarter of fiscal 2009 and is currently evaluating the impact, if any, the adoption will have on the Company's Condensed Consolidated Financial Statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This section should be read in conjunction with the same titled section contained in our Annual Report on Form 10-K as filed with the SEC for the year ended December 31, 2008 and the "Risk Factors" contained in the 10-K and this report.

Forward-Looking Information

The Financial Statements and Notes thereto should be read in conjunction with the following discussion. The discussion in this 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 Exchange Act. Forward-looking statements are identified by such words as "believe," "expect," "anticipate" and words of similar import. All statements other than historical or current facts, including, without limitation, statements about our business strategy, plans and objectives of management and our future prospects, are forward-looking statements. Such forward-looking statements involve risks and uncertainties, including, but not limited to, the results of research and development efforts, the success of raising funds in the current offering or future offerings under our current shelf registration, the results of pre-clinical and clinical testing, the effect of regulation by FDA and other agencies, the impact of competitive products, product development, commercialization and technological difficulties, and other risks detailed in the Company's Securities and Exchange Commission filings, that could cause actual results to differ materially from the expected results reflected in such forward looking statements.

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Overview

From our inception in 1980, we have devoted our resources primarily to fund our research and development efforts. We have been unprofitable since inception and, other than limited interest, license fees, grants and research contracts, we have had no material revenues from the sale of products or other sources, other than from government grants and research contracts, and we do not expect material revenues for the foreseeable future. We expect to continue to incur losses for the foreseeable future as we continue our research and development efforts and enter additional collaborative efforts. As of March 31, 2009, our accumulated deficit was $251 million.

Results of Operations

Revenues from license fees, grants and research contracts decreased to $3.2 million in the first quarter of 2009 from $5.6 million in the comparable period in 2008. The decrease in research contracts revenues was the result of the decline in revenues from government research contracts for the development of therapeutic agents for use in defending against biological threats.

Operating expenses decreased to $6.7 million in the first quarter of 2009 from $19.4 million in the first quarter of 2008. In the first quarter of 2008, operating expenses included the $10 million of acquired in-process research and development associated with the acquisition of Ercole Biotechnology, Inc ("Ercole").

In addition, research and development expenses decreased to $4.5 million in the first quarter of 2009 from $6.9 million in the first quarter of 2008. This research and development decrease was due primarily to decreases in research and development costs related to the government research contracts for the development of therapeutic agents for use in defending against biological threats.

General and administrative expenses decreased to $2.2 million in the first quarter of 2009, from $2.6 million in the first quarter of 2008. The decrease in general and administrative expenses was due primarily to one time, non-cash costs for stock compensation paid to Ercole executives related to the 2008 acquisition. Net interest income declined primarily due to declines in market rates of interest on the Company's interest-earning investments.

The gain on warrant liability of $2.6 million was the result of the decline in the Company's stock price subsequent to the issuance of warrants as a part of the registered equity financing that closed in January 2009. The gain or (loss) on warrant liability fluctuates as the market price of the Company's stock fluctuates.

Liquidity and Capital Resources

We have financed our operations since inception primarily through sales of common stock and other forms of equity totaling $230.6 million and from grants and contract research funding of $45.4 million from various sources. In January 2009, we raised net proceeds of $15.5 million in financing through the sale of 14,224,202 shares of common stock pursuant to a registered direct offering to a select group of institutional investors. The investors also received warrants to purchase 14,224,202 shares of the Company's common stock. These warrants are exercisable starting July 30, 2009 and expire on July 30, 2014. In addition, the placement agent

used for the equity financing received a warrant for the purchase of an additional 426,726 common shares at $1.45 per share. This warrant is exercisable starting January 30, 2009 and expires on January 30, 2014. We plan to use the net proceeds from the offering to fund clinical trials for our lead product candidates, to fund the advancement of our pre-clinical programs, and for other research and development and general corporate purposes.

We expect to continue to incur losses as we continue to expand our research and development activities and related regulatory work and increase our collaborative efforts. For 2009, we expect our expenditures for operations, net of government funding, including our collaborative efforts, and our GMP facilities to be approximately $10 to $12 million. This cost could increase if we undertake additional collaborative efforts. However, if necessary in 2009, we believe we can reduce our expenditures because a significant amount of our costs are variable. Those estimated expenditures include amounts necessary to fulfill our obligations under our various collaborative, research and licensing agreements during 2009. We believe we will be awarded additional government funds to pursue the advanced development of our antiviral compounds and have assumed certain revenues from these awards in providing this guidance. Should we not receive the additional awards, or should the timing be delayed, it may have a significant negative impact on these projections.

Because of the cost (up to $1.7 billion) and timeframe (up to 15 years) generally associated with developing a potential drug or pharmaceutical product to the point of approval by the FDA or other regulatory agencies for human use, our business strategy is to develop our products up to Phase II human clinical trials and then look for third parties to fund further development of the product and to market the product through strategic partnerships, license agreements or other relationships. We also look for collaborative and other efforts, such as our relationship with Cook, to utilize other technology to increase the potential variety and reduce the cost of identifying products. We believe that this strategy will reduce the potential costs we would otherwise incur in developing a product and bringing it to market. Our expected costs under our various contracts and for various drug development products can be estimated for the next year or two, but not much beyond that due to the uncertainty of clinical trial results, research results and the timing of securing one or more partners to develop and market a potential drug.

Because of the various factors noted above and the expectation that, until we establish revenue sources, we will license or jointly develop our prospective products to or with strategic partners, we review, at least annually, each research program and clinical trial, based on results and progress during the prior year and estimate our needs for that program or trial for the coming year, making adjustments based on the progress of the program during the year.

In December 2006, we announced the execution of a two-year $28 million research contract with the Defense Threat Reduction Agency (DTRA), an agency of the United States Department of Defense (DoD). In February 2008, the contract was extended into the first five months of 2009. The contract is directed toward funding the Company's development of antisense therapeutics to treat the effects of Ebola, Marburg and Junin hemorrhagic viruses, which are seen by DoD as potential biological warfare and bioterrorism agents. We recognized $1.7 million in revenue from this contract during the first quarter of 2009 and have recognized $26.5 million in total revenues to date from this contract. Funding of the remainder of the contract is anticipated in 2009.

In January 2006, we announced that the final version of the 2006 Defense Appropriations Act had been approved, which included an allocation of $11.0 million to fund our ongoing defense-related programs. Net of government administrative costs, we anticipate that we will receive up to $9.8 million under this allocation. The

Company's technology is expected to be used to continue developing therapeutic agents against Ebola, Marburg and Dengue viruses, as well as to continue developing countermeasures for anthrax exposure and antidotes for ricin toxin. We have received signed contracts for all four of these projects. We expect that funding under these signed contracts will be received over the next 12 months. We recognized $1.4 million in research contract revenue from these contracts during the three months ended March 31, 2009, and have recognized $8.3 million in total revenues to date on these contracts. Funding of the remainder of these contracts is anticipated in 2009.

Our cash, cash equivalents and short-term securities were $25.0 million at March 31, 2009, compared with $11.5 million at December 31, 2008. The increase of $13.5 million was due primarily to net proceeds of $15.5 million from the sale of common stock and issuance of stock warrants as part of a registered equity financing that closed in January 2009. This cash from financing activities was partially offset by cash used in operations of $1.6 million and costs related to acquisitions of patents and fixed assets of $0.3 million.

We do not expect any material revenues in 2009 from our business activities except for revenues from U.S. government contracts. We expect that our cash requirements for the next twelve months to be satisfied by existing cash resources and these revenues. To fund our operations beyond the next twelve months, we may need to raise additional capital. We will continue to look for opportunities to finance our ongoing activities and operations through accessing corporate partners or the public equity markets, as we currently have no credit facility, and do not intend to seek one.

Critical Accounting Policies and Estimates

The discussion and analysis of the Company's financial condition and results of operations are based upon its financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. The Company's critical accounting policies and estimates are consistent with the disclosure in the Company's Form 10-K, with the exception of FIN 48 (see Note 13).

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There has been no material change in the Company's market risk exposure since the filing of our 2008 Annual Report on Form 10-K.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

As of March 31, 2009, the Company carried out an evaluation, under the supervision and with the participation of its management, including its Chief Executive Officer and its Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and procedures pursuant to Rule 13a-15(e) under the Securities Exchange Act of 1934. Based on this review of its disclosure controls and procedures, the Chief Executive Officer and the Chief Financial Officer have concluded that its disclosure controls and procedures are effective in timely alerting them to material information relating to the Company that is required to be included in our periodic SEC filings.

Internal Controls and Procedures

There were no significant changes in internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

None

Item 1A. Risk Factors.

Risks Affecting Future Operating Results

The following factors should be considered in evaluating our business and prospects for the future. If risks described below actually occur, our operating results and financial condition would likely suffer and the trading price of our common stock may fall, causing a loss of some or all of an investment in our common stock. In addition, there may be additional risks not known to us or understood by us which may adversely affect our financial condition, results of operations, and the price of our stock.

If we fail to attract significant additional capital, we may be unable to continue to successfully develop our products.

Since we began operations, we have obtained operating funds primarily by selling shares of our common stock. Based on our current plans, we believe that current cash balances will be sufficient to meet our operating needs for the next twelve months. Furthermore, the actual amount of funds that we will need will be determined by many factors, some of which are beyond our control. These factors include the success of our research and development efforts, the status of our pre-clinical and clinical testing, costs relating to securing regulatory approvals and the costs and timing of obtaining new patent rights, regulatory changes, competition and technological developments in the market. We may need funds sooner than currently anticipated.

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If necessary, potential sources of additional funding could include strategic relationships, public or private sales of shares of our stock, or debt, or other arrangements. We may not be able to obtain additional funding when we need it on terms that will be acceptable to us or at all. If we raise funds by selling additional shares of our common stock or securities convertible into our common stock, the ownership interest of our existing shareholders will be diluted. If we are unable to obtain financing when needed, our business and future prospects would be materially adversely affected.

Our products are in an early stage of research and development and may not be determined to be safe or effective.

We are in the early stages of clinical development with respect to our RNA therapeutics pharmaceutical products. We have devoted almost all of our resources to research and development of our product candidates, protecting our proprietary rights and establishing strategic alliances. Our potential products are in the pre-clinical or clinical stages of research and development and will require significant further research, development, clinical testing and regulatory clearances. We have no products available for sale and we do not expect to have any products available for sale for several years. Our products could be found to be ineffective or toxic, or could fail to receive necessary regulatory clearances. We have not received any significant revenues from the sale of products and we may not successfully develop marketable products that will increase sales and, given adequate margins, make us profitable. Third parties may develop superior or equivalent, but less expensive, products.

We rely on U.S. government contracts to support several important R&D programs.

We rely on U.S. government contracts and awards to fund several of our development programs, including those for the Ebola and Marburg viruses. The termination of one or more of these contracts, whether due to lack of funding, for convenience, or otherwise, or the occurrence of delays or product failures in connection with one or more of these contracts, could negatively impact our financial condition. Furthermore, we can give no assurance that we would be able to procure new U.S. government contracts to offset the revenues lost as a result of any termination of our contracts.

The funding of U.S. government programs is subject to Congressional appropriations. Congress generally appropriates funds on a fiscal year basis even though a program may extend over several fiscal years. Consequently, programs are often only partially funded initially and additional funds are committed only as Congress makes further appropriations. In the event that appropriations for one of our programs become unavailable, or are reduced or delayed, our contracts may be terminated or adjusted by the government, which could have a negative impact on our future sales under such a contract or subcontract. From time to time, when a formal appropriation bill has not been signed into law before the end of the U.S. government's fiscal year, Congress may pass a continuing resolution that authorizes agencies of the U.S. government to continue to operate, generally at the same funding levels from the prior year, but does not authorize new spending initiatives, during a certain period. During such a period (or until the regular appropriation bills are passed), delays can occur in government procurement due to lack of funding, and such delays can affect our operations during the period of delay.

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In addition, U.S. government contracts generally also permit the government to terminate the contract, in whole or in part, without prior notice, at the government's convenience or for default based on performance. If one of our contracts is terminated for convenience, we would generally be entitled to payments for our allowable costs and would receive some allowance for profit on the work performed. If one of our contracts is terminated for default, we would generally be entitled to payments for our work that has been accepted by the government. A termination arising out of our default could expose us to liability and have a negative impact on our ability to obtain future contracts.

If we fail to receive necessary regulatory approvals, we will be unable to develop and commercialize our products.

All of our products are subject to extensive regulation by the United States Food and Drug Administration, or FDA, and by comparable agencies in other countries. The FDA and these agencies require new pharmaceutical products to undergo lengthy and detailed preclinical and clinical testing procedures and other costly and time-consuming compliance procedures. We do not know when, or if, we will be able to submit our products for regulatory review. Even if we submit a new drug application, there may be delays in obtaining regulatory approvals, if we obtain them at all. Sales of our products outside the United States will also be subject to regulatory requirements governing clinical trials and product approval. These requirements vary from country to country and could delay introduction of our products in those countries. We cannot assure you that any of our products will receive marketing approval from the FDA or comparable foreign agencies.

We may have difficulty gaining regulatory drug approvals using the Animal Rule pathway.

We expect to develop the therapeutic product candidates to treat Ebola Virus and Marburg Virus under defined regulatory pathways using the so called Animal Rule mechanism. This mechanism has become available only relatively recently and has been infrequently used. The process has yet to be well tested and may present challenges for gaining final regulatory approval for these product candidates.

If we lose key personnel or are unable to attract and retain additional, highly skilled personnel required for our activities, our business will suffer.

The loss of key employees could significantly delay the achievement of our goals. Competition for qualified personnel in our industry is intense, and our success will depend on our ability to attract and retain highly skilled personnel. To date, we have been successful in attracting and retaining key personnel.

Asserting, defending and maintaining our intellectual property rights could be challenging and costly, and our failure to do so could harm our ability to compete and impair the outcome of our operations. The pharmaceutical environment is highly competitive and competing intellectual property could limit our ability to protect our products.

Our success will depend on our existing patents and licenses (213 patents (domestic and foreign) issued or licensed to us and 185 (domestic and foreign) pending patent applications) and our ability to obtain additional patents in the future. We license patents from other parties for certain complementary technologies.

Some of our patents on core technologies expired in 2008, including for our basic PMO chemistry. Based on patented improvements and inventive additions to such core patents, however, we believe our patent protection for those products and other products extend beyond 2020.

We cannot be certain that pending patent applications will result in patents being issued in the United States or foreign countries. In addition, the patents that have been or will be issued may not afford meaningful protection for our technology and products. Competitors may develop products similar to ours that do not conflict with our patents. Pharmaceutical research and development is highly competitive; others may file patents first. We are aware of a patent that has been allowed and will soon issue that may provide the basis for the patent holder to assert that our drug AVI-4658 infringes on such patent. We intend to vigorously defend any such claim if it should be asserted and believe that we may be able to invalidate some or all of the claims covered by this patent. In any case, we believe that we have freedom to move forward with our ongoing clinical trials and drug development efforts for this drug candidate.

Others may challenge our patents and, as a result, our patents could be narrowed or invalidated. The patent position of biotechnology firms generally is highly uncertain, involves complex legal and factual questions, and has recently been the subject of much litigation. No consistent policy has emerged from the United States Patent and Trademark Office (USPTO) or the courts regarding the breadth of claims allowed or the degree of protection afforded under biotechnology patents. In addition, there is a substantial backlog of biotechnology patent applications at the USPTO and the approval or rejection of patents may take several years.

Our success will also depend partly on our ability to operate without infringing upon the proprietary rights of others as well as our ability to prevent others from infringing on our proprietary rights. We may be required at times to take legal action to protect our proprietary rights and, despite our best efforts, we may be sued for infringing on the patent rights of others. We have not received any communications or other indications from owners of related patents or others that such persons believe our products or technology may infringe their patents. Patent litigation is costly and, even if we prevail, the cost of such litigation could adversely affect our financial condition. If we do not prevail, in addition to any damages we might have to pay, we could be required to stop the infringing activity or obtain a license. Any required license may not be available to us on acceptable terms, or at all. If we fail to obtain a license, our business might be materially adversely affected.

To help protect our proprietary rights in unpatented trade secrets, we require our employees, consultants and advisors to execute confidentiality agreements. However, such agreements may not provide us with adequate protection if confidential information is used or disclosed improperly. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants or advisors have prior employment or consulting relationships. Further, others may independently develop substantially equivalent proprietary information and techniques, or otherwise gain access to our trade secrets.

We depend on our partners for critical functions. Therefore, if our collaborations or strategic relationships are unsuccessful, our business could be harmed.

Our strategic relationships are important to our success. The discovery, development and marketing of many of our key therapeutic products are or will be dependent in large part on the efforts of our strategic partners. The transactions contemplated by our agreements with strategic partners, including the equity purchases and cash payments, are subject to numerous risks and conditions. The occurrence of any of these events could severely harm our business.

We anticipate entering into relationships with larger pharmaceutical companies to conduct late stage clinical trials and to market our products. We also plan to use contract manufacturing for late stage clinical and commercial quantities of our products. We may be unable to enter into partnerships or other relationships, which could impede our ability to bring our products to market**.** Any such partnerships, if entered into at all, may be on less than favorable terms and may not result in the successful development or marketing of our products. If we are unsuccessful in establishing advantageous clinical testing, manufacturing and marketing relationships, we are not likely to generate significant revenues and become profitable.

To fully realize the potential of our products, including development, production and marketing, we may need to establish other strategic relationships.

We may get unexpected results from, or have trouble conducting, our clinical studies.

Not only do any clinical studies need to be agreed with regulatory authorities beforehand, especially in the case of phase III or pivotal studies, but they have to be successfully executed. Preclinical as well as clinical studies are experiments designed to test a theory or hypothesis, and by their very nature, the result is unknown at the time the study is started. Sometimes unexpected results occur and the product does not demonstrate effectiveness (even though it may be effective), or an unexpected safety issue is encountered. In addition in rare diseases, other companies may be testing their products which will prevent AVI from testing its candidate products.

We have incurred net losses since our inception and we may not achieve or sustain profitability.

We incurred a net loss of $0.9 million in the first quarter of 2009 and $24.0 million for the year ended December 31, 2008. As of March 31, 2009, our accumulated deficit was $251.2 million. Our losses have resulted principally from expenses incurred in research and development of our technology and products and from selling, general and administrative expenses that we have incurred while building our business infrastructure. We expect to continue to incur significant operating losses in the future as we continue our research and development efforts and seek to obtain regulatory approval of our products. Our ability to achieve profitability depends on our ability to raise additional capital, complete development of our products, obtain regulatory approvals and market our products. It is uncertain when, if ever, we will become profitable.

Our ability to be successful against our competitors cannot be assured.

The biopharmaceutical industry is highly competitive, with a number of well established firms performing leading-edge research for the development of new products to treat a wide range of diseases. These companies have obtained patents for their intellectual property rights that could preclude other companies from using similar technologies in their product development. Moreover, companies which are focused on the treatment of similar diseases are in effect competing for the same limited number of potential patients. Even if we are able to develop new products for market, there can be no assurance that we will be able to compete effectively or profitably against our competitors.

We may be subject to clinical trial claims and our insurance may not be adequate to cover damages.

We believe we carry adequate insurance for our current product development research. In the future, commercial sale and use of our products will expose us to the risk of clinical trial claims. Although we intend to obtain product liability insurance coverage, product liability insurance may not continue to be available to us on acceptable terms and our coverage may not be sufficient to cover all claims against us. A product liability claim, even one without merit or for which we have substantial coverage, could result in significant legal defense costs, thereby increasing our expenses, lowering our earnings and, depending on revenues, potentially resulting in additional losses.

We use hazardous substances in our research activities.

We use organic and inorganic solvents and reagents in our clinical development that are customarily used in pharmaceutical development and synthesis. Some of these chemicals, such as methylene chloride, isopropyl alcohol, ethyl acetate and acetone, may be classified as hazardous substances, are flammable and, if exposed to human skin, can cause anything from irritation to severe burns. We receive, store, use and dispose of such chemicals in compliance with all applicable laws with containment storage facilities and contained handling and disposal safeguards and procedures. We are routinely inspected by federal, state and

local governmental and public safety agencies regarding our storage, use and disposal of such chemicals, including the federal Occupational, Safety and Health Agency (“OSHA”), the Oregon Department of Environmental Quality (“DEQ”) and local fire departments, without any material noncompliance issues in such inspections to date. Based on our limited use of such chemicals, the nature of such chemicals and the safeguards undertaken by the Company for storage, use and disposal, we believe we do not have any material exposure for toxic tort liability. Further, the cost of such compliance is not a material cost in our operating budget. While we do not have toxic tort liability insurance at this time, we believe our current insurance coverage is adequate to cover most liabilities that may arise from our use of such substances. If we are wrong in any of our beliefs, we could incur a liability in certain circumstances that would be material to our finances and the value of an investment in our securities.

Risks Related to Share Ownership

Our right to issue preferred stock, our classified Board of Directors and Oregon Anti-Takeover laws may delay a takeover attempt and prevent or frustrate any attempt to replace or remove the then current management of the Company by shareholders.

Our authorized capital consists of 200 million shares of common stock and 20 million shares of preferred stock. Our Board of Directors, without any further vote by the shareholders, has the authority to issue preferred shares and to determine the price, preferences, rights and restrictions, including voting and dividend rights, of these shares. The rights of the holders of shares of common stock may be affected by the rights of holders of any preferred shares that our Board of Directors may issue in the future. For example, our Board of Directors may allow the issuance of preferred shares with more voting rights, preferential dividend payments or more favorable rights upon dissolution than the shares of common stock or special rights to elect directors.

In addition, we have a “classified” Board of Directors, which means that only one-half of our directors are eligible for election each year. Therefore, if shareholders wish to change the composition of our Board of Directors, it could take at least two years to remove a majority of the existing directors or to change all directors. Having a classified Board of Directors may, in some cases, delay mergers, tender offers or other possible transactions that may be favored by some or a majority of our shareholders and may delay or frustrate action by shareholders to change the then current Board of Directors and management.

The Oregon Control Share Act and Business Combination Act may limit parties that acquire a significant amount of voting shares from exercising control over us for specific periods of time. These acts may lengthen the period for a proxy contest or for a person to vote their shares to elect the majority of our Board and change management.

Our stock price is volatile and may fluctuate due to factors beyond our control.

Historically, the market price of our stock has been highly volatile. The following types of announcements could have a significant impact on the price of our common stock: positive or negative results of testing and clinical trials by ourselves, strategic partners, or competitors; delays in entering into corporate partnerships; technological innovations or commercial product introductions by ourselves or competitors; changes in government regulations; developments concerning proprietary rights, including patents and litigation matters; public concern relating to the commercial value or safety of any of our products; financing or other corporate transactions; or general stock market conditions.

The significant number of our shares of Common Stock eligible for future sale may cause the price of our common stock to fall.

We have outstanding 85,644,698 shares of common stock as of March 31 2009 and all are eligible for sale under Rule 144 or are otherwise freely tradeable. In addition:

- Our employees and others hold options to buy a total of 8,580,652 shares of common stock, of which 4,934,162 options were exercisable at March 31, 2009. The options outstanding have exercise prices between $0.60 and $7.35 per share. The shares of common stock to be issued upon exercise of these options have been registered, and, therefore, may be freely sold when issued;

- There are outstanding warrants to buy 24,774,687 shares of common stock as of March 31, 2009 with exercise prices ranging from $.0003 to $35.63

per share. Other than warrants to purchase an aggregate of 445,985 shares of common stock issued to ISIS Pharmaceuticals, Inc. ("ISIS") in exchange for warrants to purchase shares of Ercole capital stock previously issued by Ercole to ISIS prior to the Company's acquisition of Ercole, all of the shares of common stock issuable upon exercise of outstanding warrants are registered for resale and may be freely sold when issued, subject to the limitations imposed by applicable securities laws;

- We may issue options to purchase up to an additional 1,285,258 shares of common stock as of March 31, 2009 under our stock option plans, which also will be fully saleable when issued except to the extent limited under Rule 144 for resales by our officers and directors;

- We are authorized to sell up to 124,213 shares of common stock under our Employee Stock Purchase Plan to our full-time employees, nearly all of whom are eligible to participate; and

Sales of substantial amounts of shares into the public market could lower the market price of our common stock.

Our common stock is listed on The NASDAQ Global Market and we may not be able to maintain that listing, which may make it more difficult for investors to sell shares of our common stock.

Our common stock is listed on The NASDAQ Global Market. The NASDAQ Global Market has several quantitative and qualitative requirements with which companies must comply in order to maintain this listing, including a $1.00 minimum bid price per share and $50 million minimum value of listed securities. If a listed company fails to meet the $1.00 minimum bid price per share requirement for 30 consecutive days, it will receive a notice from NASDAQ mandating that the company achieve compliance with the minimum bid price per share listing requirement within 90 calendar days. Our stock price is currently below $1.00, and there can be no assurance that we will be able to maintain compliance with the minimum bid price per share requirement. Likewise, based on a closing price of $0.55 per share on such date, the aggregate market value for our listed securities has gone below the $50 million minimum value of listed securities as recently as March 12, 2009, and there can be no assurance that we will be able to maintain compliance with this listing requirement.

On October 16, 2008, NASDAQ suspended the minimum bid price per share requirement and market value for publicly held shares requirements for all listed companies through January 16, 2009. Recently, NASDAQ extended the suspension of the minimum bid price per share requirement and market value for publicly held shares requirements for all listed companies through July 19, 2009, with enforcement of these rules presently scheduled to resume on July 20, 2009.

In order to maintain our listing on NASDAQ, we may seek to transfer our securities listing to The NASDAQ Capital Market, but any such proposed transfer would be subject to our ability to satisfy the listing standards for The NASDAQ Capital Market, which includes, among other things, a $35 million minimum value of listed securities. The level of trading activity of our common stock may decline if it is no longer listed on The NASDAQ Global Market or The NASDAQ Capital Market. As such, if our common stock ceases to be listed for trading on The NASDAQ Stock Market for any reason, it may harm our stock price, increase the volatility of our stock price and make it more difficult for investors to buy or sell shares of our common stock.

In addition to the foregoing, if we are not listed on The NASDAQ Stock Market and/or if our public float remains below $75 million, we may be limited in our ability to file new shelf registration statements on SEC Form S-3 and/or to fully use one or more registration statements on SEC Form S-3. We have relied significantly on shelf registration statements on SEC Form S-3 for most of our financings in recent years, so any such limitations might have a material adverse effect on our ability to raise the capital we need.

We do not expect to pay dividends in the foreseeable future.

We have never paid dividends on our shares of common stock and do not intend to pay dividends in the foreseeable future. Therefore, you should only invest in our common stock with the expectation of realizing a return through capital appreciation on your investment. You should not invest in our common stock if you are seeking dividend income.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None

Item 4. Submission of Matters to a Vote of Security Holders.

None

Item 5. Other Information.

None

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Item 6. Exhibits

		Incorporated by Reference to Filings Indicated				
Exhibit No	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
1.3	Engagement Letter dated January 28, 2009 between the Company and Rodman & Renshaw, LLC	8-K	1-14895	1.3	1/30/09	
3.1	Third Restated Articles of Incorporation of AntiVirals Inc.	SB-2	333-20513	3.1	5/29/97	
3.2	First Restated Bylaws of AVI BioPharma, Inc.	8-K	1-14895	3.5	2/7/08	
3.3	First Amendment to Third Restated Articles of Incorporation	8-K	0-22613	3.3	9/30/98	
3.4	Amendment to Article 2 of the Company's Third Restated Articles of Incorporation	DEF 14A	1-14895	N/A	4/11/02	
4.4	Form of Common Stock Purchase Warrant	8-K	1-14895	4.4	1/30/09	
10.69	Securities Purchase Agreement dated January 29, 2009 between the Company and the Purchasers	8-K	1-14895	10.69	1/30/09	
10.70	Letter Agreement Regarding Board of Director Representation between the Company and Eastbourne Capital Management, LLC	8-K	1-14895	10.70	1/30/09	
10.71	Employment Agreement dated January 26, 2009 by and between AVI BioPharma, Inc. and Stephen B. Shrewsbury, M.D.					X
31.1	Certification of the Company's President and Chief Executive Officer, Leslie Hudson, Ph.D, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Chief Financial Officer, J. David Boyle II, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32	Certification of the Company's Chief Executive Officer, Leslie Hudson, Ph.D, and Chief Financial Officer, J. David Boyle II, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X

Portions of the materials in the exhibits marked with a "+" have been omitted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Securities and Exchange Commission.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 11, 2009

AVI BIOPHARMA, INC.

By: /s/ LESLIE HUDSON, Ph.D.
Leslie Hudson, Ph.D.
President, Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ J. DAVID BOYLE II
J. David Boyle II
Senior Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") is made on this 26th day of January, 2009, by and between AVI BioPharma, Inc., an Oregon corporation, with its principal office at 4575 SW Research Way, Suite 200, Corvallis, Oregon, ("Company"), and Stephen Bevan Shrewsbury MD, 1100 Lincoln Village Circle, Apartment 248, Larkspur, CA 94939 ("Employee").

RECITALS:

The Company desires to hire the Employee as Senior Vice President — Preclinical, Clinical and Regulatory Affairs and the Employee desires to accept such position under the terms and conditions stated herein.

NOW, THEREFORE, in consideration of the mutual benefits contained herein, the sufficiency of which the parties acknowledge, the parties hereby agree as follows:

AGREEMENT:

1. Employment Term. The term of employment ("Term") shall commence on the Effective Date and shall continue until the first anniversary of the Effective Date, unless extended or terminated in accordance with Section 12. This Agreement establishes an "at will" employment relationship, as such term is defined and used under Oregon law, between the Company and the Employee. Employee shall commence employment not later than January 26, 2009 (the "Effective Date"). Failure to do so shall be grounds for immediate termination for Cause, as such term is defined in Section 12 hereof.

2. Duties. Employee shall be employed as Senior Vice President- Preclinical, Clinical and Regulatory Affairs and shall have such duties as are customarily associated with that position, including overall responsibility for pre-clinical, clinical and regulatory activities and initiatives that will enable the Company to develop candidates for further clinical activities, and such other duties as may be assigned to him from time to time by the Company's Chief Executive Officer ("CEO") and the Board of Directors of the Company ("Board"). Employee shall be a direct report of the Company's Chief Executive Officer. Employee shall devote substantially all of his business time to the service of the Company throughout the Term. Employee and Company acknowledge and agree that (i) Employee may hold certain offices within certain entities as set forth on Exhibit A to this Agreement, (ii) Employee's devotion of reasonable amounts of time in such capacities, so long as it does not interfere with his performance of services hereunder, shall not conflict with the terms of this Agreement, and (iii) Exhibit A may be amended from time to time by agreement of the parties.

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3. Compensation.

(a) Base Compensation. During the Term the Company shall compensate the Employee at an initial annual salary of Three Hundred Ten Thousand Dollars ($310,000.00), payable in accordance with the Company's payroll practices in effect from time to time, and less amounts required to be withheld under applicable law and requested to be withheld by the Employee (as increased from time to time, "Base Compensation"). The Employee's Base Compensation shall be subject to review for potential increase on an annual basis. Except as otherwise provided in this Agreement, the Base Compensation shall be prorated for any period of service less than a full month.

(b) Bonus. The Employee shall be eligible for an annual bonus of up to 25% of Employee's Base Compensation, which bonus shall be paid in the normal cycle of payment of executive bonuses and upon achievement and satisfaction of goals and objectives ("Goals and Objectives") established upon mutual agreement of the CEO, Employee and the Compensation Committee of the Company's Board. Such goals shall be established concurrently with the goals and objectives of the Company's other senior executives. Employee shall be eligible for consideration for an award of a full 12-month bonus based on achievement of 2009 Goals and Objectives.

(c) Equity Compensation.

(i) On the Effective Date, the Employee will be granted options to purchase Four Hundred Fifty Thousand (450,000) shares of the Company's common stock (the "Options") under the Company's 2002 Equity Incentive Plan (the "Plan") (a copy of which is attached as Exhibit B, with an exercise price at the fair market value of the Company common stock on the date Effective Date;

(ii) In addition, Employee will be issued 60,000 shares of restricted stock under the Plan (the "Restricted Shares"). In the event Employee remains employed on the 181st day following the Effective Date, vesting shall commence with respect to such Restricted Shares as of the Effective Date; and

(iii) The exercise price of the Options and the issuance price of the Restricted Shares and all other terms and conditions associated with the Options and Restricted Shares be determined in accordance with the Plan. To the maximum extent possible, the Options shall be Incentive Stock Options. Subject to accelerated vesting or termination as set forth herein, the Standard Options and Restricted Shares shall vest in equal annual installments over three (3) years

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4. Expenses. The Company will reimburse Employee for all expenses reasonably incurred by him in discharging his duties for the Company, conditioned upon Employee's submission of written documentation in support of claimed reimbursement of such expenses, and consistent with the Company's expense reimbursement policies in effect from time to time. The Company will reimburse the Employee up to One Hundred Thousand Dollars ($100,000) for reasonable expenses incurred in 2009 to relocate Employee and parts of Employee's household in a manner compatible with Employee's duties hereunder to the city where the Company's headquarters are located ("Facility Location"), including the shipment of personal effects to the Facility Location, and the customary closing costs associated with the purchase of a residence in the Facility Location. In addition, Company shall reimburse Employee (or pay on Employee's behalf) rent and related living expenses, not to exceed $2,500 per month in the aggregate and up to six (6) months in duration for temporary living arrangements. In addition, the Company shall reimburse Employee for reasonable attorneys fees incurred in connection with the review and negotiation of this Agreement in an amount not to exceed $3,000.

5. Benefits. Subject to eligibility requirements, Employee shall be entitled to participate in such benefits plans and programs as adopted by the Company from time to time and shall be eligible for paid vacation of four (4) business weeks (20 business days) annually; *provided, however*, if Employee does not use all available vacation in any given year, Employee may roll-over up to one business week (5 business days) to the following year, the parties intending that Employee shall have a maximum of five (5) business weeks (25 business days) of paid vacation in any year following 2009.

6. Confidentiality.

(a) In the course of his employment with the Company, it is anticipated that Employee may acquire knowledge (both orally and in writing) regarding confidential affairs of the Company and confidential or proprietary information including: (i) matters of a technical nature, such as know-how, inventions, processes, products, designs, chemicals, compounds, materials, drawings, concepts, formulas, trade secrets, secret processes or machines, inventions or research projects; (ii) matters of a business nature, such as information about costs, profits and pricing policies; (iii) markets, sales, suppliers, customers, plans for future development, plans for future products, marketing plans or strategies; and (iv) other information of a similar nature which is not generally disclosed by the Company to the public, referred to collectively hereafter as "Confidential Information." "Confidential Information" shall not include information generally available to the public. Employee agrees that during the term of this Agreement and thereafter, he (1) will keep secret and retain in the strictest confidence all Confidential Information, (2) not disclose Confidential Information to anyone except employees of the Company authorized to receive it and third parties to whom such disclosure is specifically authorized, and (3) not use any Confidential Information for any purpose other than performance of services under this Agreement without prior written permission from the Company.

(b) If Employee is served with any subpoena or other compulsory judicial or administrative process calling for production or disclosure of Confidential Information or if Employee is otherwise required by law or regulation to disclose Confidential Information, Employee will immediately, and prior to production or disclosure, notify the Company and

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provide it with such information as may be necessary in order that the Company may take such action as it deems necessary to protect its interest.

(c) The provisions of this Section 6 shall survive termination of this Agreement.

7. Non-competition and Non-solicitation.

(a) For a period of one (1) year in the case of the payment of severance equal to 12 months Base Compensation and for a period of two (2) years in the case of the payment of severance equal to 24 months Base Compensation, in both instances as provided in Section 13(c) below, Employee shall not directly or indirectly engage in or have any ownership interest in, or participate in the financing, operation, management or control of, any person, firm, corporation or business that engages in any activity customarily associated with the Company's ordinary course of business at the time of such termination anywhere in the world; *provided, however,* that this provision shall not prohibit Employee from owning up to five percent (5%) of any class of outstanding bonds, preferred stock or shares of common stock of any such entity or from employment with any institute of higher learning.

(b) For a period of two (2) years following termination of employment with the Company for any reason, except with the express written consent of the Company, Employee agrees to refrain from directly or indirectly recruiting, hiring or assisting anyone else to hire, or otherwise counseling to discontinue employment with the Company, any person then employed by the Company or its subsidiaries or affiliates.

(c) In the event that the provisions of this Section 7 should ever be deemed to exceed the duration or geographic limitations or scope permitted by applicable law, then such provisions shall be reformed to the maximum time or geographic limitations or scope, as the case may be, permitted by applicable laws.

(d) The provisions of this Section 7 shall survive termination of this Agreement and the term of employment.

8. Covered Work.

(a) All rights, title and interest to any Covered Work that Employee makes or conceives (whether alone or with others) while employed by the Company, belong to the Company. This Agreement operates as an actual assignment of all rights in Covered Work to the Company. "Covered Work" means products and Inventions that relate to the actual or anticipated business of the Company or any of its subsidiaries or affiliates, or that result from or are suggested by a task assigned to Employee or work performed by Employee on behalf of the Company or any of its subsidiaries or affiliates, or that were developed in whole or in part on the Company time or using the Company's equipment, supplies or facilities. "Inventions" mean ideas, improvements, designs, computer software, technologies, techniques, processes, products, chemicals, compounds, materials, concepts, drawings, authored works or discoveries, whether or not patentable or copyrightable, as well as other newly discovered or newly applied information or concepts. Attached hereto as Exhibit D is a description of any product or Invention in which

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Employee had or has any right, title or interest, which is not included within the definition of Covered Work or which is otherwise excluded from the restrictions set forth in this Section 8.

(b) Employee shall promptly reveal all information relating to Covered Work and Confidential Information to an appropriate officer of the Company and shall cooperate with the Company, and execute such documents as may be necessary, in the event that the Company desires to seek copyright, patent or trademark protection thereafter relating to same.

(c) In the event that the Company requests that Employee assist in efforts to defend any legal claims to patents or other right, the Company agrees to reimburse Employee for any reasonable expenses Employee may incur in connection with such assistance. This obligation to reimburse shall survive termination of this Agreement and the term of employment.

(d) The provisions of this Section 8 shall survive termination of this Agreement and the term of employment.

9. Return of Inventions, Products and Documents. Employee acknowledges and agrees that all Inventions, all products of the Company and all originals and copies of records, reports, documents, lists, drawings, memoranda, notes, proposals, contracts and other documentation related to the business of the Company or containing any information described in this Section 9 shall be the sole and exclusive property of the Company and shall be returned to the Company immediately upon termination of Employee's employment with the Company or upon the written request of the Company. The provisions of this Section 9 shall survive termination of this Agreement and the term of employment

10. Injunction. Employee agrees that it would be difficult to measure damages to the Company from any breach by Employee of Sections 6, 7, 8 and/or 9 of this Agreement, and that monetary damages would be an inadequate remedy for any such breach. Accordingly, Employee agrees that if Employee shall breach Sections 6, 7, 8 and/or 9 of this Agreement, the Company shall be entitled, in addition to all other remedies it may have at law or in equity, to an injunction or other appropriate orders to restrain any demonstrated breach without showing or proving any actual damage sustained by the Company. The provisions of this Section 10 shall survive termination of this Agreement and the term of employment.

11. Obligations to Others. Except for items fully disclosed in writing to the Company, Employee represents and warrants to the Company that (i) Employee's employment by the Company does not violate any agreement with any prior employer or other person or entity, and (ii) Employee is not subject to any existing confidentiality or non-competition agreement or obligation, or any agreement relating to the assignment of Inventions except as has been fully disclosed in writing to the Company.

12. Termination.

(a) Employee may voluntarily terminate his employment with the Company upon giving the Company sixty (60) days written notice.

(b) The Company may terminate Employee's employment without Cause (as defined below) upon giving Employee thirty (30) days written notice of termination.

(c) Employee's employment with the Company shall terminate upon the occurrence of any one of the following:

(i) Employee's death;

(ii) The effective date of a notice sent to Employee stating the Board's determination made in good faith and after consultation with a qualified physician selected by the Board, that Employee is incapable of performing his duties under this Agreement, with reasonable accommodation, because of a physical or mental incapacity that has prevented Employee from performing such full-time duties for a period of ninety (90) consecutive calendar days and the determination that such incapacity is likely to continue for at least another ninety (90) days; or

(iii) The effective date of a notice sent to Employee terminating Employee's employment for Cause.

(d) "Cause" means the occurrence of one or more of the following events:

(i) Employee's willful and repeated failure or refusal to comply in any material respect with the reasonable lawful policies, standards or regulations from time to time established by the Company, or to perform his duties in accordance with this Agreement after notice to Employee of such failure and after Employee has been given a reasonable period of time to cure such failure to comply; or

(ii) Employee engages in criminal conduct or demonstrably engages in misconduct that is materially detrimental to the reputation, character or standing of the Company.

(e) Notwithstanding anything to the contrary herein, unless sooner terminated in accordance with the terms hereof, this Agreement shall automatically renew for an additional one-year term unless one party notifies the other party in accordance with Section 14 hereof of its intention not to renew, such notice to be delivered not less than 90 days before the term ends.

13. Termination Compensation.

(a) Upon Employee's voluntary termination of employment, other than voluntary termination with Good Reason (as defined below), the Company shall pay to Employee all compensation due to the date of termination, but shall have no further obligation to Employee hereunder in respect of any period following termination.

(b) Upon the death of Employee, the Company shall pay to Employee's estate or such other party who shall be legally entitled thereto, all compensation due at the date of death, and an

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additional amount equal to compensation at the rate set forth in this Agreement or then current annual salary rate, whichever is greater, from the date of death to the final day of the month following the month in which the death occurs.

(c) (i) Upon termination of Employee's employment by the Company other than for Cause and other than in connection with a Change in Control, the Company shall pay to Employee twelve (12) months of Base Compensation. In addition, all nonvested Options shall immediately vest and be exercisable for a period of 180-days following the effective date of termination.

(ii) Upon termination by the Company other than for Cause in connection with a Change in Control or upon Employee's voluntary termination of employment for Good Reason in connection with a Change of Control, the Company shall pay to Employee twenty-four (24) months of Base Compensation. In addition, all nonvested Options shall immediately vest and be exercisable for a period of 180-days following the effective date of termination.

(d) Amounts payable under this Section 13 shall be net of amounts required to be withheld under applicable law and amounts requested to be withheld by Employee.

(e) As used herein, "Good Reason" shall mean, following a Change of Control (as such term is defined below), the termination by Employee upon the occurrence of any of the below described events. The Employee must provide notice to the Company of the existence of such event within ninety (90) days of the first occurrence of such event, and the Company will have thirty (30) days to remedy the condition, in which case no Good Reason shall exist. If the Company fails to remedy the condition within such thirty (30) day period, the Employee must terminate employment within two (2) years of the first occurrence of such event. The events which constitute a Good Reason termination are:

(i) The assignment of a different title or change that results in a material reduction in Employees duties or responsibilities;

(ii) A reduction by the Company in Employee's Base Compensation, other than a salary reduction that is part of a general salary reduction affecting employees generally and provided the reduction is not greater, percentage-wise, than the reduction affecting other employees generally or failure to provide an annual increase in Base Compensation commensurate with other Employees; *provided, however*, in determining whether to provide an annual increase in Base Compensation commensurate with an annual increase provided to other Employees, the Company may take into account factors such as market levels of compensation, Employee's overall performance, and other factors reasonably considered by the Company's compensation committee and/or Board of Directors, so long as such determination is not made in bad faith with the intent to discriminate against Employee; or

(iii) Relocation of Employee's principal place of business of greater than seventy-five (75) miles from its then location; *provided, however,* the first such

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relocation in connection with the concurrent relocation of the Company's headquarters shall not constitute Good Reason hereunder.

(f) As a condition of payment of the amounts set forth in this Section 13, if requested by Company Employee agrees to enter into a Separation and Release Agreement substantially in the form attached hereto as Exhibit D.

(g) As used herein, "Change of Control" means the occurrence of any one of the following events: (i) any person becomes the beneficial owner of twenty-five percent (25%) or more of the total number of voting shares of the Company; (ii) any person (other than the persons named as proxies solicited on behalf of the Board of Directors of the Company) holds revocable or irrevocable proxies representing twenty-five percent (25%) or more of the total number of voting shares of the Company; (iii) any person has commenced a tender or exchange offer, or entered into an agreement or received an option, to acquire beneficial ownership of twenty-five percent (25%) or more of the total number of voting shares of the Company; and (iv) as the result of, or in connection with, any cash tender or exchange offer, merger, or other business combination, sale of assets, or any combination of the foregoing transactions, the persons who were directors of the Company before such transactions shall cease to constitute at least two-thirds (2/3) of the Board of Directors of the Company or any successor entity.

14. Notice. Unless otherwise provided herein, any notice, request, certificate or instrument required or permitted under this Agreement shall be in writing and shall be deemed "given" upon personal delivery to the party to be notified or three business days after deposit with the United States Service, by registered or certified mail, addressed to the party to receive notice at the address set forth above, postage prepaid. Either party may change its address by notice to the other party given in the manner set forth in this Section.

15. Entire Agreement. This Agreement constitutes the entire agreement between the parties and contains all the agreements between them with respect to the subject matter hereof. It also supersedes any and all other agreements or contracts, either oral or written, between the parties with respect to the subject matter hereof; *provided, however,* in the event any of Sections 6, 7, 8, 9, or 10 of this Agreement is found enforceable in any way, then such section shall be amended to the extent necessary to conform to applicable law.

16. Modification. Except as otherwise specifically provided, the terms and conditions of this Agreement may be amended at any time by mutual agreement of the parties, provided that before any amendment shall be valid or effective, it shall have been reduced to writing and signed by an authorized representative of the Company and Employee.

17. No Waiver. The failure of any party hereto to exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to insist upon compliance by any other party hereto with its obligations, shall not be a waiver by such party of its right to exercise any such or other right, power or remedy or to demand compliance.

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18. Severability. In the event that any section or provision of this Agreement shall be held to be illegal or unenforceable, such section or provision shall be severed from this Agreement and the entire Agreement shall not fail as a result, but shall otherwise remain in full force and effect.

19. Assignment. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and assigns, and shall be binding upon Employee, his administrators, executors, legatees, and heirs. In that this Agreement is a personal services contract, it shall not be assigned by Employee.

20. Dispute Resolution. Except as otherwise provided in Section 10, the Company and Employee agree that any dispute between Employee and the Company or its officers, directors, employees, or agents in their individual or Company capacity of this Agreement, shall be submitted to a mediator for nonbinding, confidential mediation. If the matter cannot be resolved with the aid of the mediator, the Company and Employee mutually agree to arbitration of the dispute. The arbitration shall be in accordance with the then-current Employment Dispute Resolution Rules of the Arbitration Service of Portland ("ASP") before an arbitrator who is licensed to practice law in the State of Oregon. The arbitration shall take place in or near Portland, Oregon. Employee and the Company will share bear the cost of the arbitration equally, but each party will bear their own costs and legal fees associated with the arbitration; *provided, however,* if any party prevails on a statutory claim, which affords the prevailing party attorneys' fees, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees. The Company and Employee agree that the procedures outlined in this provision are the exclusive method of dispute resolution.

21. Attorneys' Fees. In the event suit or action is instituted pursuant to Section 10 or Section 20 of this Agreement, the prevailing party in such proceeding, including any appeals thereon, shall be awarded reasonable attorneys' fees and costs.

22. Applicable Law. This Agreement shall be construed and enforced under and in accordance with the laws of the State of Oregon.

23. Section 409A; Section 280G.

(a) It is the intention of the parties to this Agreement that no payment or entitlement pursuant to this Agreement will give rise to any adverse tax consequences to Employee or the Company with regard to Section 409A of the Internal Revenue Code of 1986 ("Section 409A"). This Agreement shall be interpreted to that end and consistent with that objective. The Company and the Employee shall, to the extent necessary to comply with Section 409A and permitted thereunder, agree to act reasonably and in good faith to mutually reform the provisions of this Agreement to avoid the application of the additional tax and interest under Section 409A(a)(1)(B), provided that any such reformation shall not negatively impact the economics of the Company or the Employee hereunder. Notwithstanding any other provision herein, if Employee is a "specified employee," as defined in, and pursuant to, Treasury Regulation Section 1.409A-1(i) or any successor regulation, on the date of termination, no payment of any "deferred compensation", as defined under Treasury Regulation Section 1.409A or any successor regulation, shall be made to

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Employee during the period lasting until the earlier of six (6) months from the date of termination or upon Employee's death. If any payment to Employee is delayed pursuant to the foregoing sentence, such payment instead shall be made on the first business day following the expiration of the six (6) month period referred to in the prior sentence or, if in the case of Employee's death, promptly thereafter.

(b) Except as otherwise specifically provided in this Agreement, if any reimbursement to which the Employee is entitled under this Agreement would constitute deferred compensation subject to Section 409A of the Code, the following additional rules shall apply: (i) the reimbursable expense must have been incurred, except as otherwise expressly provided in this Agreement, during the term of this Agreement; (ii) the amount of expenses eligible for reimbursement during any calendar year will not affect the amount of expenses eligible for reimbursement in any other calendar year; (iii) the reimbursement shall be made not later than December 31 of the calendar year following the calendar year in which the expense was incurred; and (iv) the Employee's entitlement to reimbursement shall not be subject to liquidation or exchange for another benefit.

(c) With regard to any installment payment, each installment thereof shall be deemed a separate payment for purposes of Section 409A of the Code.

(d) Section 280G

(i) Except as provided below, the payments or benefits to which Employee will be entitled under Section 13 of the Agreement will be reduced to the extent necessary so that Employee will not be liable for the federal excise tax levied on certain "excess parachute payments" under section 4999 of the Internal Revenue Code of 1986, as amended ("Code").

(ii) The limitation above will not apply if:

1. the difference between

(A) the present value of all payments to which Employee is entitled under Section 13 of the Agreement determined without regard to the limitation above, less

(B) the present value of all federal, state, and other income and excise taxes for which Employee is liable as a result of such payments; exceeds

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2. the difference between

(A) the present value of all payments to which Employee is entitled under Section 13 of the Agreement calculated as if the limitation above applies, less

(B) the present value of all federal, state, and other income and excise taxes for which Employee is liable as a result of such reduced payments.

(iii) Present values will be determined using the interest rate specified in section 280G of the Code and will be the present values as of the date on which Employee's employment terminates (unless it is necessary to use a different date in order to avoid adverse consequences under section 280G).

24. Counterparts. This Agreement may be signed in two counterparts, each of which shall be deemed an original and both of which shall together constitute one agreement.

IN WITNESS WHEREOF, AVI BioPharma, Inc. has caused this Agreement to be signed by its duly authorized representative, and Employee has hereunder set his name as of the date of this Agreement.

COMPANY: AVI BioPharma, Inc.

By: /s/ Leslie Hudson, PhD
Leslie Hudson, PhD, Chief Executive Officer

EMPLOYEE:

/s/ Stephen Bevan Shrewsbury
Stephen Bevan Shrewsbury, MD

Exhibit A

List of Offices Held

Shrewsbury Clinical Consulting: Founder - providing limited, or ad hoc consulting advice to previous employer:

- MAP Pharmaceuticals Inc., 2400 Bayshore Parkway, Mountain View, CA

and

- Nektar Therapeutics, San Carlos, CA

provided:

1) no conflict of interest arises

2) total consulting hours not to exceed one day per month

3) such consulting work does not interfere with the full performance of duties for AVI.

Exhibit B

2002 Equity Incentive Plan

Exhibit C
Inventions Excluded from Covered Works

Exhibit D

SEPARATION AND RELEASE AGREEMENT

THIS SEPARATION AND RELEASE AGREEMENT (“Agreement”) is between Stephen Bevan Shrewsbury (“Employee”) and AVI BioPharma, Inc. (“Employer”), and is effective eight (8) days after Employee signs this Agreement (“Effective Date”).

The parties agree as follows:

1. **Resignation.** Employee resigned his position as Employer’s [Title] effective [effective date of termination] (the “Resignation Date”). Employee has been paid his salary and other compensation through the Resignation Date, less all lawful or required deductions.

2. **Consideration.** In consideration of Employee’s agreements hereunder, Employer shall pay to Employee the amounts set forth and described in Section of that certain Employment Agreement dated effective the day of , 2009.

3. **Return of Employer Property.** Employee represents that he has returned all Employer property in his possession or under his control, including but not limited to keys, credit cards, files, laptop computer and any and all Employer documents.

4. **Confidentiality.** The parties will use reasonable efforts to keep the terms of this Agreement confidential. Employee may disclose the terms of this Agreement to his immediate family. Employer may disclose the terms of this Agreement to its officers and managers. Either party may disclose the terms of this Agreement to their respective attorneys, accountants, financial advisers, auditors, or similar advisors, or in response to government requests. Third persons informed of the terms of this Agreement shall in turn be advised of this confidentiality provision and requested to maintain such confidentiality.

5. **Release.**

5.1 In exchange for the consideration paid to Employee as set forth in this Agreement, Employee forever releases and discharges Employer, any of Employer-sponsored employee benefit plans in which Employee participates, or was participating in, (collectively the “Plans”) and all of their respective officers, members, managers, partners, directors, trustees, agents, employees, and all of their successors and assigns (collectively “Releasees”) from any and all claims, actions, causes of action, rights, or damages, including costs and attorneys' fees (collectively "Claims") which Employee may have arising out of his employment (including Claims that may arise out of Employee's employment agreement), on behalf of himself, known, unknown, or later discovered which arose prior to the date Employee signs this Agreement. This release includes but is not limited to, any Claims under any local, state, or federal laws prohibiting discrimination in employment, including without limitation the federal civil rights acts, Oregon Revised Statutes Chapter 659A, the Americans with Disabilities Act, the Age Discrimination in Employment Act, or Claims under the Employee Retirement Income Security Act, or Claims alleging any legal restriction on Employer's right to terminate its employees, any Claims Employee has relating to his rights to or against any of the Plans, or personal injury Claims, including without limitation

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wrongful discharge, breach of contract, defamation, tortious interference with business expectancy, constructive discharge, or infliction of emotional distress. Employee represents that he has not filed any Claim against Employer or its Releasees, he has no knowledge of any facts that would support any Claim by Employee against Employer or by a third party against Employer, and that he will not file a Claim at any time in the future concerning Claims released in this Agreement; provided, however, that this will not limit Employee from filing a Claim to enforce the terms of this Agreement. Notwithstanding the foregoing, nothing herein shall constitute release of any of Employee's rights relating to vested options, vested benefits or vested entitlements under the Company's employee benefits plans, including equity incentive and retirement plans.

5.2 In consideration of the promises of Employee as set forth herein, Employer does hereby, and for its successors and assigns, release, acquit and forever discharge Employee from any and all actions, causes of action, obligations, costs, expenses, damages, losses, claims, liabilities, suits, debts, and demands (including attorneys' fees and costs actually incurred), of whatever character in law or in equity known or unknown, suspected or unsuspected, from the beginning of time to the date of execution hereof.

6. **Non-disparagement.** Employee and Employer each agree not to make disparaging statements about each other, except in the case of Employer statements that are required under applicable federal or state securities laws or applicable rules and regulations of any exchange on which Employer's stock is traded.

7. **Consideration and Revocation Periods.** Employee understands and acknowledges the significance and consequences of this Agreement, that it is voluntary, that it has not been given as a result of any coercion, and expressly confirms that it is to be given full force and effect according to all of its terms, including those relating to unknown Claims. Employee was hereby advised of his right to seek the advice of an attorney prior to signing this Agreement. Employee acknowledges that he has signed this Agreement only after full reflection and analysis. Although he is free to sign this Agreement before then, Employee acknowledges he was given at least 21 days after receipt of this document in which to consider it (the "Consideration Period"). If Employee executes this Agreement prior to the end of the Consideration Period, Employee hereby waives any rights associated therewith. Employee may revoke this Agreement seven (7) days after signing it and forfeit all benefits described in Section 13(c) of the Employment Agreement. Employee and Employer agree that any changes made to this Agreement during the Consideration Period as a result of negotiations between the parties do not restart the running of the Consideration Period.

8. **No Liability.** This Agreement shall not be construed as an admission by either party that it acted wrongfully with respect to the other.

9. **Severability.** If any of the provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions will nevertheless continue to be valid and enforceable.

10. **Entire Agreement.** This Agreement represents and contains the entire understanding between the parties in connection with its subject matter. All other prior written or oral agreements or understandings are merged into and superseded by this Agreement. Employee

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acknowledges that in signing this Agreement, he has not relied upon any representation or statement not set forth in this Agreement made by Employer or any of its representatives.

11. **Attorney Fees.** If any suit or action is filed by either party to enforce this Agreement or otherwise with respect to the subject matter hereof, the prevailing party shall be entitled to recover reasonable attorney fees incurred in preparation or in prosecution or defense of such suit or action as fixed by the trial court, and if any appeal is taken from the decision of the trial court, reasonable attorney fees as fixed by the appellate court.

12. **Choice of Law.** This Agreement is made and shall be construed and performed under the laws of the State of Oregon.

PLEASE READ CAREFULLY. THIS AGREEMENT INCLUDES A RELEASE OF CERTAIN KNOWN OR UNKNOWN CLAIMS.

DATED this day of , 20XX.	DATED this day of , 20XX.
AVI BioPharma, Inc.	
By: ____________________	____________________
Name:	Stephen Bevan Shrewsbury, MD
Title:	

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Leslie Hudson, Ph.D., certify that:

1. I have reviewed this quarterly report on Form 10-Q of AVI BioPharma, Inc. (the “Registrant”);

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 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; and

   (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; and

   (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 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 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: May 11, 2009

By: /s/ Leslie Hudson, Ph.D.

Leslie Hudson, Ph.D.
President, Chief Executive Officer and Director
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, J. David Boyle II, certify that:

1. I have reviewed this quarterly report on Form 10-Q of AVI BioPharma, Inc. (the “Registrant”);

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 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; and

   (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; and

   (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 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 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: May 11, 2009

By: /s/ J. David Boyle II

J. David Boyle II
Senior Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT 32

CERTIFICATION OF CEO AND CFO PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of AVI BioPharma, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2009 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Leslie Hudson, Ph.D., as President and Chief Executive Officer of the Company, and J. David Boyle II, as Chief Financial Officer of the Company, each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of our knowledge,:

(1) The Report fully complies with the req uirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ Leslie Hudson, Ph.D.

Leslie Hudson, Ph.D.
President, Chief Executive Officer and Director
AVI BioPharma, Inc.
May 11, 2009

/s/ J. David Boyle II

J. David Boyle II
Senior Vice President and Chief Financial Officer
AVI BioPharma, Inc.
May 11, 2009

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended.

See also the certification pursuant to Sec. 302 of the Sarbanes-Oxley Act of 2002, which is also attached to this Report.

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to AVI BioPharma, Inc. and will be retained by AVI BioPharma, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.