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

FORM 10-Q

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

For the quarterly period ended June 30, 2008

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE EXCHANGE ACT OF 1934

Commission file number: 000-51476

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**20-2903526**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

248 Route 25A, No. 2
East Setauket, New York 11733
(Address of principal executive offices)

(631) 942-7959
(Registrant's telephone number, including area code)

Not applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☒

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

As of July 31, 2008, the Company had 27,932,178 shares of common stock, $0.0001 par value, issued and outstanding.

Documents incorporated by reference: None

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

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Forward-Looking Statements

This Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. For example, statements regarding the Company's financial position, business strategy and other plans and objectives for future operations, and assumptions and predictions about future product demand, supply, manufacturing, costs, marketing and pricing factors are all forward-looking statements. These statements are generally accompanied by words such as "intend," anticipate," "believe," "estimate," "potential(ly)," "continue," "forecast," "predict," "plan," "may," "will," "could," "would," "should," "expect" or the negative of such terms or other comparable terminology. The Company believes that the assumptions and expectations reflected in such forward-looking statements are reasonable, based on information available to it on the date hereof, but the Company cannot provide assurances that these assumptions and expectations will prove to have been correct or that the Company will take any action that the Company may presently be planning. However, these forward-looking statements are inherently subject to known and unknown risks and uncertainties. Actual results or experience may differ materially from those expected or anticipated in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, regulatory policies, available cash, research results, competition from other similar businesses, and market and general economic factors. This discussion should be read in conjunction with the condensed consolidated financial statements and notes thereto included in Item 1of this Quarterly Report on Form 10-Q.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2008	December 31, 2007
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 201,935	$ 508,070
Advances on research and development contract services	18,750	88,180
Prepaid expenses	5,308	32,117
Total current assets	225,993	628,367
Office equipment, net of accumulated depreciation of $1,485 at June 30, 2008 and $1,167 at December 31, 2007	424	742
Total assets	$ 226,417	$ 629,109
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 48,194	$ 73,741
Liquidated damages payable under registration rights agreement	74,000	74,000
Research and development contract liabilities	—	11,725
Due to stockholder	92,717	92,717
Total current liabilities	214,911	252,183
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.0001 par value; authorized - 10,000,000 shares; issued - none	—	—
Common stock, $0.0001 par value; authorized - 100,000,000 shares; issued and outstanding - 27,932,178 shares at June 30, 2008 and 27,832,178 shares at December 31, 2007	2,793	2,783
Additional paid-in capital	2,748,992	2,600,839
Deficit accumulated during the development stage	(2,740,279)	(2,226,696)
Total stockholders' equity	11,506	376,926
Total liabilities and stockholders' equity	$ 226,417	$ 629,109

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,		Period from August 9, 2005 (Inception) to June 30, 2008
	2008	2007	2008	2007	(Cumulative)
Revenues	$ —	$ —	$ —	$ —	$ —
Costs and expenses:					
General and administrative, including $(100,355) and $8,792 of stock-based expense during the three months ended June 30, 2008 and 2007, respectively, $64,794 and $17,708 of stock-based expense during the six months ended June 30, 2008 and 2007, respectively, and $1,052,638 for the period from August 9, 2005 (inception) to June 30, 2008 (cumulative)	(50,947)	89,241	217,869	199,244	1,669,791
Depreciation	159	148	318	296	1,485
Research and development costs, including $(25,564) and $0 of stock-based expense during the three months ended June 30, 2008 and 2007, respectively, $83,369 and $31,000 of stock-based expense during the six months ended June 30, 2008 and 2007, respectively, and $134,205 for the period from August 9, 2005 (inception) to June 30, 2008 (cumulative)	61,782	89,917	298,233	237,592	970,288
Reverse merger costs	—	—	—	—	50,000
Total costs and expenses	10,994	179,306	516,420	437,132	2,691,564
	(10,994)	(179,306)	(516,420)	(437,132)	(2,691,564)
Interest income	733	3,584	2,838	8,307	25,285
Liquidated damages under registration rights agreement	—	—	—	—	(74,000)
Net loss	$ (10,261)	$ (175,722)	$ (513,582)	$ (428,825)	$ (2,740,279)
Net loss per common share - basic and diluted	$ (0.00)	$ (0.01)	$ (0.02)	$ (0.02)	
Weighted average common shares outstanding - basic and diluted	27,932,178	26,582,183	27,916,793	26,582,183	

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIENCY)

Period from August 9, 2005 (Inception) to June 30, 2008

	Common Stock		Additional Paid-in	Deficit Accumulated During the Development	Total Stockholders' Equity
	Shares	Amount	Capital	Stage	(Deficiency)
Balance, August 9, 2005 (inception)	—	$ —	$ —	$ —	$ —
Shares issued to founding stockholder	19,021,786	1,902	(402)	—	1,500
Net loss for the period August 9, 2005 (inception) to December 31, 2005	—	—	—	(16,124)	(16,124)
Balance, December 31, 2005	19,021,786	1,902	(402)	(16,124)	(14,624)
Shares issued in connection with reverse merger transaction	4,005,177	401	62,099	—	62,500
Shares issued in private placement, net of offering costs of $214,517	3,555,220	355	969,017	—	969,372
Stock-based compensation	—	—	97,400	—	97,400
Net loss for the year	—	—	—	(562,084)	(562,084)
Balance, December 31, 2006	26,582,183	2,658	1,128,114	(578,208)	552,564
Shares issued in private placement, net of offering costs of $118,680	999,995	100	531,220	—	531,320
Stock-based compensation	250,000	25	890,669	—	890,694
Stock-based research and development costs	—	—	50,836	—	50,836
Net loss for the year				(1,648,488)	(1,648,488)
Balance, December 31, 2007	27,832,178	2,783	2,600,839	(2,226,696)	376,926
Stock-based compensation	—	—	64,794	—	64,794
Stock-based research and development costs	100,000	10	83,359	—	83,369
Net loss for the six months ended June 30, 2008	—	—	—	(513,583)	(513,583)
Balance, June 30, 2008 (unaudited)	27,932,178	$ 2,793	$ 2,748,992	$ (2,740,279)	$ 11,506

See accompanying notes to condensed consolidated financial statements.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Six Months Ended June 30,		Period from August 9, 2005 (Inception) to June 30, 2008
	2008	2007	(Cumulative)
Cash flows from operating activities			
Net loss	$ (513,583)	$ (428,825)	$ (2,740,279)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	318	296	1,485
Stock-based compensation	64,794	17,708	1,052,638
Stock-based research and development costs	83,369	31,000	134,205
Changes in operating assets and liabilities:			
(Increase) decrease in -			
Advances on research and development contract services	69,430	(124,925)	(18,750)
Prepaid expenses	26,809	14,375	(5,308)
Increase (decrease) in -			
Accounts payable and accrued expenses	(25,547)	(20,199)	48,194
Research and development contract liabilities	(11,725)	25,873	—
Liquidated damages payable under registration rights agreement	—	—	74,000
Net cash used in operating activities	(306,135)	(484,697)	(1,453,815)
Cash flows from investing activities			
Purchase of office equipment	—	(272)	(1,909)
Net cash used in investing activities	—	(272)	(1,909)
Cash flows from financing activities			
Proceeds from sale of common stock to consulting firm	—	—	250
Proceeds from sale of common stock to founder	—	—	1,500
Cash acquired in reverse merger transaction	—	—	62,500
Gross proceeds from sale of common stock	—	—	1,833,889
Payment of private placement offering costs	—	—	(333,197)
Advances from stockholder	—	—	92,717
Net cash provided by financing activities	—	—	1,657,659
Net increase (decrease) in cash	(306,135)	(484,969)	201,935
Cash at beginning of period	508,070	679,640	—
Cash at end of period	$ 201,935	$ 194,671	$ 201,935

(continued)

LIXTE BIOTECHNOLOGY HOLDINGS, INC
AND SUBSIDIARY
(a development stage company)

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited) (continued)

	Six Months Ended June 30,		Period from August 9, 2005 (Inception) to June 30, 2008
	2008	**2007**	**(Cumulative)**
Supplemental disclosures of cash flow information:			
Cash paid for -			
Interest	$ —	$ —	$ —
Income taxes	$ —	$ —	$ —

See accompanying notes to condensed consolidated financial statements.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Three Months and Six Months Ended June 30, 2008 and 2007 (Unaudited)

1. Organization and Business Operations

Organization

On June 30, 2006, Lixte Biotechnology, Inc., a privately-held Delaware corporation ("Lixte"), completed a reverse merger transaction with SRKP 7, Inc. ("SRKP"), a non-trading public "shell" company, whereby Lixte became a wholly-owned subsidiary of SRKP. For financial reporting purposes, Lixte was considered the accounting acquirer in the merger and the merger was accounted for as a reverse merger. Accordingly, the historical financial statements presented herein are those of Lixte and do not include the historical financial results of SRKP. The stockholders' equity section of SRKP has been retroactively restated for all periods presented to reflect the accounting effect of the reverse merger transaction. All costs associated with the reverse merger transaction were expensed as incurred.

Lixte was incorporated in Delaware on August 9, 2005 to capitalize on opportunities to develop low cost, specific and sensitive tests for the early detection of cancers to better estimate prognosis, to monitor treatment response, and to reveal targets for development of more effective treatments.

Unless the context indicates otherwise, SRKP and Lixte are hereinafter referred to as the "Company". On December 7, 2006, the Company amended its Certificate of Incorporation to change its name from SRKP 7, Inc. to Lixte Biotechnology Holdings, Inc. ("Holdings").

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 at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

The condensed consolidated financial statements at June 30, 2008, for the three months and six months ended June 30, 2008 and 2007, and for the period from August 9, 2005 (inception) to June 30, 2008 (cumulative), are unaudited. In the opinion of management, all adjustments (including normal recurring adjustments) have been made that are necessary to present fairly the financial position of the Company as of June 30, 2008, the results of its operations for the three months and six months ended June 30, 2008 and 2007, and for the period from August 9, 2005 (inception) to June 30, 2008 (cumulative), and its cash flows for the six months ended June 30, 2008 and 2007, and for the period from August 9, 2005 (inception) to June 30, 2008 (cumulative). Operating results for the interim periods presented are not necessarily indicative of the results to be expected for a full fiscal year. The condensed consolidated balance sheet at December 31, 2007 has been derived from the Company's audited financial statements as of that date.

The statements and related notes have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been omitted pursuant to such rules and regulations. These financial statements should be read in conjunction with the financial statements and other information included in the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2007, as filed with the Securities and Exchange Commission.

Operations

The Company is concentrating on discovering biomarkers for common cancers and on developing new treatments based on an understanding of the molecular activity of these biomarkers for common cancers. For each of these diseases, a biomarker that would enable identification of the presence of cancer at a stage curable by surgery could possibly save thousands of lives annually. In addition, biomarkers specific to these diseases may also provide clues as to processes (biological pathways) that characterize specific cancer types and that may be vulnerable to drug treatment targeted to the activity of the biomarker.

The Company is currently focusing on developing new treatments for the most common and most aggressive type of brain cancer of adults, glioblastoma multiforme ("GBM"). The Company is conducting its anti-cancer activities primarily through a collaborative program governed by a Cooperative Research and Development Agreement ("CRADA") with the National Institute of Neurological Disorders and Stroke ("NINDS") of the National Institutes of Health ("NIH").

The Company has expanded the scope of its anti-cancer investigational activities to include the most common brain tumor of children, medulloblastoma, and also to several other types of more common cancers. This expansion of activity is based on documentation that each of two distinct types of drugs being developed by the Company inhibits the growth of cell lines of breast, colon, lung, prostate, pancreas, ovary, stomach and liver cancer, as well as the major types of leukemias. During the three months ended June 30, 2008, two different lead compounds, previously shown to have activity again brain tumors, were found to also have activity in a mouse model of human pancreatic cancer.

The Company expects that its products will derive directly from its intellectual property, which will consist of patents that it anticipates will arise out of its research activities. These patents are expected to cover biomarkers uniquely associated with the specific types of cancer, patents on methods to identify drugs that inhibit growth of specific tumor types, and combinations of drugs and other potential therapeutic agents for the treatment of specific cancers. The Company will continue to use discovery and/or recognition of molecular variants characteristic of specific human cancers as a guide to drug discovery and potentially new diagnostic tests.

The Company is considered a "development stage company" as defined in SFAS No. 7, "Accounting and Reporting by Development Stage Enterprises", as it has not yet commenced any revenue-generating operations, does not have any cash flows from operations, and is dependent on debt and equity funding to finance its operations. The Company has selected December 31 as its fiscal year end.

Going Concern

The Company's financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company is in the development stage and has not generated any revenues from operations to date.

The Company's ability to continue as a going concern is dependent upon its ability to develop additional sources of capital and to ultimately achieve profitable operations. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

The Company is currently devoting its efforts to research and development related to discovering specific cancer biomarkers for early detection, estimation of prognosis, monitoring response to treatment, development of targeted therapeutic agents and new treatments based on an understanding of the molecular activity of these biomarkers for common cancers. The Company is seeking to exploit this opportunity through execution of its business plan and the development of related patents.

At June 30, 2008, the Company had not yet commenced any revenue-generating operations. All activity through June 30, 2008 is related to the Company's formation, capital raising efforts and initial research and development activities. As such, the Company has yet to generate any cash flows from operations, and is essentially dependent on debt and equity funding from both related and unrelated parties to finance its operations. Prior to June 30, 2006, the Company's cash requirements were funded by advances from Lixte's founder. On June 30, 2006, the Company completed an initial closing of a private placement (see Note 3), selling 1,973,869 shares of common stock at a price of $0.333 per share and receiving net proceeds of $522,939. On July 27, 2006, the Company completed a second closing of the private placement, selling 1,581,351 shares of common stock at a price of $0.333 per share and receiving net proceeds of $446,433. On December 12, 2007, the Company completed a second private placement, selling 999,995 shares of common stock at a price of $0.65 per share and receiving net proceeds of $531,320.

Because the Company is currently engaged in research at an early stage, it will likely take a significant amount of time to develop any product or intellectual property capable of generating revenues. As such, the Company's business is unlikely to generate any revenue in the next several years and may never do so. Even if the Company is able to generate revenues in the future through licensing its technologies or through product sales, there can be no assurance that such revenues will exceed its expenses.

The Company's current resources are marginally adequate to fund the Company's basic operating budget through December 31, 2008, but are not sufficient to fund expanded research activities with respect to the Company's promising intellectual property during the remainder of 2008 and beyond. The Company does not have sufficient resources to fully develop and commercialize any products that may arise from its research. Accordingly, the Company will need to raise additional funds in order to satisfy its future working capital requirements.

Based on the Company's revised and updated research program, the Company currently estimates that it will require additional funds of approximately $2,000,000 for the year ending December 31, 2009 in order to fund operations and continuing drug discovery and to bring one drug through the pre-clinical evaluation process needed for submission of an IND. The Company is attempting to arrange such funding during the next few months, although there can be no assurances that the Company will be successful in this regard. The amount and timing of future cash requirements will depend on the market's evaluation of the Company's technology and products, and the resources that the Company devotes to developing and supporting its activities. The Company anticipates funding these cash requirements from a combination of debt or equity financings and the sale, licensing or joint venturing of its intellectual properties.

Current market conditions present uncertainty as to the Company's ability to secure additional funds, as well as its ability to reach profitability. There can be no assurances that the Company will be able to secure additional financing, or obtain favorable terms on such financing if it is available, or as to its ability to achieve positive cash flow from operations. Continued negative cash flows and lack of liquidity create significant uncertainty about the Company's ability to fully implement its operating plan, as a result of which the Company may have to reduce the scope of its planned operations. If cash resources are insufficient to satisfy the Company's liquidity requirements, the Company would be required to scale back or discontinue its technology and product development programs, or obtain funds, if available, through strategic alliances that may require the Company to relinquish rights to certain of its technologies products, or to discontinue its operations entirely.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the financial statements of Holdings and its wholly-owned subsidiary, Lixte. All intercompany balances and transactions have been eliminated in consolidation.

Cash and Cash Equivalents and Concentrations

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. At times, such cash and cash equivalents may exceed federally insured limits. The Company has not experienced a loss in such accounts to date. The Company maintains its accounts with financial institutions with high credit ratings.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses consist primarily of fees paid to consultants and outside service providers, patent fees and costs, and other expenses relating to the acquisition, design, development and testing of the Company's treatments and product candidates.

Amounts due, pursuant to contractual commitments, on research and development contracts with third parties are recorded as a liability, with the related amount of such contracts recorded as advances on research and development contract services on the Company's balance sheet. Such advances on research and development contract services are expensed over their life on the straight-line basis, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate. The Company accounts for its research and development contracts in accordance with EITF 07-3.

The funds paid to NINDS of the NIH, pursuant to the CRADA effective March 22, 2006, as amended, represent an advance on research and development costs and therefore have future economic benefit. As such, such costs are being charged to expense when they are actually expended by the provider, which is, effectively, as they perform the research activities that they are contractually committed to provide. Absent information that would indicate that a different expensing schedule is more appropriate (such as, for example, from the achievement of performance milestones or the completion of contract work), such advances are being expensed over the contractual service term on a straight-line basis, which reflects a reasonable estimate of when the underlying research and development costs are being incurred. The Company's $200,000 financial obligation due under the CRADA as of March 22, 2007 was paid on June 29, 2007, and funded ongoing research and development activities through June 30, 2008. In June 2008, the CRADA was extended to September 30, 2009 with no additional funding required for the period between July 1, 2008 and September 30, 2008. However, for the period from October 1, 2008 through September 30, 2009, the Company has agreed to provide additional funding under the CRADA of $200,000, to be paid in four quarterly installments of $50,000 commencing on October 1, 2008.

Patent Costs

Due to the significant uncertainty associated with the successful development of one or more commercially viable products based on the Company's research efforts and any related patent applications, all patent costs, including patent-related legal fees, are expensed as incurred. Patent costs were $34,224 and $6,592 for the three months ended June 30, 2008 and 2007, respectively, $74,224 and $46,592 for the six months ended June 30, 2008 and 2007, respectively, and $235,133 for the period from August 9, 2005 (inception) to June 30, 2008 (cumulative). Patent costs are included in research and development costs in the Company's statement of operations.

Income Taxes

The Company accounts for income taxes pursuant to Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" ("SFAS No. 109"), which establishes financial accounting and reporting standards for the effects of income taxes that result from an enterprise's activities during the current and preceding years. SFAS No. 109 requires an asset and liability approach for financial accounting and reporting for income taxes. Accordingly, the Company recognizes deferred tax assets and liabilities for the expected impact of differences between the financial statements and the tax basis of assets and liabilities.

For federal income tax purposes, substantially all expenses, except for interest, taxes, and research and development, are deemed start-up and organization costs and must be deferred until the Company commences business operations at which time they may be written off over a 180-month period. The Company has elected to deduct research and development costs currently.

The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its recorded amount, an adjustment to the deferred tax assets would be credited to operations in the period such determination was made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to operations in the period such determination was made.

For federal income tax purposes, net operating losses can be carried forward for a period of 20 years until they are either utilized or until they expire.

In July 2006, the Financial Accounting Standards Board ("FASB") issued FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109" ("FIN 48"), which provides criteria for the recognition, measurement, presentation and disclosure of uncertain tax positions. A tax benefit from an uncertain position may be recognized only if it is "more likely than not" that the position is sustainable based on its technical merits. The Company adopted the provisions of FIN 48 on January 1, 2007.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted SFAS No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123R"), a revision to SFAS No. 123, "Accounting for Stock-Based Compensation". SFAS No. 123R requires that the Company measure the cost of employee services received in exchange for equity awards based on the grant date fair value of the awards, with the cost to be recognized as compensation expense in the Company's financial statements over the vesting period of the awards. Accordingly, the Company recognizes compensation cost for equity-based compensation for all new or modified grants issued after December 31, 2005. The Company did not have any modified grants subsequent to December 31, 2005.

In December 2007, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 110 ("SAB 110"), which expresses the views of the staff regarding the use of a "simplified" method, as discussed in Staff Accounting Bulletin No. 107, in developing an estimate of expected term of "plain vanilla" share options in accordance with SFAS No. 123R. The staff indicated that it will accept a company's election to use the simplified method, regardless of whether the company has sufficient information to make more refined estimates of expected term. SAB 110 was effective January 1, 2008, and did not have a significant impact on the Company's consolidated financial statements.

In addition, commencing January 1, 2006, the Company was required to recognize the unvested portion of the grant date fair value of awards issued prior to the adoption of SFAS No. 123R based on the fair values previously calculated for disclosure purposes over the remaining vesting period of the outstanding stock options and warrants. The Company did not have any unvested outstanding stock options or warrants at December 31, 2005.

The Company accounts for stock option and warrant grants issued and vesting to non-employees in accordance with EITF No. 96-18, "Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services", and EITF 00-18, "Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other Than Employees", whereas the value of the stock compensation is based upon the measurement date as determined at either (a) the date at which a performance commitment is reached or (b) at the date at which the necessary performance to earn the equity instruments is complete.

Earnings Per Share

The Company computes earnings per share ("EPS") in accordance with SFAS No. 128, "Earnings per Share" and SEC Staff Accounting Bulletin No. 98. SFAS No. 128 requires companies with complex capital structures to present basic and diluted EPS. Basic EPS is measured as the income (loss) available to common shareholders divided by the weighted average common shares outstanding for the period. Diluted EPS is similar to basic EPS but presents the dilutive effect on a per share basis of potential common shares (e.g., warrants and options) as if they had been converted at the beginning of the periods presented, or issuance date, if later. Potential common shares that have an anti-dilutive effect (i.e., those that increase income per share or decrease loss per share) are excluded from the calculation of diluted EPS.

Loss per common share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the respective periods. Basic and diluted loss per common share are the same for all periods presented because all warrants and stock options outstanding are anti-dilutive. The 19,021,786 shares of common stock issued to the founder of Lixte in conjunction with the closing of the reverse merger transaction on June 30, 2006 have been presented as outstanding for all periods presented.

At June 30, 2008 and December 31, 2007, the Company had securities outstanding entitling the holder thereof to acquire shares of common stock as follows:

	June 30, 2008	December 31, 2007
Warrants	546,626	546,626
Stock options	2,290,000	2,090,000
Total	2,836,626	2,636,626

Equipment

Equipment is recorded at cost. Depreciation expense is provided on a straight-line basis using estimated useful lives of 3 years. Maintenance and repairs are charged to expense as incurred. When assets are retired or otherwise disposed of, the property accounts are relieved of costs and accumulated depreciation and any resulting gain or loss is credited or charged to operations.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, prepaid expenses, accounts payable, accrued expenses and due to stockholder approximate their respective fair values due to the short-term nature of these items and/or the current interest rates payable in relation to current market conditions.

Use of Estimates

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 at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Reclassification

Certain reclassifications have been made to prior period balances to conform to the June 30, 2008 presentation. Such reclassifications did not have any effect on results of operations.

Adoption of New Accounting Policies

In September 2006, the FASB issued Statement of Financial Accounting Standards No. 157, “Fair Value Measurements” (“SFAS No. 157”), which establishes a formal framework for measuring fair value under Generally Accepted Accounting Principles (“GAAP”). SFAS No. 157 defines and codifies the many definitions of fair value included among various other authoritative literature, clarifies and, in some instances, expands on the guidance for implementing fair value measurements, and increases the level of disclosure required for fair value measurements. Although SFAS No. 157 applies to and amends the provisions of existing FASB and American Institute of Certified Public Accountants (“AICPA”) pronouncements, it does not, of itself, require any new fair value measurements, nor does it establish valuation standards. SFAS No. 157 applies to all other accounting pronouncements requiring or permitting fair value measurements, except for: SFAS No. 123R, share-based payment and related pronouncements, the practicability exceptions to fair value determinations allowed by various other authoritative pronouncements, and AICPA Statements of Position 97-2 and 98-9 that deal with software revenue recognition. SFAS No. 157 was effective January 1, 2008, and did not have any impact on the Company’s financial statement presentation or disclosures in 2008.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities” (“SFAS No. 159”), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159’s objective is to reduce both complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Generally accepted accounting principles have required different measurement attributes for different assets and liabilities that can create artificial volatility in earnings. SFAS No. 159 helps to mitigate this type of accounting-induced volatility by enabling companies to report related assets and liabilities at fair value, which would likely reduce the need for companies to comply with detailed rules for hedge accounting. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 requires companies to provide additional information that will help investors and other users of financial statements to more easily understand the effect of the company’s choice to use fair value on its earnings. SFAS No. 159 also requires companies to display the fair value of those assets and liabilities for which the company has chosen to use fair value on the face of the balance sheet. SFAS No. 159 does not eliminate disclosure requirements included in other accounting standards, including requirements for disclosures about fair value measurements included in SFAS No. 157 and SFAS No. 107. SFAS No. 159 was effective January 1, 2008, and did not have any impact on the Company’s financial statement presentation or disclosures in 2008.

Recent Accounting Pronouncements

In December 2007, the FASB issued SFAS No. 141(R), "Business Combinations" ("SFAS No. 141(R)"), which requires an acquirer to recognize in its financial statements as of the acquisition date (i) the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree, measured at their fair values on the acquisition date, and (ii) goodwill as the excess of the consideration transferred plus the fair value of any noncontrolling interest in the acquiree at the acquisition date over the fair values of the identifiable net assets acquired. Acquisition-related costs, which are the costs an acquirer incurs to effect a business combination, will be accounted for as expenses in the periods in which the costs are incurred and the services are received, except that costs to issue debt or equity securities will be recognized in accordance with other applicable GAAP. SFAS No. 141(R) makes significant amendments to other Statements and other authoritative guidance to provide additional guidance or to conform the guidance in that literature to that provided in SFAS No. 141(R). SFAS No. 141(R) also provides guidance as to what information is to be disclosed to enable users of financial statements to evaluate the nature and financial effects of a business combination. SFAS No. 141(R) is effective for financial statements issued for fiscal years beginning on or after December 15, 2008. Early adoption is prohibited. The adoption of SFAS No. 141(R) will affect how the Company accounts for a business combination concluded after December 31, 2008.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements — an amendment of ARB No. 51" ("SFAS No. 160"), which revises the relevance, comparability, and transparency of the financial information that a reporting entity provides in its consolidated financial statements by establishing accounting and reporting standards that require (i) the ownership interests in subsidiaries held by parties other than the parent be clearly identified, labeled, and presented in the consolidated statement of financial position within equity, but separate from the parent's equity, (ii) the amount of consolidated net income attributable to the parent and to the noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income, (iii) changes in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary be accounted for consistently as equity transactions, (iv) when a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary be initially measured at fair value, with the gain or loss on the deconsolidation of the subsidiary being measured using the fair value of any noncontrolling equity investment rather than the carrying amount of that retained investment, and (v) entities provide sufficient disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 amends FASB No. 128 to provide that the calculation of earnings per share amounts in the consolidated financial statements will continue to be based on the amounts attributable to the parent. SFAS No. 160 is effective for financial statements issued for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. Early adoption is prohibited. SFAS No. 160 shall be applied prospectively as of the beginning of the fiscal year in which it is initially applied, except for the presentation and disclosure requirements, which shall be applied retrospectively for all periods presented. The Company has not yet determined the effect on its consolidated financial statements, if any, upon adoption of SFAS No. 160.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities - an amendment of FASB Statement No. 133" ("SFAS No. 161"). SFAS No. 161 amends and expands the disclosure requirements of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"). The objective of SFAS No. 161 is to provide users of financial statements with an enhanced understanding of how and why an entity uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations, and how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. SFAS No. 161 requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. SFAS No. 161 applies to all derivative financial instruments, including bifurcated derivative instruments (and nonderivative instruments that are designed and qualify as hedging instruments pursuant to paragraphs 37 and 42 of SFAS No. 133) and related hedged items accounted for under SFAS No. 133 and its related interpretations. SFAS No. 161 also amends certain provisions of SFAS No. 131. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. SFAS No. 161 encourages, but does not require, comparative disclosures for earlier periods at initial adoption. The Company has not yet determined the effect on its consolidated financial statements, if any, upon adoption of SFAS No. 161.

3. Share Exchange Agreement and Private Placement

Share Exchange Agreement

On June 30, 2006, pursuant to a Share Exchange Agreement dated as of June 8, 2006 (the "Share Exchange Agreement") by and among Holdings, Dr. John S. Kovach ("Seller") and Lixte, Holdings issued 19,021,786 shares of its common stock in exchange for all of the issued and outstanding shares of Lixte (the "Exchange"). Previously, on October 3, 2005, Lixte had issued 1,500 shares of its no par value common stock to its founder for $1,500, which constituted all of the issued and outstanding shares of Lixte prior to the Exchange. As a result of the Exchange, Lixte became a wholly-owned subsidiary of Holdings.

Pursuant to the Exchange, Holdings issued to the Seller 19,021,786 shares of its common stock. Holdings had a total of 25,000,832 shares of common stock issued and outstanding after giving effect to the Exchange and the 1,973,869 shares of common stock issued in the initial closing of the private placement.

As a result of the Exchange and the shares of common stock issued in the initial closing of the private placement, on June 30, 2006, the stockholders of the Company immediately prior to the Exchange owned 4,005,177 shares of common stock, equivalent to approximately 16% of the issued and outstanding shares of the Company's common stock, and the Company is now controlled by the former stockholder of Lixte.

The Share Exchange Agreement was determined through arms-length negotiations between Holdings, the Seller and Lixte. In connection with the Exchange, the Company paid WestPark Capital, Inc. an aggregate cash fee of $50,000.

Private Placements

On June 30, 2006, concurrently with the closing of the Exchange, the Company sold an aggregate of 1,973,869 shares of its common stock to accredited investors in an initial closing of a private placement at a per share price of $0.333, resulting in aggregate gross proceeds to the Company of $657,299. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the private placement exercisable at $0.333 per share and (b) an additional 2% of the number of shares sold in the private placement also exercisable at $0.333 per share. A total of 236,864 warrants were issued. Net cash proceeds to the Company, after the deduction of all private placement offering costs and expenses, were $522,939.

On July 27, 2006, the Company sold an aggregate of 1,581,351 shares of its common stock to accredited investors in a second closing of the private placement at a per share price of $0.333 resulting in aggregate gross proceeds to the Company of $526,590. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the private placement exercisable at $0.333 per share and (b) an additional 2% of the number of shares sold in the private placement also exercisable at $0.333 per share. A total of 189,762 warrants were issued. Net cash proceeds to the Company were $446,433.

In conjunction with the private placement of common stock, the Company issued a total of 426,626 five-year warrants to WestPark Capital, Inc. exercisable at the per share price of the common stock sold in the private placement ($0.333 per share). The warrants issued to WestPark Capital, Inc. do not contain any price anti-dilution provisions. However, such warrants contain cashless exercise provisions and demand registration rights, but the warrant holder has agreed to waive any claims to monetary damages or financial penalties for any failure by the Company to comply with such registration requirements. Based on the foregoing, the warrants have been accounted for as equity.

The fair value of the warrants, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $132,254 ($0.31 per share) using the following Black-Scholes input variables: stock price on date of grant - $0.333; exercise price - $0.333; expected life - 5 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 5%.

As part of the Company's private placement of its securities completed on July 27, 2006, the Company entered into a registration rights agreement with the purchasers, whereby the Company agreed to register the shares of common stock sold in the private placement, and to maintain the effectiveness of such registration statement, subject to certain conditions. The agreement required the Company to file a registration statement within 45 days of the closing of the private placement and to have the registration statement declared effective within 120 days of the closing of the private placement. On September 8, 2006, the Company filed a registration statement on Form SB-2 to register 3,555,220 shares of the common stock sold in the private placement. Since the registration statement was not declared effective by the Securities and Exchange Commission within 120 days of the closing of the private placement, the Company was required to pay each investor prorated liquidated damages equal to 1.0% of the amount raised per month, payable monthly in cash.

In accordance with EITF 00-19-2, "Accounting for Registration Payment Arrangements", on the date of the closing of the private placement, the Company believed it would meet the deadlines under the registration rights agreement with respect to filing a registration statement and having it declared effective by the Securities and Exchange Commission. As a result, the Company did not record any liabilities associated with the registration rights agreement at June 30, 2006. At December 31, 2006, the Company determined that the registration statement covering the shares sold in the private placement would not be declared effective within the requisite time frame and therefore accrued six months liquidated damages under the registration rights agreement aggregating approximately $74,000, which has been presented as a current liability at June 30, 2008 and December 31, 2007. The Company's registration statement on Form SB-2 was declared effective by the Securities and Exchange Commission on May 14, 2007. At June 30, 2008, the registration penalty to the investors was still due and payable.

On December 12, 2007, the Company sold an aggregate of 999,995 shares of its common stock to accredited investors in a second private placement at a per share price of $0.65, resulting in aggregate gross proceeds to the Company of $650,000. The Company paid to WestPark Capital, Inc., as placement agent, a commission of 10% and a non-accountable fee of 4% of the gross proceeds of the private placement and issued five-year warrants to purchase common stock equal to (a) 10% of the number of shares sold in the private placement exercisable at $0.65 per share and (b) an additional 2% of the number of shares sold in the private placement also exercisable at $0.65 per share. Net cash proceeds to the Company were $531,320.

In conjunction with the second private placement of common stock, the Company issued a total of 120,000 five-year warrants to WestPark Capital, Inc. exercisable at the per share price of the common stock sold in the private placement ($0.65 per share). The warrants issued to WestPark Capital, Inc. do not contain any price anti-dilution provisions. However, such warrants contain cashless exercise provisions and demand registration rights, but the warrant holder has agreed to waive any claims to monetary damages or financial penalties for any failure by the Company to comply with such registration requirements. Based on the foregoing, the warrants have been accounted for as equity.

The fair value of the warrants, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $115,200 ($0.96 per share) using the following Black-Scholes input variables: stock price on date of grant - $1.10; exercise price - $0.65; expected life - 5 years; expected volatility - 118.6%; expected dividend yield - 0%; risk-free interest rate - 4%.

As part of the Company's second private placement of its securities completed on December 12, 2007, the Company entered into a registration rights agreement with the purchasers, whereby the Company agreed to register the shares of common stock sold in the second private placement at its sole cost and expense. The registration rights agreement terminates at such time as the common shares may be sold in market transactions without regard to any volume limitations. The registration rights agreement requires the Company to file a registration statement within 75 days of receipt of written demand from holders who represent at least 50% of the common shares issued pursuant to the second private placement, provided that no demand shall be made for less than 500,000 shares, and to use its best efforts to cause such registration statement to become and remain effective for the requisite period. The registration rights agreement also provides for unlimited piggyback registration rights. The registration rights agreement does not provide for any penalties in the event that the Company is unable to comply with its terms.

The Company's common stock was listed for trading on the OTC Bulletin Board commencing September 24, 2007.

4. Related Party Transactions

Since inception, Lixte's founding stockholder and Chief Executive Officer, Dr. John Kovach, has periodically made advances to the Company to meet operating expenses. Such advances are non-interest-bearing and are due on demand. At June 30, 2008 and December 31, 2007, stockholder advances totaled $92,717.

The Company's office facilities have been provided without charge by Dr. Kovach. Such costs were not material to the financial statements and, accordingly, have not been reflected therein.

Dr. Kovach did not receive any compensation from the Company during the three months and six months ended June 30, 2008 and 2007, and for the period from August 9, 2005 (inception) through June 30, 2008 (cumulative), in view of the Company's development stage status and limited resources. Any future compensation arrangements will be subject to the approval of the Board of Directors.

Dr. Kovach is involved in other business activities and may, in the future, become involved in other business opportunities that become available. Accordingly, he may face a conflict in selecting between the Company and his other business interests. The Company has not yet formulated a policy for the resolution of such potential conflicts.

5. Common Stock and Preferred Stock

The Company's Certificate of Incorporation provides for authorized capital of 110,000,000 shares, of which 100,000,000 shares are common stock with a par value of $0.0001 per share and 10,000,000 shares are preferred stock with a par value of $0.0001 per share.

The Company is authorized to issue 10,000,000 shares of preferred stock with such designations, voting and other rights and preferences, as may be determined from time to time by the Board of Directors.

6. Stock Options and Warrants

On June 30, 2006, effective with the closing of the Exchange, the Company granted to Dr. Philip Palmedo, an outside director of the Company, stock options to purchase an aggregate of 200,000 shares of common stock, exercisable for a period of five years at $0.333 per share, with one-third of the options (66,666 shares) vesting immediately upon joining the Board and one-third vesting annually on each of June 30, 2007 and 2008. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $62,000 ($0.31 per share), of which $20,666 was charged to operations on June 30, 2006, and the remaining $41,334 is being charged to operations ratably from July 1, 2006 through June 30, 2008. During the three months ended June 30, 2008 and 2007, the Company recorded a charge to operations of $5,165 and $5,167, respectively, with respect to these options. During the six months ended June 30, 2008 and 2007, the Company recorded a charge to operations of $10,332 and $10,334, respectively, with respect to these options.

On June 30, 2006, effective with the closing of the Exchange, the Company also granted to Dr. Palmedo additional stock options to purchase 190,000 shares of common stock exercisable for a period of five years at $0.333 per share for services rendered in developing the business plan for Lixte, all of which were fully vested upon issuance. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $58,900 ($0.31 per share), and was charged to operations at June 30, 2006.

On June 30, 2006, effective with the closing of the Exchange, the Company granted to certain members of its Scientific Advisory Committee stock options to purchase an aggregate of 100,000 shares of common stock exercisable for a period of five years at $0.333 per share, with one-half of the options vesting annually on each of June 30, 2007 and June 30, 2008. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $31,000 ($0.31 per share), and is being charged to operations ratably from July 1, 2006 through June 30, 2008. On June 30, 2008 and 2007, the fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $25,000 ($0.25 per share) and $29,000 ($0.29 per share), respectively, which resulted in a charge (credit) to operations of $(17,930) and $3,626 during the three months ended June 30, 2008 and 2007, respectively. During the six months ended June 30, 2008 and 2007, the Company recorded a charge (credit) to operations of $(3,336) and $7,376, respectively, with respect to these options.

On June 30, 2006, the fair value of the aforementioned stock options was initially calculated using the following Black-Scholes input variables: stock price - $0.333; exercise price - $0.333; expected life - 5 to 7 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 5%. On June 30, 2007, the Black-Scholes input variables utilized to determine the fair value of the aforementioned stock options were stock price - $0.333; exercise price - $0.333; expected life - 4 to 6 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 4.5%. On June 30, 2008, the fair value of the aforementioned stock options was calculated using the following Black-Scholes input variables: stock price - $0.30; exercise price - $0.333; expected life - 3 to 5 years; expected volatility - 154.5%; expected dividend yield - 0%; risk-free interest rate - 3.28%.

On June 20, 2007, the Board of Directors of the Company approved the 2007 Stock Compensation Plan (the “2007 Plan”), which provides for the granting of awards, consisting of common stock options, stock appreciation rights, performance shares, or restricted shares of common stock, to employees and independent contractors, for up to 2,500,000 shares of the Company’s common stock, under terms and condition, as determined by the Company’s Board of Directors.

On September 12, 2007, in conjunction with his appointment as a director of the Company, the Company granted to Dr. Stephen Carter stock options to purchase an aggregate of 200,000 shares of common stock under the 2007 Plan, exercisable for a period of five years from vesting date at $0.333 per share, with one-half (100,000 shares) vesting annually on each of September 12, 2008 and 2009. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $204,000 ($1.02 per share), and is being charged to operations ratably from September 12, 2007 through September 12, 2009, which resulted in a charge to operations of $25,361 and $50,722 during the three months and six months ended June 30, 2008, respectively.

On September 12, 2007, the Company entered into a consulting agreement with Gil Schwartzberg and granted to Mr. Schwartzberg stock options to purchase an aggregate of 1,000,000 shares of common stock, exercisable for a period of four years from vesting date at $1.00 per share, with one-half of the options (500,000 shares) vesting immediately and one-half (500,000 shares) vesting on September 12, 2008. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $945,000 ($0.945 per share), of which $465,000 was attributed to the fully-vested options and was thus charged to operations on September 12, 2007. The remaining portion of the fair value of these options is being charged to operations ratably from September 12, 2007 through September 12, 2008. During the three months and six months ended June 30, 2008, the Company recorded a charge (credit) to operations of $(112,951) and $7,076, respectively, with respect to these options.

On September 12, 2007, the Company entered into a consulting agreement with Francis Johnson, a co-owner of Chem-Master International, Inc. and granted to Professor Johnson stock options to purchase an aggregate of 300,000 shares of common stock, exercisable for a period of four years from vesting date at $0.333 per share, with one-third (100,000 shares) vesting annually on each of September 12, 2008, 2009 and 2010. The fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $300,000 ($1.00 per share), and is being charged to operations ratably from September 12, 2007 through September 12, 2010. On June 30, 2008, the fair value of these options, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $81,000 ($0.27 per share), which resulted in a charge (credit) to operations of $(25,139) and $1,705 during the three months and six months ended June 30, 2008, respectively.

In accordance with EITF 96-18, options granted to committee members and outside consultants are revalued each reporting period to determine the amount to be recorded as an expense in the respective period. As the options vest, they are valued on each vesting date and an adjustment is recorded for the difference between the value already recorded and the then current value on the date of vesting.

On September 12, 2007, the fair value of the aforementioned stock options was initially calculated using the following Black-Scholes input variables: stock price - $1.05; exercise price - $0.333 to $1.00; expected life - 4 to 6 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 5%. On June 30, 2008, the fair value of the aforementioned stock options was calculated (for stock options revalued pursuant to EITF 98-16) using the following Black-Scholes input variables: stock price - $0.30; exercise price - $0.333 to $1.00; expected life - 4.2 years; expected volatility - 154.5%; expected dividend yield - 0%; risk-free interest rate - 3.28%. The Company used a revised volatility factor at June 30, 2008 as it had trading data commencing September 24, 2007.

Additional information with respect to common stock warrants and stock options issued is provided at Notes 3 and 7.

7. Commitments and Contingencies

Effective March 22, 2006, Lixte entered into a CRADA, as amended, with the NINDS of the NIH. The CRADA is for a term of 42 months from the effective date and may be unilaterally terminated by either party by providing written notice within sixty days. The CRADA provides for the collaboration between the parties in the identification and evaluation of agents that target the Nuclear Receptor CoRepressor (N-CoR) pathway for glioma cell differentiation. The CRADA also provided that NINDS and Lixte will conduct research to determine if expression of N-CoR correlates with prognosis in glioma patients. Pursuant to the CRADA, Lixte agreed to provide funds under the CRADA in the amount of $200,000 per year to fund two technical assistants for the technical, statistical and administrative support for the research activities, as well as to pay for supplies and travel expenses. The first $200,000 was due within 180 days of the effective date and was paid in full on July 6, 2006. The second $200,000 was paid in full on June 29, 2007. In June 2008, the CRADA was extended to September 30, 2009 with no additional funding required for the period between July 1, 2008 and September 30, 2008. However, for the period from October 1, 2008 through September 30, 2009, the Company has agreed to provide additional funding under the CRADA of $200,000, to be paid in four quarterly installments of $50,000 commencing on October 1, 2008.

On January 5, 2007, Lixte entered into a Services Agreement with The Free State of Bavaria (Germany) represented by the University of Regensburg (the “University”) pursuant to which Lixte retained the University to provide to it certain samples of primary cancer tissue and related biological fluids to be obtained from patients afflicted with specified types of cancer. The University also agreed to provide certain information relating to such patients. Lixte agreed to pay the University 72,000 Euros in two equal installments. The first installment of 36,000 Euros ($48,902) was paid on March 7, 2007. On January 12, 2008, Lixte terminated the Services Agreement in accordance with its terms, as a result of which payment of the second installment of 36,000 Euros was cancelled. The University agreed to deliver 50% of the aforementioned samples under the terminated Services Agreement.

On February 5, 2007, Lixte entered into a two-year agreement (the “Chem-Master Agreement”) with Chem-Master International, Inc. (“Chem-Master”), a company co-owned by Francis Johnson, a consultant to the Company, pursuant to which Lixte engaged Chem-Master to synthesize a compound designated as “LB-1”, and any other compound synthesized by Chem-Master pursuant to Lixte’s request, which have potential use in treating a disease, including, without limitation, cancers such as glioblastomas. Pursuant to the Chem-Master Agreement, Lixte agreed to reimburse Chem-Master for the cost of materials, labor, and expenses for other items used in the synthesis process, and also agreed to grant Chem-Master a five-year option to purchase 100,000 shares of the Company’s common stock at an exercise price of $0.333 per share. The fair value of this option, as calculated pursuant to the Black-Scholes option-pricing model, was determined to be $31,000 ($0.31 per share) using the following Black-Scholes input variables: stock price on date of grant - $0.333; exercise price - $0.333; expected life - 5 years; expected volatility - 150%; expected dividend yield - 0%; risk-free interest rate - 4.5%. The $31,000 fair value was charged to operations as research and development costs during the year ended December 31, 2007, since the option was fully vested and non-forfeitable on the date of issuance. Lixte has the right to terminate the Chem-Master Agreement at any time during its term upon sixty days prior written notice. On February 5, 2009, provided that the Chem-Master Agreement has not been terminated prior to such date, the Company has agreed to grant Chem-Master a second five-year option to purchase an additional 100,000 shares of the Company’s common stock at an exercise price of $0.333 per share.

On January 29, 2008, the Chem-Master Agreement was amended to extend its term to February 15, 2014, and to expressly provide for the design and synthesis of a new series of compounds designated as "LB-3". Pursuant to the amendment, Lixte issued 100,000 shares of its restricted common stock, valued at $75,000, and granted an option to Chem-Master to purchase 200,000 shares of the Company's common stock. The option is exercisable for a period of two years from the vesting date at $1.65 per share, with one-half (100,000 shares) vesting on August 1, 2009, and one-half (100,000 shares) vesting on February 1, 2011. The fair value of this option, as calculated pursuant to the Black-Scholes option-pricing model, was initially determined to be $96,000 ($0.48 per share) using the following Black-Scholes input variables: stock price on date of grant - $0.75; exercise price - $1.65; expected life - 5 years; expected volatility - 120.1%; expected dividend yield - 0%; risk-free interest rate - 3.09%.

The fair value of the restricted common stock issued was charged to operations as research and development costs on January 29, 2008. On June 30, 2008, the fair value of the aforementioned stock options was determined to be $48,000 ($0.24 per share calculated using the following Black-Scholes input variables: stock price - $0.30; exercise price - $1.65; expected life - 4.59 years; expected volatility - 154.5%; expected dividend yield - 0%; risk-free interest rate - 3.28%, which resulted in a charge (credit) to operations of $(425) and $6,664 during the three months and six months ended June 30, 2008, respectively.

On September 12, 2007, the Company entered into two consulting agreements for financial and scientific services. Compensation related to these agreements is primarily in the form of stock options (see Note 6).

On September 20, 2007, the Company entered into a one-year consulting agreement (the "Mirador Agreement") with Mirador Consulting, Inc. ("Mirador"), pursuant to which Mirador was to provide the Company with various financial services. Pursuant to the Mirador Agreement, Lixte agreed to pay Mirador $5,000 per month and also agreed to sell Mirador 250,000 shares of the Company's restricted common stock for $250 ($0.001 per share). The fair value of this transaction was determined to be in excess of the purchase price by $262,250 ($1.049 per share), reflecting the difference between the $0.001 purchase price and the $1.05 price per share as quoted on the OTC Bulletin Board on the transaction date, and was charged to operations as stock-based compensation during the year ended December 31, 2007, since the shares were fully vested and non-forfeitable on the date of issuance. The Company made payments under the Mirador Agreement aggregating $10,000 during 2007. The Mirador Agreement was amended in February 2008 such that Mirador forgave all accrued but unpaid monthly fees through February 29, 2008 and the Company agreed to pay Mirador a fee of $2,000 per month for the remaining six months of the Mirador Agreement.

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

Overview

On June 30, 2006, Lixte Biotechnology, Inc., a privately-held Delaware corporation ("Lixte"), completed a reverse merger transaction with SRKP 7, Inc. ("SRKP"), a non-trading public "shell" company, whereby Lixte became a wholly-owned subsidiary of SRKP. For financial reporting purposes, Lixte was considered the accounting acquirer in the merger and the merger was accounted for as a reverse merger. Accordingly, the historical financial statements presented herein are those of Lixte and do not include the historical financial results of SRKP. The stockholders' equity section of SRKP has been retroactively restated for all periods presented to reflect the accounting effect of the reverse merger transaction. All costs associated with the reverse merger transaction were expensed as incurred.

Lixte was incorporated in Delaware on August 9, 2005 to capitalize on opportunities to develop low cost, specific and sensitive tests for the early detection of cancers to better estimate prognosis, to monitor treatment response, and to reveal targets for development of more effective treatments.

Unless the context indicates otherwise, SRKP and Lixte are hereinafter referred to as the "Company". On December 7, 2006, the Company amended its Certificate of Incorporation to change its name from SRKP 7, Inc. to Lixte Biotechnology Holdings, Inc. ("Holdings").

The Company's financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company is in the development stage and has not generated any revenues from operations to date. The Company's ability to continue as a going concern is dependent upon its ability to develop additional sources of capital and to ultimately achieve profitable operations. The financial statements do not include any adjustments that might result from the outcome of these uncertainties (see "Liquidity and Capital Resources - June 30, 2008 - Going Concern").

Recent Developments

On April 23, 2008, the Company announced that Dr. Jie Lu and Dr. Zhengping Zhuang of the Surgical Neurology Branch, National Institute of Neurological Disorders and Stroke, National Institutes of Health and the Company, as a collaborator in such study, reported at the Annual Meeting of the American Association of Cancer Research that the Company's lead compound, LB-1, one of a patent-pending proprietary series of agents, has anti-cancer activity against human glioblastoma multiforme cells in a mouse model of cancer. Glioblastoma multiforme is the most common and aggressive brain tumor of adults. The Company and the Surgical Neurology Branch of the National Institute of Neurological Disorders and Stroke are continuing to develop LB-1 and analogs of the compound for the treatment of human brain cancers.

On August 8, 2008, the Company announced that lead compounds from each of two different types of drugs being developed by it as a potential treatment for specific types of brain cancers have activity against human pancreatic cancers in a mouse model. The Company had previously reported that lead compounds from each of two different classes of pharmacologic agents have significant inhibitory activity against several types of human cancers in the test tube and against brain cancers in animal models. The Company has now found that two different lead compounds also have statistically significant activity against human pancreatic cancer cells growing in mice. These are early studies and there is no evidence that these drugs are able to eliminate pancreatic cancers, but rather slow their growth.

On August 1, 2008, five patent applications were filed with regard to the Company's various ongoing research activities.

Adoption of New Accounting Policies

In September 2006, the FASB issued Statement of Financial Accounting Standards No. 157, "Fair Value Measurements" ("SFAS No. 157"), which establishes a formal framework for measuring fair value under Generally Accepted Accounting Principles ("GAAP"). SFAS No. 157 defines and codifies the many definitions of fair value included among various other authoritative literature, clarifies and, in some instances, expands on the guidance for implementing fair value measurements, and increases the level of disclosure required for fair value measurements. Although SFAS No. 157 applies to and amends the provisions of existing FASB and American Institute of Certified Public Accountants ("AICPA") pronouncements, it does not, of itself, require any new fair value measurements, nor does it establish valuation standards. SFAS No. 157 applies to all other accounting pronouncements requiring or permitting fair value measurements, except for: SFAS No. 123R, share-based payment and related pronouncements, the practicability exceptions to fair value determinations allowed by various other authoritative pronouncements, and AICPA Statements of Position 97-2 and 98-9 that deal with software revenue recognition. SFAS No. 157 was effective January 1, 2008, and did not have any impact on the Company's financial statement presentation or disclosures in 2008.

In February 2007, the FASB issued Statement of Financial Accounting Standards No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS No. 159"), which provides companies with an option to report selected financial assets and liabilities at fair value. SFAS No. 159's objective is to reduce both complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. Generally accepted accounting principles have required different measurement attributes for different assets and liabilities that can create artificial volatility in earnings. SFAS No. 159 helps to mitigate this type of accounting-induced volatility by enabling companies to report related assets and liabilities at fair value, which would likely reduce the need for companies to comply with detailed rules for hedge accounting. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 requires companies to provide additional information that will help investors and other users of financial statements to more easily understand the effect of the company's choice to use fair value on its earnings. SFAS No. 159 also requires companies to display the fair value of those assets and liabilities for which the company has chosen to use fair value on the face of the balance sheet. SFAS No. 159 does not eliminate disclosure requirements included in other accounting standards, including requirements for disclosures about fair value measurements included in SFAS No. 157 and SFAS No. 107. SFAS No. 159 was effective January 1, 2008, and did not have any impact on the Company's financial statement presentation or disclosures in 2008.

Recent Accounting Pronouncements

In December 2007, the FASB issued SFAS No. 141(R), "Business Combinations" ("SFAS No. 141(R)"), which requires an acquirer to recognize in its financial statements as of the acquisition date (i) the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree, measured at their fair values on the acquisition date, and (ii) goodwill as the excess of the consideration transferred plus the fair value of any noncontrolling interest in the acquiree at the acquisition date over the fair values of the identifiable net assets acquired. Acquisition-related costs, which are the costs an acquirer incurs to effect a business combination, will be accounted for as expenses in the periods in which the costs are incurred and the services are received, except that costs to issue debt or equity securities will be recognized in accordance with other applicable GAAP. SFAS No. 141(R) makes significant amendments to other Statements and other authoritative guidance to provide additional guidance or to conform the guidance in that literature to that provided in SFAS No. 141(R). SFAS No. 141(R) also provides guidance as to what information is to be disclosed to enable users of financial statements to evaluate the nature and financial effects of a business combination. SFAS No. 141(R) is effective for financial statements issued for fiscal years beginning on or after December 15, 2008. Early adoption is prohibited. The adoption of SFAS No. 141(R) will affect how the Company accounts for a business combination concluded after December 31, 2008.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements — an amendment of ARB No. 51" ("SFAS No. 160"), which revises the relevance, comparability, and transparency of the financial information that a reporting entity provides in its consolidated financial statements by establishing accounting and reporting standards that require (i) the ownership interests in subsidiaries held by parties other than the parent be clearly identified, labeled, and presented in the consolidated statement of financial position within equity, but separate from the parent's equity, (ii) the amount of consolidated net income attributable to the parent and to the noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income, (iii) changes in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary be accounted for consistently as equity transactions, (iv) when a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary be initially measured at fair value, with the gain or loss on the deconsolidation of the subsidiary being measured using the fair value of any noncontrolling equity investment rather than the carrying amount of that retained investment, and (v) entities provide sufficient disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS No. 160 amends FASB No. 128 to provide that the calculation of earnings per share amounts in the consolidated financial statements will continue to be based on the amounts attributable to the parent. SFAS No. 160 is effective for financial statements issued for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. Early adoption is prohibited. SFAS No. 160 shall be applied prospectively as of the beginning of the fiscal year in which it is initially applied, except for the presentation and disclosure requirements, which shall be applied retrospectively for all periods presented. The Company has not yet determined the effect on its consolidated financial statements, if any, upon adoption of SFAS No. 160.

In March 2008, the FASB issued SFAS No. 161, “Disclosures about Derivative Instruments and Hedging Activities - an amendment of FASB Statement No. 133” (“SFAS No. 161”). SFAS No. 161 amends and expands the disclosure requirements of SFAS No. 133, “Accounting for Derivative Instruments and Hedging Activities” (“SFAS No. 133”). The objective of SFAS No. 161 is to provide users of financial statements with an enhanced understanding of how and why an entity uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS No. 133 and its related interpretations, and how derivative instruments and related hedged items affect an entity’s financial position, financial performance, and cash flows. SFAS No. 161 requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of and gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. SFAS No. 161 applies to all derivative financial instruments, including bifurcated derivative instruments (and nonderivative instruments that are designed and qualify as hedging instruments pursuant to paragraphs 37 and 42 of SFAS No. 133) and related hedged items accounted for under SFAS No. 133 and its related interpretations. SFAS No. 161 also amends certain provisions of SFAS No. 131. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. SFAS No. 161 encourages, but does not require, comparative disclosures for earlier periods at initial adoption. The Company has not yet determined the effect on its consolidated financial statements, if any, upon adoption of SFAS No. 161.

Critical Accounting Policies and Estimates

The Company prepared its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires the use of 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 amount of revenues and expenses during the reporting period. Management periodically evaluates the estimates and judgments made. Management bases its estimates and judgments on historical experience and on various factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates as a result of different assumptions or conditions.

The following critical accounting policies affect the more significant judgments and estimates used in the preparation of the Company’s consolidated financial statements.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses consist primarily of fees paid to consultants and outside service providers, patent fees and costs, and other expenses relating to the acquisition, design, development and testing of the Company's treatments and product candidates.

Amounts due, pursuant to contractual commitments, on research and development contracts with third parties are recorded as a liability, with the related amount of such contracts recorded as advances on research and development contract services on the Company’s balance sheet. Such advances on research and development contract services are expensed over their life on the straight-line basis, unless the achievement of milestones, the completion of contracted work, or other information indicates that a different expensing schedule is more appropriate. The Company accounts for its research and development contracts in accordance with EITF 07-3.

Patent Costs

Due to the significant uncertainty associated with the successful development of one or more commercially viable products based on the Company's research efforts and any related patent applications, all patent costs, including patent-related legal fees, are expensed as incurred.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted SFAS No. 123 (revised 2004), "Share-Based Payment" ("SFAS No. 123R"), a revision to SFAS No. 123, "Accounting for Stock-Based Compensation". SFAS No. 123R requires that the Company measure the cost of employee services received in exchange for equity awards based on the grant date fair value of the awards, with the cost to be recognized as compensation expense in the Company's financial statements over the vesting period of the awards.

The Company accounts for stock option and warrant grants issued and vesting to non-employees in accordance with EITF No. 96-18, "Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services", and EITF 00-18, "Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other Than Employees", whereas the value of the stock compensation is based upon the measurement date as determined at either (a) the date at which a performance commitment is reached or (b) at the date at which the necessary performance to earn the equity instruments is complete.

Income Taxes

The Company accounts for income taxes pursuant to Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" ("SFAS No. 109"), which establishes financial accounting and reporting standards for the effects of income taxes that result from an enterprise's activities during the current and preceding years. SFAS No. 109 requires an asset and liability approach for financial accounting and reporting for income taxes. Accordingly, the Company recognizes deferred tax assets and liabilities for the expected impact of differences between the financial statements and the tax basis of assets and liabilities.

The Company records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. In the event the Company was to determine that it would be able to realize its deferred tax assets in the future in excess of its recorded amount, an adjustment to the deferred tax assets would be credited to operations in the period such determination was made. Likewise, should the Company determine that it would not be able to realize all or part of its deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to operations in the period such determination was made.

Plan of Operation

General Overview of Plans

The Company is concentrating on discovering biomarkers for common cancers for which better diagnostic and therapeutic measures are needed. For each of these diseases, a biomarker that would enable identification of the presence of cancer at a stage curable by surgery could possibly save thousands of lives annually. In addition, biomarkers specific to these diseases may also provide clues as to processes (biological pathways) that characterize specific cancer types and that may be vulnerable to drug treatment targeted to the activity of the biomarker.

The Company is currently focusing on developing new treatments for the most common and most aggressive type of brain cancer of adults, glioblastoma multiforme ("GBM"). The Company has expanded the scope of its anti-cancer investigational activities to include the most common brain tumor of children, medulloblastoma, and also to several other types of more common cancers. This expansion of activity is based on documentation that each of two distinct types of drugs being developed by the Company inhibits the growth of cell lines of breast, colon, lung, prostate, pancreas, ovary, stomach and liver cancer, as well as the major types of leukemias. Activity of lead compounds of both types of drugs was recently demonstrated against human pancreatic cancer cells in a mouse model. Because there is a great need for any kind of effective treatment for pancreatic cancer, this cancer will be studied concomitantly with the primary target of the Company's research program focused on brain cancers.

The research on brain tumors is proceeding in collaboration with the National Institute of Neurological Disorders and Stroke ("NINDS") of the National Institutes of Health ("NIH") under a Cooperative Research and Development Agreement ("CRADA") entered into on March 22, 2006, as amended. The research at NINDS continues to be led by Dr. Zhengping Zhuang, an internationally recognized investigator in the molecular pathology of cancer. Dr. Zhuang is aided by two senior research technicians supported by the Company as part of the CRADA. The goal of the CRADA is to develop more effective drugs for the treatment of GBM through the processes required to gain Food and Drug Administration ("FDA") approval for clinical trials. The CRADA was further amended on June 17, 2008. Accordingly, the Company is committed to provide funding of $600,000 under the CRADA over a period of 42 months, of which $400,000 had been paid as of June 30, 2008 and the remaining $200,000 is to be paid in four quarterly installments of $50,000 commencing on October 1, 2008. The CRADA is presently scheduled to end on September 30, 2009.

The Company developed five patent applications that were filed on August 1, 2008. Two of these patent filings deal with applications filed earlier jointly with NIH for work done under the CRADA: (1) a filing entering the regional stage of a PCT application involving the use of certain compounds to treat human tumors expressing a biomarker for brain and other human cancers, and (2) an application for the treatment of the pediatric tumors, medulloblastoma (the most common brain tumor in children) and neuroblastoma (a tumor arising from neural cells outside the brain that is the most common cancer of children). The three new patent applications include (1) a joint application with NIH identifying a new biomarker for many common human cancers that when targeted by compounds developed by the Company result in inhibition of growth and death of cancer cells; (2) an application by the Company regarding the structure, synthesis and use of a group of new homologs of its LB-1 compounds; and (3) an application by the Company for the use of certain homologs of its drugs as neuroprotective agents with potential application to common neurodegenerative conditions such as Alzheimer's and Parkinson's diseases.

The Company continues to evaluate compounds for activity against several types of fungi that cause serious infections, particularly in immuno-compromised individuals, such as those with HIV-AIDS, and those having bone marrow transplantations. The Company is also exploring indications that specific analogy of one class of drugs has activity against strains of fungi that cause the most common fungal infections of the skin and nails. Discussions are in progress with experts in fungal infections regarding the most reliable methods of assessing the potential of new agents for the management of common fungal diseases.

The Company expects that its products will derive directly from the intellectual property from its research activities. The development of lead compounds with different mechanisms of action that have now been shown to have activity against brain tumors and several other much more common human cancers, as well as serious fungal infections, originated from its original focus on a biochemical defect in GBM. The Company will continue to use discovery and/or recognition of molecular variants characteristic of specific human cancers as a guide to drug discovery and potentially new diagnostic tests. Examples of the productivity of this approach to discovery of new therapeutics are (1) the recent patent application filing for a new bio-marker of several common cancers that when targeted by certain of the Company's drugs results in inhibition of growth and death of cancer cells displaying the marker, and (2) the filing of a patent on certain homologs of one group of compounds as potentially useful for the treatment of neurodegenerative diseases.

The Company faces several potential challenges to its goal of commercial success. These include raising sufficient capital to fund its business plan, achieving commercially applicable results from its research programs, competition from more established, well-funded companies with competitive technologies, and future competition from companies developing new competitive technologies. Because of these challenges, there is substantial uncertainty as to the Company's ability to fund its operations and continue as a going concern (see "Liquidity and Capital Resources - June 30, 2008 - Going Concern" below).

Plans for the Remainder of 2008

The Company's primary financial goal is to raise funds to cover ongoing operations and development of its lead compounds for the treatment of brain cancers and to also include another devastating human cancer, pancreatic cancer, in its research efforts. The Company's objective is to have sufficient resources available to explore, most likely in partnership with a pharmaceutical company, new data indicating potentially significant activity of some derivatives of its lead anti-cancer drugs for the management of fungal diseases and, possibly, use in neurodegenerative diseases where pharmacologic neuroprotection may be therapeutically beneficial.

The Company has three major therapeutic goals, as follows:

The first goal is to continue to evaluate lead compounds of the LB-1 and LB-2 series for effectiveness in a rat model of brain cancer in which drugs are administered systemically or by direct infusion into the diseased area of the brain. The latter method of administration is called “convection administration”. In addition to its current lead compounds, new analogs designed to have enhanced penetration of the brain and combinations of current drugs with activity in the rat model will be evaluated alone and in combination with other known active anti-cancer drugs that have complementary activity to Company drugs.

The second goal is to evaluate the recently documented anti-cancer activity of lead compounds from the LB-1 and LB-2 series against a series of common human cancers. These studies are being done independently of NIH and are therefore not part of the CRADA.

The Company will seek the interest of NIH in supporting development of one or two lead compounds from the LB-1 series through pre-clinical studies necessary to receive FDA approval to take the drugs into Phase I clinical trials. The NIH offers opportunities for academic laboratories, including laboratories at NIH with a for-profit partner, to seek NIH support and expertise in expediting development of particularly promising new compounds as anti-cancer drugs. The Company will also explore the potential interest of major pharmaceutical companies in collaborating in the development of one or more of its lead compounds through Phase I clinical trials of their anti-cancer activity.

The third goal is to assess the interest of pharmaceutical companies in collaborating with the Company or in licensing from the Company rights to some of its lead compounds as anti-fungal drugs. Certain molecular pathways essential for growth by cancer cells are also used by microorganisms, including fungi. Anti-fungal therapy is an additional potentially large market for the Company’s compounds, but one in which outside expertise will be necessary to plan efficient assessment and development of their potential value.

Existing resources will not permit evaluation of activity of the Company’s lead drugs against many of the common cancers against which the Company’s compounds may have anti-cancer activity. Current resources also will not be sufficient to carry out pre-clinical studies necessary to apply to the FDA for approval of drug evaluations in Phase I trials. Accordingly, the Company is seeking to raise approximately $2,000,000 from the issuance of new debt and/or equity during the latter part of 2008 in order to fund its planned operations in 2009. However, there can be no assurances that the Company will be able to secure such additional financing, or obtain favorable terms on such financing if it is available.

The Company faces several potential challenges in its efforts to achieve commercial success, including raising sufficient capital to fund its business plan, achieving commercially applicable results of its research program, competition from more established, well-funded companies with competitive technologies, and future competition from companies that are developing competitive technologies, some of whom are larger companies with greater capital resources than the Company. There is substantial uncertainty as to the Company’s ability to fund its operations and continue as a going concern (see “Liquidity and Capital Resources - June 30, 2008 - Going Concern”). Should the Company be unable to raise the required capital on a timely basis, the Company’s business plans would be materially adversely affected.

The Company had initially planned to begin its own analyses of tumor types other than GBM for new biomarkers by late 2008. However, in order to do this, the Company would need to establish and operate a laboratory. The Company had estimated that the creation and operation of such a laboratory for two years would cost approximately $2,000,000. The Company has revised its research plans as described above, as a result of which it has deferred such plans to open and staff such a laboratory indefinitely.

Plans for 2009

A goal of the Company is to continue the synthesis of new compounds that target other components of molecular pathways already identified by the Company to be vulnerable to attack by small molecule drugs, and to explore the vulnerability of additional potential new targets revealed through the molecular characterization of the effects of the Company's lead compounds.

The Company expects to participate in clinical trials of new therapies in partnership with an organization experienced in such undertakings. The partnering organization may be either a clinical branch of NIH or a pharmaceutical company with expertise in the conduct of clinical trials. The Company's present position is to take one or more of its new therapies for the treatment of glioblastoma multiforme through pre-clinical evaluation as part of the CRADA with the NINDS of the NIH. After completing pre-clinical evaluation, the Company will consider partnering with the NIH to conduct a Phase I trial or jointly with the NIH to seek a third party, most probably a large pharmaceutical company, to carry the new therapies into Phase I trials. After completion of Phase I trials, the Company, potentially in partnership with the NIH, would collaborate with the third party to carry new therapies found to be safe for administration to humans in the Phase I trials into Phase II trials.

Phase II trials test the safety and effectiveness, as well as the best estimate of the proper dose of the new therapies, in a group of patients with the same type of cancer at the same stage. For the Company's initial studies, the focus will be brain tumors. The duration of Phase II trials may run from 6 to 24 months. New regimens showing beneficial activity in Phase II trials may then be considered for evaluation in Phase III trials. Phase III trials for the evaluation of new cancer treatments are comparative trials in which the therapeutic benefit of a new regimen is compared to the therapeutic benefit of the best standard regimen in a randomized study.

Whether the Company will participate in or be in a position to participate in any clinical trials will depend upon partnerships and specific licensing agreements. However, in all cases of clinical trial participation, the Company will be subject to FDA regulation. These regulations are specific and form the basis for assessing the potential clinical benefit of new therapeutic regimens while safeguarding the health of patients participating in investigational studies. Even after a drug receives approval from the FDA for sale as a new treatment for a specific disease indication, the sponsors of the drug are subject to reporting potentially adverse effects of the new regimen to the FDA.

Given the progress in identifying two lead compounds with activity in animal models of GBM, the Company is devoting its resources to bring the agents to a point at which an Investigational New Drug ("IND") application can be submitted to the FDA for a Phase I clinical trial. One lead compound (LB-1) is the most advanced in the process and the Company plans to be ready for IND submission by early 2009. The other lead compound (LB-2.5), which inhibits cancer cells by a mechanism distinct from that of LB-1, is anticipated to complete its evaluation by the end of 2009.

On January 29, 2008, the Chem-Master Agreement was amended to extend its term to February 15, 2014, pursuant to which Chem-Master was engaged to synthesize certain compounds, and to expressly provide for the expansion of the Company's drug development program, through consultation with the medicinal chemists at Chem-Master. The Company is exploring the synthesis of additional novel anti-cancer drugs. Several targets for anti-cancer drug development are under consideration. When the next group of compounds is developed, it will be designated as "LB-3", as distinguished from the first two classes of compounds that were designated as "LB-1" and "LB-2". This process is currently in the planning stage and no compounds have been made as yet.

Results of Operations

The Company is a development stage company and had not commenced revenue-generating operations at June 30, 2008.

Three Months Ended June 30, 2008 and 2007

General and Administrative Expenses. For the three months ended June 30, 2008, general and administrative expenses were $(50,947), which consisted of a credit to stock-based compensation of $100,355, and charges to consulting and professional fees of $34,060, insurance expense of $5,955, travel costs of $2,235, and other operating costs of $7,158. The Company recorded a credit with respect to stock-based general and administrative expenses during the three months ended June 30, 2008 as a result of a decrease in the fair value of unvested stock options resulting from a decline in the market price of the Company's common stock during the period.

For the three months ended June 30, 2007, general and administrative expenses were $89,241, which consisted of stock-based compensation of $8,791, consulting and professional fees of $62,304, insurance expense of $7,188, filing fees of $5,101, and other operating costs of $5,857.

Depreciation. For the three months ended June 30, 2008 and 2007, depreciation expense was $159 and $148, respectively.

Research and Development Costs. For the three months ended June 30, 2008, research and development costs were $61,782, which consisted of a credit for the vested portion of the fair value of stock options issued to a consultant and a vendor of $25,564, and charges for patent costs of $34,224, laboratory supplies of $15,500, and other costs of $37,622. The Company recorded a credit with respect to stock-based research and development costs during the three months ended June 30, 2008 as a result of a decrease in the fair value of unvested stock options resulting from a decline in the market price of the Company's common stock during the period.

For the three months ended June 30, 2007, research and development costs were $89,917, which consisted of patent costs of $6,592, laboratory supplies of $8,400, and other costs of $74,925.

Interest Income. For the three months ended June 30, 2008, interest income was $733, as compared to interest income of $3,584 for the three months ended June 30, 2007.

Net Loss. For the three months ended June 30, 2008, the Company incurred a net loss of $10,261, as compared to a net loss of $175,722 for the three months ended June 30, 2007.

Six Months Ended June 30, 2008 and 2007

General and Administrative Expenses. For the six months ended June 30, 2008, general and administrative expenses were $217,869, which consisted of stock-based compensation of $64,794, consulting and professional fees of $105,785, insurance expense of $11,911, travel costs of $20,223, and other operating costs of $15,156.

For the six months ended June 30, 2007, general and administrative expenses were $199,244, which consisted of stock-based compensation of $17,708, consulting and professional fees of $149,264, insurance expense of $14,375, filing fees of $8,295, and other operating costs of $9,602.

Depreciation. For the six months ended June 30, 2008 and 2007, depreciation expense was $318 and $296, respectively.

Research and Development Costs. For the six months ended June 30, 2008, research and development costs were $298,233, which consisted of the fair value of restricted common stock issued to a vendor of $75,000, the vested portion of the fair value of stock options issued to a consultant and a vendor of $8,369, patent costs of $74,224, laboratory supplies of $24,250, and other costs of $116,390.

For the six months ended June 30, 2007, research and development costs were $237,592, which consisted of the vested portion of the fair value of stock options issued to a vendor of $31,000, patent costs of $46,592, laboratory supplies of $10,150, and other costs of $149,850.

Interest Income. For the six months ended June 30, 2008, interest income was $2,838, as compared to interest income of $8,307 for the six months ended June 30, 2007.

Net Loss. For the six months ended June 30, 2008, the Company incurred a net loss of $513,582, as compared to a net loss of $428,825 for the six months ended June 30, 2007.

Liquidity and Capital Resources - June 30, 2008

Going Concern

The Company's financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company is in the development stage and has not generated any revenues from operations to date.

The Company's ability to continue as a going concern is dependent upon its ability to develop additional sources of capital and to ultimately achieve profitable operations. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

The Company is currently devoting its efforts to research and development related to discovering specific cancer biomarkers for early detection, estimation of prognosis, monitoring response to treatment, development of targeted therapeutic agents and new treatments based on an understanding of the molecular activity of these biomarkers for common cancers. The Company is seeking to exploit this opportunity through execution of its business plan and the development of related patents.

At June 30, 2008, the Company had not yet commenced any revenue-generating operations. All activity through June 30, 2008 is related to the Company's formation, capital raising efforts and initial research and development activities. As such, the Company has yet to generate any cash flows from operations, and is essentially dependent on debt and equity funding from both related and unrelated parties to finance its operations. Prior to June 30, 2006, the Company's cash requirements were funded by advances from Lixte's founder. On June 30, 2006, the Company completed an initial closing of a private placement, selling 1,973,869 shares of common stock at a price of $0.333 per share and receiving net proceeds of $522,939. On July 27, 2006, the Company completed a second closing of the private placement, selling 1,581,351 shares of common stock at a price of $0.333 per share and receiving net proceeds of $446,433. On December 12, 2007, the Company completed a second private placement, selling 999,995 shares of common stock at a price of $0.65 per share and receiving net proceeds of $531,320.

Because the Company is currently engaged in research at an early stage, it will likely take a significant amount of time to develop any product or intellectual property capable of generating revenues. As such, the Company's business is unlikely to generate any revenue in the next several years and may never do so. Even if the Company is able to generate revenues in the future through licensing its technologies or through product sales, there can be no assurance that such revenues will exceed its expenses.

The Company's current resources are marginally adequate to fund the Company's basic operating budget through December 31, 2008, but are not sufficient to fund expanded research activities with respect to the Company's promising intellectual property during the remainder of 2008 and beyond. The Company does not have sufficient resources to fully develop and commercialize any products that may arise from its research. Accordingly, the Company will need to raise additional funds in order to satisfy its future working capital requirements.

Based on the Company's revised and updated research program, the Company currently estimates that it will require additional funds of approximately $2,000,000 for the year ending December 31, 2009 in order to fund operations and continuing drug discovery and to bring one drug through the pre-clinical evaluation process needed for submission of an IND. The Company is attempting to arrange such funding during the next few months, although there can be no assurances that the Company will be successful in this regard. The amount and timing of future cash requirements will depend on the market's evaluation of the Company's technology and products, and the resources that the Company devotes to developing and supporting its activities. The Company anticipates funding these cash requirements from a combination of debt or equity financings and the sale, licensing or joint venturing of its intellectual properties.

Current market conditions present uncertainty as to the Company's ability to secure additional funds, as well as its ability to reach profitability. There can be no assurances that the Company will be able to secure additional financing, or obtain favorable terms on such financing if it is available, or as to its ability to achieve positive cash flow from operations. Continued negative cash flows and lack of liquidity create significant uncertainty about the Company's ability to fully implement its operating plan, as a result of which the Company may have to reduce the scope of its planned operations. If cash resources are insufficient to satisfy the Company's liquidity requirements, the Company would be required to scale back or discontinue its technology and product development programs, or obtain funds, if available, through strategic alliances that may require the Company to relinquish rights to certain of its technologies products, or to discontinue its operations entirely.

Operating Activities. For the six months ended June 30, 2008, operating activities utilized cash of $306,135, as compared to utilizing cash of $484,697 for the six months ended June 30, 2007, primarily as a result of a decrease in advances on research and development contract services in 2008, as compared to an increase in advances on research and development contract services in 2007 related to an installment payment made under the CRADA in 2007.

The Company had working capital of $11,082 at June 30, 2008. At December 31, 2007, the Company had working capital of $376,184, primarily as a result of the sale of the Company's common stock pursuant to a second private placement in December 2007 that generated net proceeds of $531,320.

Investing Activities. There were no investing activities during the six months ended June 30, 2008. For the six months ended June 30, 2007, investing activities utilized cash of $272 for the purchase of office equipment.

Financing Activities. There were no financing activities during the six months ended June 30, 2008 and 2007.

Principal Commitments

At June 30, 2008, the Company did not have any material commitments for capital expenditures. The Company's principal commitments at June 30, 2008 consisted of the liquidated damages payable under the registration rights agreement of $74,000 and the contractual obligations as summarized below.

Effective March 22, 2006, Lixte entered into a CRADA, as amended, with the NINDS of the NIH. The CRADA is for a term of 42 months from the effective date and may be unilaterally terminated by either party by providing written notice within sixty days. The CRADA provides for the collaboration between the parties in the identification and evaluation of agents that target the Nuclear Receptor CoRepressor (N-CoR) pathway for glioma cell differentiation. The CRADA also provided that NINDS and Lixte will conduct research to determine if expression of N-CoR correlates with prognosis in glioma patients. Pursuant to the CRADA, Lixte agreed to provide funds under the CRADA in the amount of $200,000 per year to fund two technical assistants for the technical, statistical and administrative support for the research activities, as well as to pay for supplies and travel expenses. The first $200,000 was due within 180 days of the effective date and was paid in full on July 6, 2006. The second $200,000 was paid in full on June 29, 2007. In June 2008, the CRADA was extended to September 30, 2009 with no additional funding required for the period between July 1, 2008 and September 30, 2008. However, for the period from October 1, 2008 through September 30, 2009, the Company has agreed to provide additional funding under the CRADA of $200,000, to be paid in four quarterly installments of $50,000 commencing on October 1, 2008.

On January 5, 2007, Lixte entered into a Services Agreement with The Free State of Bavaria (Germany) represented by the University of Regensburg (the "University") pursuant to which Lixte retained the University to provide to it certain samples of primary cancer tissue and related biological fluids to be obtained from patients afflicted with specified types of cancer. The University also agreed to provide certain information relating to such patients. Lixte agreed to pay the University 72,000 Euros in two equal installments. The first installment of 36,000 Euros ($48,902) was paid on March 7, 2007. On January 12, 2008, Lixte terminated the Services Agreement in accordance with its terms, as a result of which payment of the second installment of 36,000 Euros was cancelled. The University agreed to deliver 50% of the aforementioned samples under the terminated Services Agreement.

On February 5, 2007, Lixte entered into a two-year agreement (the "Chem-Master Agreement") with Chem-Master International, Inc. ("Chem-Master"), a company co-owned by Francis Johnson, a consultant of the Company, pursuant to which Lixte engaged Chem-Master to synthesize a compound designated as "LB-1", and any other compound synthesized by Chem-Master pursuant to Lixte's request, which have potential use in treating a disease, including, without limitation, cancers such as glioblastomas. Pursuant to the Chem-Master Agreement, Lixte agreed to reimburse Chem-Master for the cost of materials, labor, and expenses for other items used in the synthesis process, and also agreed to grant Chem-Master a five-year option to purchase 100,000 shares of the Company's common stock at an exercise price of $0.333 per share. Lixte has the right to terminate the Chem-Master Agreement at any time during its term upon sixty days prior written notice. On February 5, 2009, provided that the Chem-Master Agreement has not been terminated prior to such date, the Company has agreed to grant Chem-Master a second five-year option to purchase an additional 100,000 shares of the Company's common stock at an exercise price of $0.333 per share.

On January 29, 2008, the Chem-Master Agreement was amended to extend its term to February 15, 2014, and to expressly provide for the design and synthesis of a new series of compounds designated as "LB-3". Pursuant to the amendment, Lixte issued 100,000 shares of its restricted common stock, valued at $75,000, and granted an option to Chem-Master to purchase 200,000 shares of the Company's common stock. The option is exercisable for a period of two years from vesting date at $1.65 per share, with one-half (100,000 shares) vesting on August 1, 2009, and one-half (100,000 shares) vesting on February 1, 2011.

On September 20, 2007, the Company entered into a one-year consulting agreement (the "Mirador Agreement") with Mirador Consulting, Inc. ("Mirador"), pursuant to which Mirador was to provide the Company with various financial services. Pursuant to the Mirador Agreement, Lixte agreed to pay Mirador $5,000 per month and also agreed to sell Mirador 250,000 shares of the Company's restricted common stock for $250 ($0.001 per share). The Company made payments under the Mirador Agreement aggregating $10,000 during 2007. The Mirador Agreement was amended in February 2008 such that Mirador forgave all accrued but unpaid monthly fees through February 29, 2008 and the Company agreed to pay Mirador a fee of $2,000 per month for the remaining six months of the Mirador Agreement.

Off-Balance Sheet Arrangements

At June 30, 2008, the Company did not have any transactions, obligations or relationships that could be considered off-balance sheet arrangements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 4T. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

Disclosure Controls and procedures are designed to ensure that information required to be disclosed in the reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports filed under the Exchange Act is accumulated and communicated to management.

As of June 30, 2008, the Company's Chief Executive Officer and Chief Financial Officer (who is the same individual) evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon and as of the date of that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective to ensure that the information required to be disclosed in the reports the Company files and submits under the Exchange Act is recorded, processed, summarized, and reported as and when required.

(b) Changes in Internal Controls Over Financial Reporting

There were no changes in the Company's internal control over financial reporting or in other factors that materially affect, or are reasonably likely to materially affect, those controls subsequent to the date of the Company's most recent evaluation.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The Company is currently not a party to any pending or threatened legal proceedings.

Item 1A. Risk Factors

Not applicable.

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

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

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

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

A list of exhibits required to be filed as part of this report is set forth in the Index to Exhibits, which immediately precedes such exhibits, and is incorporated herein by reference.

SIGNATURES

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

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

(Registrant)

Date: August 12, 2008

By: /s/ JOHN S. KOVACH

John S. Kovach

Chief Executive Officer and Chief Financial Officer

(Principal financial and accounting officer)

INDEX TO EXHIBITS

Exhibit Number	Description of Document
10.1	Services Agreement between Lixte Biotechnology, Inc. and Freestate of Bavaria represented by University of Regensburg dated January 5, 2007, previously filed as an exhibit to the Company's Current Report on Form 8-K filed on January 11, 2007, and incorporated herein by reference.
10.2	Agreement between Lixte Biotechnology Holdings, Inc. and Chem-Master International, Inc. dated February 5, 2007, previously filed as an exhibit to the Company's Current Report on Form 8-K filed on February 9, 2007, and incorporated herein by reference.
10.3	2007 Stock Compensation Plan adopted by the Company's Board of Directors on June 20, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended June 30, 2007, and incorporated herein by reference.
10.4	Stock Option Agreement between Lixte Biotechnology Holdings, Inc. and Stephen K. Carter dated September 12, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended September 30, 2007, and incorporated herein by reference.
10.5	Stock Option Agreement between Lixte Biotechnology Holdings, Inc. and Francis Johnson dated September 12, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended September 30, 2007, and incorporated herein by reference.
10.6	Stock Option Agreement between Lixte Biotechnology Holdings, Inc. and Gil Schwartzberg dated September 12, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended September 30, 2007, and incorporated herein by reference.
10.7	Consulting Agreement between Lixte Biotechnology Holdings, Inc. and Gil Schwartzberg dated September 12, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended September 30, 2007, and incorporated herein by reference.
10.8	Consulting Agreement between Lixte Biotechnology Holdings, Inc. and Mirador Consulting, Inc. dated September 20, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended September 30, 2007, and incorporated herein by reference.
10.9	Consulting Agreement between Lixte Biotechnology Holdings, Inc. and Francis Johnson dated September 12, 2007, previously filed as an exhibit to the Company's Quarterly Report on Form 10-QSB for the Quarterly Period Ended September 30, 2007, and incorporated herein by reference.
10.10	Amendment to Agreement between Lixte Biotechnology Holdings, Inc. and Chem-Master International, Inc. dated January 29, 2008, previously filed as an exhibit to the Company's Quarterly Report on Form 10-Q for the Quarterly Period Ended March 31, 2008, and incorporated herein by reference.
10.11	Amendment No. 5 to Cooperative Research and Development Agreement between The National Institute of Neurological Disorders and Stroke and Lixte Biotechnology, Inc. dated June 17, 2008. (1)
31.1	Certifications under Section 302 of the Sarbanes-Oxley Act of 2002. (1)
32.1	Certifications under Section 906 of the Sarbanes-Oxley Act of 2002. (1)

(1) Filed herewith.

AMENDMENT 5

Current CRADA TERMS:

CRADA # 02165
Effective Date: 3/22/2006
Executed Date: 3/22/2006
Original Term: 24 months
(Extended to 27 months in Amendment 4)
New Term: 42 months

Current Expiration Date: 6/30/008
Original Expiration Date: 3/22/2008
New Expiration date: 9/30/2009

NIH PIs: Dr. Russell Lonser

Institute: NINDS

Collaborator PI: Dr. John Kovach
Collaborator: Lixte Biotechnology Holdings, Inc.

CRADA Title: Identification of agents regulating Nuclear Receptor Corepressor (N-CoR) pathway for glioma tumor cell differentiation

The purpose of this amendment is to change certain terms of the above referenced Cooperative Research and Development Agreement (CRADA). These changes are reflected below and except for these changes all other provisions including the research plan of the original CRADA and four previous amendments remain in full force and effect. Each signatory will receive an original of this amendment. Text to be added to the original CRADA is indicated by underlining

NEW TERMS:

1. Extend the term of the CRADA to September 30, 2009.
2. Change the name of the CRADA collaborator from Lixte Biotechnology Holdings, Inc. to Lixte Biotechnology, Inc.
3. Amend Appendix B as follows:

Funding Contributions:

Collaborator agrees to provide funds in the amount of two hundred thousand dollars ($200,000) per year of the CRADA for ICD to use to acquire technical, statistical, and administrative support for the research activities, as well as to pay for supplies and travel expenses. Collaborator will provide funds in equal annual installments. The first installment will be due within one hundred eighty (180) days of the Effective Date. Each subsequent installment will be due within thirty (30) days of each anniversary of the Effective Date. Collaborator agrees that ICD can allocate the funding between the various categories in support of the CRADA research as ICD's PI sees fit.

No additional CRADA funds will be provided for the period between July 1, 2008 and September 30, 2008. For the period October 1, 2008 through September 30, 2009, Collaborator will provide $200,000 to be paid in four quarterly payments of $50,000 each commencing on October 1, 2008.

CRADA PAYMENTS:
Collaborator will make checks payable to the National Institute of Neurological Disorders and Stroke, will reference the CRADA number 02165 entitled

"Identification of agents regulating Nuclear Receptor Corepressor (N-CoR) pathway for glioma tumor cell differentiation" on each check, and will send them via trackable mail or courier to:
National Institute of Neurological Disorders and Stroke,
Financial Management Branch Building 31, Room8A34
31 Center Drive, MSC2540
Bethesda, MD 20892-2540

ACCEPTED AND AGREED TO

FOR NINDS:

Story Landis, Ph.D.
Director, The National Institute of Neurological Disorders and Stroke

Date 6/13/08

FOR COLLABORATOR:

Dr. John S. Kovach
President, Lixte Biotechnology, Inc.

Date 6/17/08

Exhibit 31.1

CERTIFICATIONS OF THE CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John S. Kovach, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2008 of Lixte Biotechnology Holdings, Inc.;

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. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and I have:

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

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

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

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

5. I have disclosed, based on my 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: August 12, 2008

By: /s/ JOHN S. KOVACH
John. S. Kovach
Chief Executive Officer and Chief Financial Officer
(Principal Executive Officer and Principal Financial Officer)

Exhibit 32.1

CERTIFICATIONS OF THE CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
UNDER SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing by Lixte Biotechnology Holdings, Inc. (the "Registrant") of its Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2008 (the "Quarterly Report") with the Securities and Exchange Commission, I, John S. Kovach, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

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

Date: August 12, 2008

By: /s/ JOHN S. KOVACH
John S. Kovach
Chief Executive Officer and Chief Financial Officer
(Principal Executive Officer and Principal Financial Officer)