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

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): September 14, 2015

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

DELAWARE
(State or other jurisdiction
of incorporation)

000-51436
(Commission
File Number)

20-2903526
(IRS Employer
Identification No.)

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

Registrant's telephone number, including area code: 631 942 7959

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (See General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act of 1933 (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(e) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 1.01 Entry Into a Material Agreement

Effective September 14, 2015 (the “Effective Date”), the Company entered into a Collaboration Agreement (the “Agreement”) with BioPharmaWorks LLC (“BPW”), pursuant to which the Company engaged BPW to perform certain services for the Company. Those services include *inter alia* (a) assisting the Company to (i) commercialize its products and strengthen its patent portfolio, (ii) identify large pharmaceutical companies with potential interest in the Company’s product pipeline and (iii) prepare and deliver presentations concerning the Company’s products - (b) at the request of the board of directors, serving as backup management for up to three months should the Company’s chief executive officer and scientific leader be temporarily unable to carry out his duties - (c) being available for consultation in drug discovery and development; and (d) identifying providers and overseeing tasks relating to clinical use and commercialization of new compounds—all as more fully described in the Agreement.

The Agreement is for an initial term of two years and automatically renews for subsequent annual periods unless terminated by a party not less than 60 days prior to the expiration of the applicable period.

In consideration of BPW agreeing to provide the services under the Agreement, the Company has agreed to issue to BPW 1,000,000 shares of its common stock (the “Shares”). The Company also granted to BPW two five-year warrants (the “Warrants”) to purchase shares of the Company’s common stock as follows: one Warrant (the “First Warrant”) to purchase 500,000 shares at an exercise price of \$1.00 per share vesting on the first anniversary of the Effective Date; and a second Warrant (the “Second Warrant”) to purchase 500,000 shares at an exercise price of \$2.00 per share vesting on the second anniversary of the Effective Date. The Company has also agreed to pay BPW a monthly fee of \$10,000 subject to the right of the Company to pay a negotiated hourly rate in lieu of the monthly payment.

Item 3.02 Unregistered Sales of Equity Securities

As stated in Item 1.01, above, which information is hereby incorporated by reference, effective as of September 14, 2015, the Company issued to BPW the Shares and issued to BPW the First Warrant and the Second Warrant.

The Shares and the Warrants were not registered under the Securities Act of 1933, as amended (the “Act”), in reliance upon the exemption from registration contained in Section 4(2) of the Act. Such securities (including the shares of common stock which may be issuable upon exercise of the Warrants) may not be re-offered or sold in the United States in the absence of a registration statement or exemption for the registration requirements of the Act.

Item 8.01 Other Events

On September 17, 2015, the Company issued a press release regarding the entering into of the Collaboration Agreement.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

There is filed as part of this report the exhibit listed on the accompanying Index to Exhibits, which information is incorporated herein by reference.

SIGNATURES

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

Date: September 18, 2015

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

By: /s/ JOHN S. KOVACH

John S. Kovach, Chief Executive Officer

Index to Exhibits

| Exhibit No. | Description |
|--------------------|---|
| 4.01 | Form of First Warrant. |
| 4.02 | Form of Second Warrant. |
| 10.01 | Collaboration Agreement between the Company and BioPharmaWorks LLC. |
| 99.1 | Press Release. |

THE WARRANT EVIDENCED OR CONSTITUTED HEREBY, AND ALL SHARES OF COMMON STOCK ISSUABLE HEREUNDER, HAVE BEEN AND WILL BE ISSUED WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND MAY NOT BE SOLD, OFFERED FOR SALE, TRANSFERRED, PLEDGED OR HYPOTHECATED WITHOUT REGISTRATION UNDER THE ACT UNLESS EITHER (i) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH DISPOSITION OR (ii) THE SALE OF SUCH SECURITIES IS MADE PURSUANT TO SEC RULE 144.

WARRANT TO PURCHASE COMMON STOCK

OF

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

September 14, 2015

THIS CERTIFIES THAT, for value received BioPharmaWorks LLC (“Holder”) is entitled, subject to the terms and conditions of this Warrant, at any time or from time to time after the first anniversary of the issuance date of this Warrant (the “Effective Date”), and before 5:00 p.m., Eastern Time, on the fifth (5th) anniversary of the date hereof (the “Expiration Date”), to purchase from the Company, 500,000 shares of Common Stock of Lixte Biotechnology Holdings, Inc. (the “Company”) at a price per share equal to \$1.00 (the “Purchase Price”). Both the number of shares of Common Stock purchasable upon exercise of this Warrant and the Purchase Price are subject to adjustment and change as provided herein.

1. **CERTAIN DEFINITIONS** . As used in this Warrant the following terms shall have the following respective meanings:

1.1 “Fair Market Value” of a share of Common Stock as of a particular date shall mean:

(a) If traded on a securities exchange or the Nasdaq National Market, the Fair Market Value shall be deemed to be the average of the closing prices of the Common Stock of the Company on such exchange or market over the five (5) trading days ending immediately prior to the applicable date of valuation;

(b) If actively traded over-the-counter, the Fair Market Value shall be deemed to be the average of the closing bid prices over the thirty (30)-day period ending immediately prior to the applicable date of valuation; and

(c) If there is no active public market, the Fair Market Value shall be the value thereof, as agreed upon by the Company and the Holder; *provided, however* , that if the Company and the Holder cannot agree on such value, such value shall be determined by an independent valuation firm experienced in valuing businesses such as the Company and jointly selected in good faith by the Company and the Holder. Fees and expenses of the valuation firm shall be paid for by the Company.

1.2 “Registered Holder” shall mean any Holder in whose name this Warrant is registered upon the books and records maintained by the Company.

1.3 “Warrant” as used herein, shall include this Warrant and any warrant delivered in substitution or exchange therefor as provided herein.

1.4 “Common Stock” shall mean the Common Stock of the Company and any other securities at any time receivable or issuable upon exercise of this Warrant.

2. EXERCISE OF WARRANT .

2.1 Payment. Subject to compliance with the terms and conditions of this Warrant and applicable securities laws, this Warrant may be exercised, in whole or in part at any time or from time to time, on or before the Expiration Date by (a) the delivery (including, without limitation, delivery by facsimile) of the form of Notice of Exercise attached hereto as Exhibit A (the “Notice of Exercise”), duly executed by the Holder, at the principal office of the Company, and (b) as soon as practicable after such date, surrendering.

(a) this Warrant at the principal office of the Company, and

(b) payment, in cash (by check) or by wire transfer, of an amount equal to the product obtained by multiplying the number of shares of Common Stock being purchased upon such exercise by the then effective Purchase Price (the “Exercise Amount”).

2.2 Net Issue Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, the Holder may elect to exchange all or some of this Warrant for shares of Common Stock equal to the value of the amount of the Warrant being exchanged on the date of exchange. If Holder elects to exchange this Warrant as provided in this Section 2.2, Holder shall tender to the Company the Warrant for the amount being exchanged, along with written notice of Holder’s election to exchange some or all of the Warrant, and the Company shall issue to Holder the number of shares of the Common Stock computed using the following formula:

$$X = \frac{Y (A-B)}{A}$$

Where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock purchasable under the amount of the Warrant being exchanged (as adjusted to the date of such calculation).

A = the Fair Market Value of one share of the Common Stock.

B = Purchase Price (as adjusted to the date of such calculation).

2.3 “Easy Sale” Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, when permitted by law and applicable regulations (including Nasdaq and NASD rules), the Holder may pay the Purchase Price through a “same day sale” commitment from the Holder (and if applicable a broker-dealer (a “Dealer.”)), whereby the Holder irrevocably elects to exercise this Warrant and to sell a portion of the shares so purchased to pay the Purchase Price and the Holder (or, if applicable, a Dealer) commits upon sale (or, in the case of a Dealer, upon receipt) of such shares to forward the Purchase Price directly to the Company.

2.4 Stock Certificates; Fractional Shares. As soon as practicable on or after the date of any exercise of this Warrant, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of whole shares of Common Stock issuable upon such exercise. No fractional shares or scrip representing fractional shares shall be issued upon an exercise of this Warrant.

2.5 Partial Exercise; Effective Date of Exercise. In case of any partial exercise of this Warrant, the Company shall cancel this Warrant upon surrender hereof and shall execute and deliver a new Warrant of like tenor and date for the balance of the shares of Common Stock purchasable hereunder. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above. The person entitled to receive the shares of Common Stock issuable upon exercise of this Warrant shall be treated for all purposes as the holder of record of such shares as of the close of business on the date the Holder is deemed to have exercised this Warrant.

2.6 Vesting. This Warrant shall vest fully upon the first anniversary of the date of issuance.

3. VALID ISSUANCE: TAXES. All shares of Common Stock issued upon the exercise of this Warrant shall be validly issued, fully paid and nonassessable, and the Company shall pay all taxes and other governmental charges that may be imposed in respect of the issue or delivery thereof. The Company shall not be required to pay any tax or other charge imposed in connection with any transfer involved in the issuance of any certificate for shares of Common Stock in any name other than that of the Registered Holder of this Warrant, and in such case the Company shall not be required to issue or deliver any stock certificate or security until such tax or other charge has been paid, or it has been established to the Company's reasonable satisfaction that no tax or other charge is due.

4. ADJUSTMENT OF PURCHASE PRICE AND NUMBER OF SHARES. The number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities or property receivable or issuable upon exercise of this Warrant) and the Purchase Price are subject to adjustment upon occurrence of the following events:

4.1 Adjustment for Stock Splits, Stock Subdivisions or Combinations of Shares. The Purchase Price of this Warrant shall be proportionally decreased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally increased to reflect any stock split or subdivision of the Company's Common Stock. The Purchase Price of this Warrant shall be proportionally increased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally decreased to reflect any combination of the Company's Common Stock.

4.2 Adjustment for Dividends or Distributions of Stock or Other Securities or Property. In case the Company shall make or issue, or shall fix a record date for the determination of eligible holders entitled to receive, a dividend or other distribution with respect to the Common Stock (or any shares of stock or other securities at the time issuable upon exercise of the Warrant) payable in (a) securities of the Company or (b) assets (excluding cash dividends paid or payable solely out of retained earnings), then, in each such case, the Holder of this Warrant on exercise hereof at any time after the consummation, effective date or record date of such dividend or other distribution, shall receive, in addition to the shares of Common Stock (or such other stock or securities) issuable on such exercise prior to such date, and without the payment of additional consideration therefor, the securities or such other assets of the Company to which such Holder would have been entitled upon such date if such Holder had exercised this Warrant on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such additional securities or other assets distributed with respect to such shares as aforesaid during such period giving effect to all adjustments called for by this Section 4.

4.3 Reclassification. If the Company, by reclassification of securities or otherwise, shall change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change, and the Purchase Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 4. No adjustment shall be made pursuant to this Section 4.3 upon any conversion or redemption of the Common Stock, which is the subject of Section 4.5.

4.4 Adjustment for Capital Reorganization, Merger or Consolidation. In case of any capital reorganization of the capital stock of the Company (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or any merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all the assets of the Company then, and in each such case, as a part of such reorganization, merger, consolidation, sale or transfer, lawful provision shall be made so that the Holder of this Warrant shall thereafter be entitled to receive upon exercise of this Warrant, during the period specified herein and upon payment of the Purchase Price then in effect, the number of shares of stock or other securities or property of the successor corporation resulting from such reorganization, merger, consolidation, sale or transfer that a holder of the shares deliverable upon exercise of this Warrant would have been entitled to receive in such reorganization, consolidation, merger, sale or transfer if this Warrant had been exercised immediately before such reorganization, merger, consolidation, sale or transfer, all subject to further adjustment as provided in this Section 4. The foregoing provisions of this Section 4.4 shall similarly apply to successive reorganizations, consolidations, mergers, sales and transfers and to the stock or securities of any other corporation that are at the time receivable upon the exercise of this Warrant. If the per-share consideration payable to the Holder hereof for shares in connection with any such transaction is in a form other than cash or marketable securities, then the value of such consideration shall be determined in good faith by the Company's Board of Directors. In all events, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the transaction, to the end that the provisions of this Warrant shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after that event upon exercise of this Warrant.

4.5 Conversion of Common Stock. In case all or any portion of the authorized and outstanding shares of Common Stock of the Company are redeemed or converted or reclassified into other securities or property pursuant to the Company's Certificate of Incorporation or otherwise, or the Common Stock otherwise ceases to exist, then, in such case, the Holder of this Warrant, upon exercise hereof at any time after the date on which the Common Stock is so redeemed or converted, reclassified or ceases to exist (the "Termination Date"), shall receive, in lieu of the number of shares of Common Stock that would have been issuable upon such exercise immediately prior to the Termination Date, the securities or property that would have been received if this Warrant had been exercised in full and the Common Stock received thereupon had been simultaneously converted immediately prior to the Termination Date, all subject to further adjustment as provided in this Warrant. Additionally, the Purchase Price shall be immediately adjusted to equal the quotient obtained by dividing (x) the aggregate Purchase Price of the maximum number of shares of Common Stock for which this Warrant was exercisable immediately prior to the Termination Date by (y) the number of shares of Common Stock of the Company for which this Warrant is exercisable immediately after the Termination Date, all subject to further adjustment as provided herein.

5. CERTIFICATE AS TO ADJUSTMENTS. In each case of any adjustment in the Purchase Price, or number or type of shares issuable upon exercise of this Warrant, the Chief Financial Officer or Controller of the Company shall compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment and showing in detail the facts upon which such adjustment is based, including a statement of the adjusted Purchase Price. The Company shall promptly send (by facsimile and by either first class mail, postage prepaid or overnight delivery) a copy of each such certificate to the Holder.

6. LOSS OR MUTILATION. Upon receipt of evidence reasonably satisfactory to the Company of the ownership of and the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to it, and (in the case of mutilation) upon surrender and cancellation of this Warrant, the Company will execute and deliver in lieu thereof a new Warrant of like tenor as the lost, stolen, destroyed or mutilated Warrant.

7. RESERVATION OF COMMON STOCK. The Company hereby covenants that at all times there shall be reserved for issuance and delivery upon exercise of this Warrant such number of shares of Common Stock or other shares of capital stock of the Company as are from time to time issuable upon exercise of this Warrant and, from time to time, will take all steps necessary to amend its Certificate of Incorporation to provide sufficient reserves of shares of Common Stock issuable upon exercise of this Warrant. All such shares shall be duly authorized, and when issued upon such exercise, shall be validly issued, fully paid and non-assessable, free and clear of all liens, security interests, charges and other encumbrances or restrictions on sale and free and clear of all preemptive rights, except encumbrances or restrictions arising under federal or state securities laws. Issuance of this Warrant shall constitute full authority to the Company's Officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

8. TRANSFER AND EXCHANGE. Subject to the terms and conditions of this Warrant and compliance with all applicable securities laws, this Warrant and all rights hereunder may be transferred to any Registered Holder's parent, subsidiary or affiliate, in whole or in part, on the books of the Company maintained for such purpose at the principal office of the Company referred to above, by the Registered Holder hereof in person, or by duly authorized attorney, upon surrender of this Warrant properly endorsed and upon payment of any necessary transfer tax or other governmental charge imposed upon such transfer. Upon any permitted partial transfer, the Company will issue and deliver to the Registered Holder a new Warrant or Warrants with respect to the shares of Common Stock not so transferred. Each taker and holder of this Warrant, by taking or holding the same, consents and agrees that when this Warrant shall have been so endorsed, the person in possession of this Warrant may be treated by the Company, and all other persons dealing with this Warrant, as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, any notice to the contrary notwithstanding; *provided, however*, that until a transfer of this Warrant is duly registered on the books of the Company, the Company may treat the Registered Holder hereof as the owner for all purposes. Any other transfer shall require the approval of the Company in its sole discretion.

9. RESTRICTIONS ON TRANSFER. The Holder, by acceptance hereof, agrees that, absent an effective registration statement filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act") covering the disposition or sale of this Warrant or the Common Stock issued or issuable upon exercise hereof, as the case may be, and registration or qualification under applicable state securities laws, such Holder will not sell, transfer, pledge, or hypothecate any or all of this Warrant or such Common Stock, as the case may be, unless either (i) the Company has received an opinion of counsel, in form and substance reasonably satisfactory to the Company, to the effect that such registration is not required in connection with such disposition or (ii) the sale of such securities is made pursuant to SEC Rule 144. Notwithstanding the foregoing, it is understood that the Holder may transfer a portion of this Warrant to employees or consultants of Holder.

10. COMPLIANCE WITH SECURITIES LAWS. By acceptance of this Warrant, the Holder hereby represents, warrants and covenants that any shares of stock purchased upon exercise of this Warrant shall be acquired for investment only and not with a view to, or for sale in connection with, any distribution thereof; that the Holder has had such opportunity as such Holder has deemed adequate to obtain from representatives of the Company such information as is necessary to permit the Holder to evaluate the merits and risks of its investment in the Company; that the Holder is able to bear the economic risk of holding such shares as may be acquired pursuant to the exercise of this Warrant for an indefinite period; that the Holder understands that the shares of stock acquired pursuant to the exercise of this Warrant will not be registered under the Securities Act (unless otherwise required pursuant to exercise by the Holder of the registration rights, if any, granted to the Registered Holder) and will be “restricted securities” within the meaning of Rule 144 under the Securities Act and that the exemption from registration under Rule 144 will not be available for at least one (1) year from the date of exercise of this Warrant, subject to any special treatment by the SEC for exercise of this Warrant pursuant to Section 2.2, and even then will not be available unless a public market then exists for the stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and that all stock certificates representing shares of stock issued to the Holder upon exercise of this Warrant or upon conversion of such shares may have affixed thereto a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

11. NO RIGHTS OR LIABILITIES AS STOCKHOLDERS. This Warrant shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company. In the absence of affirmative action by such Holder to purchase Common Stock by exercise of this Warrant or Common Stock upon conversion thereof, no provisions of this Warrant, and no enumeration herein of the rights or privileges of the Holder hereof shall cause such Holder hereof to be a stockholder of the Company for any purpose.

12. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby represents and warrants to Holder that:

12.1 Due Authorization; Consents. All corporate action on the part of the Company, its officers, directors and stockholders necessary for (a) the authorization, execution and delivery of, and the performance of all obligations of the Company under, this Warrant, and (b) the authorization, issuance, reservation for issuance and delivery of all of the Common Stock issuable upon exercise of this Warrant, has been duly taken. This Warrant constitutes a valid and binding obligation of the Company enforceable in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors’ rights generally and to general equitable principles. All consents, approvals and authorizations of, and registrations, qualifications and filings with, any federal or state governmental agency, authority or body, or any third party, required in connection with the execution, delivery and performance of this Warrant and the consummation of the transactions contemplated hereby and thereby have been obtained.

12.2 Organization. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power to own, lease and operate its property and to carry on its business as now being conducted and as currently proposed to be conducted.

12.3 Valid Issuance of Stock. The outstanding shares of the capital stock of the Company are duly and validly issued, fully paid and nonassessable, and such shares, and all outstanding options and other securities of the Company, have been issued in full compliance with the registration and prospectus delivery requirements of the Securities Act and the registration and qualification requirements of all applicable state securities laws, or in compliance with applicable exemptions therefrom, and all other provisions of applicable federal and state securities laws, including without limitation, anti-fraud provisions.

12.4 Governmental Consents. All consents, approvals, orders, authorizations or registrations, qualifications, declarations or filings with any federal or state governmental authority on the part of the Company required in connection with the consummation of the transactions contemplated herein shall have been obtained prior to and be effective as of the Effective Date.

13. NOTICES. Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other party; (b) when received when sent by facsimile at the address and number set forth below; (c) three business days after deposit in the U.S. mail with first class or certified mail receipt requested postage prepaid and addressed to the other party as set forth below; or (d) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the parties as set forth below with next-business-day delivery guaranteed, provided that the sending party receives a confirmation of delivery from the delivery service provider.

To the Company :

Lixte Biotechnology Holdings, Inc.
248 Route 25A, No. 2
East Setauket, New York 11733
Attn: John S. Kovach

To the Holder :

The address on the signature page hereto

Each person making a communication hereunder by facsimile shall promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity of any such communication. A party may change or supplement the addresses given above, or designate additional addresses, for purposes of this Section 13 by giving the other party written notice of the new address in the manner set forth above.

14. HEADINGS. The headings in this Warrant are for purposes of convenience in reference only, and shall not be deemed to constitute a part hereof.

15. LAW GOVERNING. This Warrant shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, with regard to conflict of law principles of such state.

16. NO IMPAIRMENT. The Company will not, by amendment of its Certificate of Incorporation or bylaws, or through reorganization, consolidation, merger, dissolution, issue or sale of securities, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Registered Holder of this Warrant against impairment. Without limiting the generality of the foregoing, the Company (a) will not increase the par value of any shares of stock issuable upon the exercise of this Warrant above the amount payable therefor upon such exercise, and (b) will take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon exercise of this Warrant.

17. NOTICES OF RECORD DATE. In case:

17.1 the Company shall take a record of the holders of its Common Stock (or other stock or securities at the time receivable upon the exercise of this Warrant), for the purpose of entitling them to receive any dividend or other distribution, or any right to subscribe for or purchase any shares of stock of any class or any other securities or to receive any other right; or

17.2 of any consolidation or merger of the Company with or into another corporation, any capital reorganization of the Company, any reclassification of the capital stock of the Company, or any conveyance of all or substantially all of the assets of the Company to another corporation in which holders of the Company's stock are to receive stock, securities or property of another corporation; or

17.3 of any voluntary dissolution, liquidation or winding-up of the Company; or

17.4 of any redemption or conversion of all outstanding Common Stock;

then, and in each such case, the Company will mail or cause to be mailed to the Registered Holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation, winding-up, redemption or conversion is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock or (such stock or securities as at the time are receivable upon the exercise of this Warrant), shall be entitled to exchange their shares of Common Stock (or such other stock or securities), for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. The Company shall use all reasonable efforts to ensure such notice shall be delivered at least thirty (30) days prior to the date therein specified.

18. SEVERABILITY. If any term, provision, covenant or restriction of this Warrant is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Warrant shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

19. COUNTERPARTS. For the convenience of the parties, any number of counterparts of this Warrant may be executed by the parties hereto and each such executed counterpart shall be, and shall be deemed to be, an original instrument.

20. NO INCONSISTENT AGREEMENTS. The Company will not on or after the date of this Warrant enter into any agreement with respect to its securities which is inconsistent with the rights granted to the Holders of this Warrant or otherwise conflicts with the provisions hereof. The rights granted to the Holders hereunder do not in any way conflict with and are not inconsistent with the rights granted to holders of the Company's securities under any other agreements, except rights that have been waived.

21. SATURDAYS, SUNDAYS AND HOLIDAYS. If the Expiration Date falls on a Saturday, Sunday or legal holiday, the Expiration Date shall automatically be extended until 5:00 p.m. the next business day.

22. ENTIRE AGREEMENT. This Warrant contains the sole and entire agreement and understanding of the parties with respect to the entire subject matter of this Warrant, and any and all prior discussions, negotiations, commitments and understandings, whether oral or otherwise, related to the subject matter of this Warrant are hereby merged herein.

[Signatures appear on following page.]

IN WITNESS WHEREOF , the parties hereto have executed this Warrant as of the Effective Date.

Holder:

Lixte Biotechnology Holdings, Inc.

BioPharmaWorks LLC

By: _____

By: _____

Robert Volkmann
Manager

John S. Kovach
President

Address: 1084 Shennecossett Road
Groton, Connecticut 06340

SIGNATURE PAGE TO WARRANT TO PURCHASE COMMON STOCK

Exhibit 4.01 - Page 9

Warrant No. 1

Exhibit A

NOTICE OF EXERCISE

(To be executed upon exercise of Warrant)

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, the securities of the Company, as provided for therein, and (check the applicable box):

tenders herewith payment of the exercise price in full in the form of cash or a certified or official bank check in same-day funds in the amount of \$ _____ for _____ such securities.

elects the [Net Issue Exercise][Easy Sale Exercise] option pursuant to Section 2.2 or 2.3 of the Warrant, and accordingly requests delivery of a net of _____ of such securities.

Please issue a certificate or certificates for such securities in the name of, and pay any cash for any fractional share to (please print name, address and social security number):

Name: _____

Address: _____

Signature: _____

Note: The above signature should correspond exactly with the name on the first page of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

If said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the shares purchasable thereunder rounded up to the next higher whole number of shares.

Exhibit B

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

For value received, hereby sells, assigns and transfers unto _____ the within Warrant Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint _____ attorney, to transfer said Warrant Certificate on the books of the within-named Company with respect to the number of Warrants set forth below, with full power of substitution in the premises:

| Name(s) of Assignee(s) | Address | # of Warrants |
|-------------------------------|----------------|----------------------|
|-------------------------------|----------------|----------------------|

And if said number of Warrants shall not be all the Warrants represented by the Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the Warrants registered by said Warrant Certificate.

Dated: _____

Signature: _____

Notice: The signature to the foregoing Assignment must correspond to the name as written upon the face of this security in every particular, without alteration or any change whatsoever; signature(s) must be guaranteed by an eligible guarantor institution (banks, stock brokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program) pursuant to Securities and Exchange Commission Rule 17Ad-15.

THE WARRANT EVIDENCED OR CONSTITUTED HEREBY, AND ALL SHARES OF COMMON STOCK ISSUABLE HEREUNDER, HAVE BEEN AND WILL BE ISSUED WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND MAY NOT BE SOLD, OFFERED FOR SALE, TRANSFERRED, PLEDGED OR HYPOTHECATED WITHOUT REGISTRATION UNDER THE ACT UNLESS EITHER (i) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH DISPOSITION OR (ii) THE SALE OF SUCH SECURITIES IS MADE PURSUANT TO SEC RULE 144.

WARRANT TO PURCHASE COMMON STOCK

OF

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

September 14, 2015

THIS CERTIFIES THAT, for value received BioPharmaWorks LLC (“Holder”) is entitled, subject to the terms and conditions of this Warrant, at any time or from time to time after the second anniversary of the issuance date of this Warrant (the “Effective Date”), and before 5:00 p.m., Eastern Time, on the fifth (5th) anniversary of the date hereof (the “Expiration Date”), to purchase from the Company, 500,000 shares of Common Stock of Lixte Biotechnology Holdings, Inc. (the “Company”) at a price per share equal to \$2.00 (the “Purchase Price”). Both the number of shares of Common Stock purchasable upon exercise of this Warrant and the Purchase Price are subject to adjustment and change as provided herein.

1. **CERTAIN DEFINITIONS** . As used in this Warrant the following terms shall have the following respective meanings:

1.1 “Fair Market Value” of a share of Common Stock as of a particular date shall mean:

(a) If traded on a securities exchange or the Nasdaq National Market, the Fair Market Value shall be deemed to be the average of the closing prices of the Common Stock of the Company on such exchange or market over the five (5) trading days ending immediately prior to the applicable date of valuation;

(b) If actively traded over-the-counter, the Fair Market Value shall be deemed to be the average of the closing bid prices over the thirty (30)-day period ending immediately prior to the applicable date of valuation; and

(c) If there is no active public market, the Fair Market Value shall be the value thereof, as agreed upon by the Company and the Holder; *provided, however* , that if the Company and the Holder cannot agree on such value, such value shall be determined by an independent valuation firm experienced in valuing businesses such as the Company and jointly selected in good faith by the Company and the Holder. Fees and expenses of the valuation firm shall be paid for by the Company.

1.2 “Registered Holder” shall mean any Holder in whose name this Warrant is registered upon the books and records maintained by the Company.

1.3 “ Warrant ” as used herein, shall include this Warrant and any warrant delivered in substitution or exchange therefor as provided herein.

1.4 “ Common Stock ” shall mean the Common Stock of the Company and any other securities at any time receivable or issuable upon exercise of this Warrant.

2. EXERCISE OF WARRANT .

2.1 Payment. Subject to compliance with the terms and conditions of this Warrant and applicable securities laws, this Warrant may be exercised, in whole or in part at any time or from time to time, on or before the Expiration Date by (a) the delivery (including, without limitation, delivery by facsimile) of the form of Notice of Exercise attached hereto as Exhibit A (the “ Notice of Exercise ”), duly executed by the Holder, at the principal office of the Company, and (b) as soon as practicable after such date, surrendering

(a) this Warrant at the principal office of the Company, and

(b) payment, in cash (by check) or by wire transfer, of an amount equal to the product obtained by multiplying the number of shares of Common Stock being purchased upon such exercise by the then effective Purchase Price (the “ Exercise Amount ”).

2.2 Net Issue Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, the Holder may elect to exchange all or some of this Warrant for shares of Common Stock equal to the value of the amount of the Warrant being exchanged on the date of exchange. If Holder elects to exchange this Warrant as provided in this Section 2.2, Holder shall tender to the Company the Warrant for the amount being exchanged, along with written notice of Holder’s election to exchange some or all of the Warrant, and the Company shall issue to Holder the number of shares of the Common Stock computed using the following formula:

$$X = \frac{Y (A-B)}{A}$$

Where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock purchasable under the amount of the Warrant being exchanged (as adjusted to the date of such calculation).

A = the Fair Market Value of one share of the Common Stock.

B = Purchase Price (as adjusted to the date of such calculation).

2.3 “ Easy Sale ” Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, when permitted by law and applicable regulations (including Nasdaq and NASD rules), the Holder may pay the Purchase Price through a “same day sale” commitment from the Holder (and if applicable a broker-dealer (a “ Dealer ”)), whereby the Holder irrevocably elects to exercise this Warrant and to sell a portion of the shares so purchased to pay the Purchase Price and the Holder (or, if applicable, a Dealer) commits upon sale (or, in the case of a Dealer, upon receipt) of such shares to forward the Purchase Price directly to the Company.

2.4 Stock Certificates; Fractional Shares. As soon as practicable on or after the date of any exercise of this Warrant, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of whole shares of Common Stock issuable upon such exercise. No fractional shares or scrip representing fractional shares shall be issued upon an exercise of this Warrant.

2.5 Partial Exercise; Effective Date of Exercise. In case of any partial exercise of this Warrant, the Company shall cancel this Warrant upon surrender hereof and shall execute and deliver a new Warrant of like tenor and date for the balance of the shares of Common Stock purchasable hereunder. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above. The person entitled to receive the shares of Common Stock issuable upon exercise of this Warrant shall be treated for all purposes as the holder of record of such shares as of the close of business on the date the Holder is deemed to have exercised this Warrant.

2.6 Vesting. This Warrant shall vest fully upon the second anniversary of the date of issuance, provided the Collaboration Agreement dated as of the date hereof between the Company and Holder is then in full force and effect.

3. VALID ISSUANCE; TAXES. All shares of Common Stock issued upon the exercise of this Warrant shall be validly issued, fully paid and nonassessable, and the Company shall pay all taxes and other governmental charges that may be imposed in respect of the issue or delivery thereof. The Company shall not be required to pay any tax or other charge imposed in connection with any transfer involved in the issuance of any certificate for shares of Common Stock in any name other than that of the Registered Holder of this Warrant, and in such case the Company shall not be required to issue or deliver any stock certificate or security until such tax or other charge has been paid, or it has been established to the Company's reasonable satisfaction that no tax or other charge is due.

4. ADJUSTMENT OF PURCHASE PRICE AND NUMBER OF SHARES. The number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities or property receivable or issuable upon exercise of this Warrant) and the Purchase Price are subject to adjustment upon occurrence of the following events:

4.1 Adjustment for Stock Splits, Stock Subdivisions or Combinations of Shares. The Purchase Price of this Warrant shall be proportionally decreased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally increased to reflect any stock split or subdivision of the Company's Common Stock. The Purchase Price of this Warrant shall be proportionally increased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally decreased to reflect any combination of the Company's Common Stock.

4.2 Adjustment for Dividends or Distributions of Stock or Other Securities or Property. In case the Company shall make or issue, or shall fix a record date for the determination of eligible holders entitled to receive, a dividend or other distribution with respect to the Common Stock (or any shares of stock or other securities at the time issuable upon exercise of the Warrant) payable in (a) securities of the Company or (b) assets (excluding cash dividends paid or payable solely out of retained earnings), then, in each such case, the Holder of this Warrant on exercise hereof at any time after the consummation, effective date or record date of such dividend or other distribution, shall receive, in addition to the shares of Common Stock (or such other stock or securities) issuable on such exercise prior to such date, and without the payment of additional consideration therefor, the securities or such other assets of the Company to which such Holder would have been entitled upon such date if such Holder had exercised this Warrant on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such additional securities or other assets distributed with respect to such shares as aforesaid during such period giving effect to all adjustments called for by this Section 4.

4.3 Reclassification. If the Company, by reclassification of securities or otherwise, shall change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change, and the Purchase Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 4. No adjustment shall be made pursuant to this Section 4.3 upon any conversion or redemption of the Common Stock, which is the subject of Section 4.5.

4.4 Adjustment for Capital Reorganization, Merger or Consolidation. In case of any capital reorganization of the capital stock of the Company (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or any merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all the assets of the Company then, and in each such case, as a part of such reorganization, merger, consolidation, sale or transfer, lawful provision shall be made so that the Holder of this Warrant shall thereafter be entitled to receive upon exercise of this Warrant, during the period specified herein and upon payment of the Purchase Price then in effect, the number of shares of stock or other securities or property of the successor corporation resulting from such reorganization, merger, consolidation, sale or transfer that a holder of the shares deliverable upon exercise of this Warrant would have been entitled to receive in such reorganization, consolidation, merger, sale or transfer if this Warrant had been exercised immediately before such reorganization, merger, consolidation, sale or transfer, all subject to further adjustment as provided in this Section 4. The foregoing provisions of this Section 4.4 shall similarly apply to successive reorganizations, consolidations, mergers, sales and transfers and to the stock or securities of any other corporation that are at the time receivable upon the exercise of this Warrant. If the per-share consideration payable to the Holder hereof for shares in connection with any such transaction is in a form other than cash or marketable securities, then the value of such consideration shall be determined in good faith by the Company's Board of Directors. In all events, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the transaction, to the end that the provisions of this Warrant shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after that event upon exercise of this Warrant.

4.5 Conversion of Common Stock. In case all or any portion of the authorized and outstanding shares of Common Stock of the Company are redeemed or converted or reclassified into other securities or property pursuant to the Company's Certificate of Incorporation or otherwise, or the Common Stock otherwise ceases to exist, then, in such case, the Holder of this Warrant, upon exercise hereof at any time after the date on which the Common Stock is so redeemed or converted, reclassified or ceases to exist (the "Termination Date"), shall receive, in lieu of the number of shares of Common Stock that would have been issuable upon such exercise immediately prior to the Termination Date, the securities or property that would have been received if this Warrant had been exercised in full and the Common Stock received thereupon had been simultaneously converted immediately prior to the Termination Date, all subject to further adjustment as provided in this Warrant. Additionally, the Purchase Price shall be immediately adjusted to equal the quotient obtained by dividing (x) the aggregate Purchase Price of the maximum number of shares of Common Stock for which this Warrant was exercisable immediately prior to the Termination Date by (y) the number of shares of Common Stock of the Company for which this Warrant is exercisable immediately after the Termination Date, all subject to further adjustment as provided herein.

5. CERTIFICATE AS TO ADJUSTMENTS. In each case of any adjustment in the Purchase Price, or number or type of shares issuable upon exercise of this Warrant, the Chief Financial Officer or Controller of the Company shall compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment and showing in detail the facts upon which such adjustment is based, including a statement of the adjusted Purchase Price. The Company shall promptly send (by facsimile and by either first class mail, postage prepaid or overnight delivery) a copy of each such certificate to the Holder.

6. LOSS OR MUTILATION. Upon receipt of evidence reasonably satisfactory to the Company of the ownership of and the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to it, and (in the case of mutilation) upon surrender and cancellation of this Warrant, the Company will execute and deliver in lieu thereof a new Warrant of like tenor as the lost, stolen, destroyed or mutilated Warrant.

7. RESERVATION OF COMMON STOCK. The Company hereby covenants that at all times there shall be reserved for issuance and delivery upon exercise of this Warrant such number of shares of Common Stock or other shares of capital stock of the Company as are from time to time issuable upon exercise of this Warrant and, from time to time, will take all steps necessary to amend its Certificate of Incorporation to provide sufficient reserves of shares of Common Stock issuable upon exercise of this Warrant. All such shares shall be duly authorized, and when issued upon such exercise, shall be validly issued, fully paid and non-assessable, free and clear of all liens, security interests, charges and other encumbrances or restrictions on sale and free and clear of all preemptive rights, except encumbrances or restrictions arising under federal or state securities laws. Issuance of this Warrant shall constitute full authority to the Company's Officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

8. TRANSFER AND EXCHANGE. Subject to the terms and conditions of this Warrant and compliance with all applicable securities laws, this Warrant and all rights hereunder may be transferred to any Registered Holder's parent, subsidiary or affiliate, in whole or in part, on the books of the Company maintained for such purpose at the principal office of the Company referred to above, by the Registered Holder hereof in person, or by duly authorized attorney, upon surrender of this Warrant properly endorsed and upon payment of any necessary transfer tax or other governmental charge imposed upon such transfer. Upon any permitted partial transfer, the Company will issue and deliver to the Registered Holder a new Warrant or Warrants with respect to the shares of Common Stock not so transferred. Each taker and holder of this Warrant, by taking or holding the same, consents and agrees that when this Warrant shall have been so endorsed, the person in possession of this Warrant may be treated by the Company, and all other persons dealing with this Warrant, as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, any notice to the contrary notwithstanding; *provided, however*, that until a transfer of this Warrant is duly registered on the books of the Company, the Company may treat the Registered Holder hereof as the owner for all purposes. Any other transfer shall require the approval of the Company in its sole discretion.

9. RESTRICTIONS ON TRANSFER. The Holder, by acceptance hereof, agrees that, absent an effective registration statement filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act") covering the disposition or sale of this Warrant or the Common Stock issued or issuable upon exercise hereof, as the case may be, and registration or qualification under applicable state securities laws, such Holder will not sell, transfer, pledge, or hypothecate any or all of this Warrant or such Common Stock, as the case may be, unless either (i) the Company has received an opinion of counsel, in form and substance reasonably satisfactory to the Company, to the effect that such registration is not required in connection with such disposition or (ii) the sale of such securities is made pursuant to SEC Rule 144. Notwithstanding the foregoing, it is understood that the Holder may transfer a portion of this Warrant to employees or consultants of Holder.

10. COMPLIANCE WITH SECURITIES LAWS. By acceptance of this Warrant, the Holder hereby represents, warrants and covenants that any shares of stock purchased upon exercise of this Warrant shall be acquired for investment only and not with a view to, or for sale in connection with, any distribution thereof; that the Holder has had such opportunity as such Holder has deemed adequate to obtain from representatives of the Company such information as is necessary to permit the Holder to evaluate the merits and risks of its investment in the Company; that the Holder is able to bear the economic risk of holding such shares as may be acquired pursuant to the exercise of this Warrant for an indefinite period; that the Holder understands that the shares of stock acquired pursuant to the exercise of this Warrant will not be registered under the Securities Act (unless otherwise required pursuant to exercise by the Holder of the registration rights, if any, granted to the Registered Holder) and will be “restricted securities” within the meaning of Rule 144 under the Securities Act and that the exemption from registration under Rule 144 will not be available for at least one (1) year from the date of exercise of this Warrant, subject to any special treatment by the SEC for exercise of this Warrant pursuant to Section 2.2, and even then will not be available unless a public market then exists for the stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and that all stock certificates representing shares of stock issued to the Holder upon exercise of this Warrant or upon conversion of such shares may have affixed thereto a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

11. NO RIGHTS OR LIABILITIES AS STOCKHOLDERS. This Warrant shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company. In the absence of affirmative action by such Holder to purchase Common Stock by exercise of this Warrant or Common Stock upon conversion thereof, no provisions of this Warrant, and no enumeration herein of the rights or privileges of the Holder hereof shall cause such Holder hereof to be a stockholder of the Company for any purpose.

12. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby represents and warrants to Holder that:

12.1 Due Authorization; Consents. All corporate action on the part of the Company, its officers, directors and stockholders necessary for (a) the authorization, execution and delivery of, and the performance of all obligations of the Company under, this Warrant, and (b) the authorization, issuance, reservation for issuance and delivery of all of the Common Stock issuable upon exercise of this Warrant, has been duly taken. This Warrant constitutes a valid and binding obligation of the Company enforceable in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors’ rights generally and to general equitable principles. All consents, approvals and authorizations of, and registrations, qualifications and filings with, any federal or state governmental agency, authority or body, or any third party, required in connection with the execution, delivery and performance of this Warrant and the consummation of the transactions contemplated hereby and thereby have been obtained.

12.2 Organization. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power to own, lease and operate its property and to carry on its business as now being conducted and as currently proposed to be conducted.

12.3 Valid Issuance of Stock. The outstanding shares of the capital stock of the Company are duly and validly issued, fully paid and nonassessable, and such shares, and all outstanding options and other securities of the Company, have been issued in full compliance with the registration and prospectus delivery requirements of the Securities Act and the registration and qualification requirements of all applicable state securities laws, or in compliance with applicable exemptions therefrom, and all other provisions of applicable federal and state securities laws, including without limitation, anti-fraud provisions.

12.4 Governmental Consents. All consents, approvals, orders, authorizations or registrations, qualifications, declarations or filings with any federal or state governmental authority on the part of the Company required in connection with the consummation of the transactions contemplated herein shall have been obtained prior to and be effective as of the Effective Date.

13. NOTICES. Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other party; (b) when received when sent by facsimile at the address and number set forth below; (c) three business days after deposit in the U.S. mail with first class or certified mail receipt requested postage prepaid and addressed to the other party as set forth below; or (d) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the parties as set forth below with next-business-day delivery guaranteed, provided that the sending party receives a confirmation of delivery from the delivery service provider.

To the Company :

Lixte Biotechnology Holdings, Inc.
248 Route 25A, No. 2
East Setauket, New York 11733
Attn: John S. Kovach

To the Holder :

The address on the signature page hereto

Each person making a communication hereunder by facsimile shall promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity of any such communication. A party may change or supplement the addresses given above, or designate additional addresses, for purposes of this Section 13 by giving the other party written notice of the new address in the manner set forth above.

14. HEADINGS. The headings in this Warrant are for purposes of convenience in reference only, and shall not be deemed to constitute a part hereof.

15. LAW GOVERNING. This Warrant shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, with regard to conflict of law principles of such state.

16. NO IMPAIRMENT. The Company will not, by amendment of its Certificate of Incorporation or bylaws, or through reorganization, consolidation, merger, dissolution, issue or sale of securities, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Registered Holder of this Warrant against impairment. Without limiting the generality of the foregoing, the Company (a) will not increase the par value of any shares of stock issuable upon the exercise of this Warrant above the amount payable therefor upon such exercise, and (b) will take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon exercise of this Warrant.

17. NOTICES OF RECORD DATE. In case:

17.1 the Company shall take a record of the holders of its Common Stock (or other stock or securities at the time receivable upon the exercise of this Warrant), for the purpose of entitling them to receive any dividend or other distribution, or any right to subscribe for or purchase any shares of stock of any class or any other securities or to receive any other right; or

17.2 of any consolidation or merger of the Company with or into another corporation, any capital reorganization of the Company, any reclassification of the capital stock of the Company, or any conveyance of all or substantially all of the assets of the Company to another corporation in which holders of the Company's stock are to receive stock, securities or property of another corporation; or

17.3 of any voluntary dissolution, liquidation or winding-up of the Company; or

17.4 of any redemption or conversion of all outstanding Common Stock;

then, and in each such case, the Company will mail or cause to be mailed to the Registered Holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation, winding-up, redemption or conversion is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock or (such stock or securities as at the time are receivable upon the exercise of this Warrant), shall be entitled to exchange their shares of Common Stock (or such other stock or securities), for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. The Company shall use all reasonable efforts to ensure such notice shall be delivered at least thirty (30) days prior to the date therein specified.

18. SEVERABILITY. If any term, provision, covenant or restriction of this Warrant is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Warrant shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

19. COUNTERPARTS. For the convenience of the parties, any number of counterparts of this Warrant may be executed by the parties hereto and each such executed counterpart shall be, and shall be deemed to be, an original instrument.

20. NO INCONSISTENT AGREEMENTS. The Company will not on or after the date of this Warrant enter into any agreement with respect to its securities which is inconsistent with the rights granted to the Holders of this Warrant or otherwise conflicts with the provisions hereof. The rights granted to the Holders hereunder do not in any way conflict with and are not inconsistent with the rights granted to holders of the Company's securities under any other agreements, except rights that have been waived.

21. SATURDAYS, SUNDAYS AND HOLIDAYS. If the Expiration Date falls on a Saturday, Sunday or legal holiday, the Expiration Date shall automatically be extended until 5:00 p.m. the next business day.

22. ENTIRE AGREEMENT. This Warrant contains the sole and entire agreement and understanding of the parties with respect to the entire subject matter of this Warrant, and any and all prior discussions, negotiations, commitments and understandings, whether oral or otherwise, related to the subject matter of this Warrant are hereby merged herein.

[Signatures appear on following page.]

IN WITNESS WHEREOF , the parties hereto have executed this Warrant as of the Effective Date.

Holder:

Lixte Biotechnology Holdings, Inc.

BioPharmaWorks LLC

By: _____

By: _____

Robert Volkmann
Manager

John S. Kovach
President

Address: 1084 Shennecossett Road
Groton, Connecticut 06340

SIGNATURE PAGE TO WARRANT TO PURCHASE COMMON STOCK

Exhibit 4.02 - Page 9

Warrant No. 2

Exhibit A

NOTICE OF EXERCISE

(To be executed upon exercise of Warrant)

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, the securities of the Company, as provided for therein, and (check the applicable box):

tenders herewith payment of the exercise price in full in the form of cash or a certified or official bank check in same-day funds in the amount of \$ _____ for _____ such securities.

elects the [Net Issue Exercise][Easy Sale Exercise] option pursuant to Section 2.2 or 2.3 of the Warrant, and accordingly requests delivery of a net of _____ of such securities.

Please issue a certificate or certificates for such securities in the name of, and pay any cash for any fractional share to (please print name, address and social security number):

Name: _____

Address: _____

Signature: _____

Note: The above signature should correspond exactly with the name on the first page of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

If said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the shares purchasable thereunder rounded up to the next higher whole number of shares.

Exhibit B

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

For value received, hereby sells, assigns and transfers unto _____ the within Warrant Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint _____ attorney, to transfer said Warrant Certificate on the books of the within-named Company with respect to the number of Warrants set forth below, with full power of substitution in the premises:

| Name(s) of Assignee(s) | Address | # of Warrants |
|-------------------------------|----------------|----------------------|
|-------------------------------|----------------|----------------------|

And if said number of Warrants shall not be all the Warrants represented by the Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the Warrants registered by said Warrant Certificate.

Dated: _____

Signature: _____

Notice: The signature to the foregoing Assignment must correspond to the name as written upon the face of this security in every particular, without alteration or any change whatsoever; signature(s) must be guaranteed by an eligible guarantor institution (banks, stock brokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program) pursuant to Securities and Exchange Commission Rule 17Ad-15.

**Collaboration Agreement between the Company
and BioPharmaWorks LLC**

THIS COLLABORATION AGREEMENT (this “Agreement”) is made and entered into as of September __, 2015 (the “Effective Date”), by and between Lixte Biotechnology Holdings, Inc., a Delaware corporation (“Lixte”) and BioPharmaWorks LLC, a Connecticut limited liability company (“BioPharma”) with reference to the following:

Lixte wishes to engage BioPharma to work with Lixte in a collaborative mode to maximize the value of Lixte’s intellectual property, and, in connection therewith, to provide certain services, as hereinafter defined, and BioPharma has agreed to provide the services in accordance with the terms and conditions of this Agreement.

NOW THEREFORE, for good and valuable consideration, including the herein promises, covenants, agreements, representations and warranties, the receipt and legal sufficiency of which is hereby acknowledged, accepted and agreed to, Lixte and BioPharma, intending to be legally bound, hereby agree as follows:

1. BioPharma hereby agrees to perform the services (the “Services”) as set forth on Schedule A. This Agreement shall apply to any and all Services performed pursuant hereto. BioPharma shall take all reasonable steps to become knowledgeable with Lixte’s patent portfolio (currently consisting of 22 issued or pending applications) and additional existing and to be developed preclinical data on potential drug candidates.

2. Unless sooner terminated pursuant to Section 7 hereof, this Agreement shall be deemed effective as of the Effective Date, and shall continue in full force and effect for an initial period of two (2) years from such Date and shall automatically renew for subsequent annual periods unless terminated by a party pursuant to written notice delivered to the other party not less than 60 days prior to the expiration of the applicable annual period.

3. In consideration of the Services to be rendered hereunder, the following shall apply:

(a) Lixte hereby grants and shall promptly issue to BioPharma 1,000,000 shares of Lixte Common Stock (the “Shares”) vesting on the Effective Date, it being understood that BioPharma shall have the right to designate up to six employees of BioPharma to receive up to an aggregate of 60,000 Shares subject to such employees executing a representation letter in form and substance satisfactory to Lixte.

(b) Lixte hereby grants BioPharma five-year warrants to purchase 1,000,000 Shares (the “Warrants”) in the form of Exhibit A and Exhibit B attached hereto divided into two tranches:

(i) Warrants to purchase 500,000 shares at \$1.00/share vesting on the first anniversary of the Effective Date, provided the Agreement is then still in force and effect.

(ii) Warrants to purchase 500,000 shares at \$2.00/share vesting on the second anniversary of the Effective Date, provided the Agreement is then still in force and effect.

(c) Lixte shall pay BioPharma a monthly fee of \$10,000 payable within fifteen business days after receipt of an invoice from BioPharma, provided that Lixte shall have the right to cancel the monthly payment plan and negotiate an hourly rate for individual tasks mutually agreed upon by BioPharma and Lixte.

4. BioPharma shall keep in strictest confidence and shall not, without the prior written authorization of Lixte, publish, disclose, disseminate or use for any purpose other than as contemplated by this Agreement any and all information disclosed to or developed by BioPharma in connection with this Agreement or with providing any Services performed hereunder (collectively the “Information”). This obligation of non-disclosure and non-use shall not apply to Information which: (i) is, at the time of disclosure or thereafter, becomes publicly available through no fault of BioPharma; (ii) BioPharma can demonstrate through competent written records was in its possession before receipt; (iii) is disclosed to BioPharma by a third party with the legal right to do so; or (iv) is required to be disclosed pursuant to judicial process, court order or administrative request, provided that BioPharma shall so notify Lixte sufficiently prior to disclosing such Information as to permit Lixte to seek a protective order. BioPharma shall ensure that each of its employees, subcontractors, consultants, and agents who have access to Information understand the confidential nature thereof and agree to be bound by the obligations set forth in this Section 4. BioPharma shall not have any publication rights and all of the same shall belong to Lixte.

5. All information, data, reports, writings, ideas, inventions and other work product, in any form whatsoever, both tangible and intangible, developed as a result of BioPharma’s performance of the Services (collectively, the “Works”), shall be the sole and exclusive property of Lixte. BioPharma hereby assigns, and to the extent any such assignment cannot be made at present hereby agrees to timely assign to Lixte and further agrees to cause its employees to assign to Lixte all rights, title and interest in and to any such Works. All such assignments now and in the future shall be immediately made when requested by Lixte and shall be made without any additional consideration or fee. During the term of this Agreement or at any time after the termination thereof, at the request of Lixte, BioPharma shall make, or cause its employees to make promptly, or cooperate in the making thereof, an application for United States letters patent and foreign letters patent or for copyright registration on any materials BioPharma may develop in the course of performing the Services and developing the Works contemplated by this Agreement. Furthermore, BioPharma shall assign, or shall cause its employees and all others involved with or who participated in providing the Services, to assign, to Lixte or its designee: (i) any such application for copyright registration or for letters patent and patents issuing thereon; (ii) any other rights arising out of the Works; and (iii) any other intellectual property rights arising out of or related to this Agreement.

For avoidance of doubt, BioPharma agrees that any theory, discovery, invention, formulation, know-how, method, technology, development, confidential information, enhancement, modification, improvement or trade secret owned by or licensed to Lixte as of the Effective Date or at any time during the Term of this Agreement, shall remain exclusively owned or licensed by Lixte (the “Lixte Background Intellectual Property”). In addition, any and all discoveries, inventions or improvements thereto, together with any enhancements, additions, trade secrets or know-how created, developed, conceived or reduced to practice by BioPharma (whether patentable or not), during the term of this Agreement and in the performance, directly or indirectly, of the Services (the “Services IP”) shall be solely owned by Lixte, and BioPharma shall execute or cause the execution of any agreement reasonably requested by Lixte to evidence the foregoing, including, without limitation, obtaining from BioPharma’s employees or consultants appropriate assignments of Services IP.

6. BioPharma shall be identified on Lixte’s web site and as appropriate in Lixte’s press releases (subject to the reasonable approval by BioPharma) as a participant and collaborator of Lixte in Lixte’s drug discovery, development and commercialization.

7. This Agreement may be terminated by a party in the event that: (i) the other party becomes insolvent or is unable to pay its debts as they become due, or a petition in bankruptcy or for reorganization is filed by or against it, or a receiver is appointed of the whole or any substantial portion of its property; or (ii) the other party is in material breach of its obligations hereunder, which breach remains uncured for ten (10) business days following receipt of written notice from the other specifying the breach, then the other party shall have the right to immediately terminate this Agreement, without prejudice to its other rights or remedies, by written notice of such election.

8. BioPharma shall perform the Services: (i) in a first class professional manner in accordance with the terms and conditions of this Agreement, (ii) in conformance with that level of care and skill ordinarily exercised in similar circumstances by providers of the same or similar services and (iii) in compliance with all applicable federal, state and local laws, rules, regulations, orders, ordinances and binding obligations. BioPharma warrants that BioPharma is presently, and will remain, for the term of this Agreement and any extension thereof, free from any commitments or conflicts of interest that would impair BioPharma from rendering its undivided loyalty to Lixte or providing the Services in an accurate and timely manner as directed by Lixte and shall devote such time and effort as reasonably required to provide the Services hereunder. BioPharma shall require any subcontractors or consultants retained to assist BioPharma in the performance of this Agreement to agree to maintain itself free from conflicts of interest pursuant to terms substantially similar to those set forth in this Section 8.

9. BioPharma shall not subcontract this Agreement or any portion thereof, without the prior written approval of Lixte. Any such approval shall not relieve BioPharma of its obligations under this Agreement. Further, BioPharma may not assign, delegate or transfer any of its rights or obligations under this Agreement without the written consent of Lixte. Any attempted assignment, delegation or transfer in breach of this Section 9 shall be null and void.

10. Any Services performed by BioPharma for Lixte under this Agreement are to be performed by BioPharma in BioPharma's capacity as an independent contractor. Neither BioPharma nor its employees, agents or representatives are employees of Lixte, and BioPharma shall have no right to enter into any agreement which binds or otherwise commits Lixte to any obligation. BioPharma retains the sole right to hire, discipline, evaluate and terminate its own employees and to set their hours, wages and terms and conditions of employment in accordance with law and BioPharma's obligations herein. All income, employment and other similar taxes required to be withheld and/or paid with respect to all services provided hereunder will be timely paid by BioPharma directly to the appropriate governmental agency. The employees, representatives or agents of BioPharma are not entitled to and will not receive from Lixte in connection with the Services, any benefits normally provided by Lixte to its employees. BioPharma agrees to defend, indemnify and hold Lixte harmless against any claim that Lixte is jointly or severally liable or obligated to BioPharma's employees, agents, employees' representative, a benefit plan or any governmental fund or entity on the basis of a statute, regulation or common law duty relating to employment.

11. Except as set forth in Schedule A or as otherwise approved by Lixte, BioPharma shall be responsible for all expenses and costs in providing the Services hereunder.

12. All notices required or permitted hereunder shall be given in writing and sent by facsimile transmission, or mailed postage prepaid by certified or registered mail, or sent by a nationally recognized express courier service, or hand delivered at the following addresses:

To Lixte: Lixte Biotechnology Holdings, Inc.
248 Route 25A, No. 2
East Setauket, New York 11733
Attention: President
Email: JKovach@Lixte.com

With a copy to: TroyGould PC
1801 Century Park East, Suite 1600
Los Angeles, California 90067
Attention: David L. Ficksman, Esq.
Email: DFicksman@TroyGould.com

To BioPharma: BioPharmaWorks LLC
1084 Shennecossett Road
Groton, Connecticut 06340
Attention: Robert Volkmann
Email: ravolkmann@gmail.com

Any notice, if mailed properly addressed, postage prepaid, shall be deemed made three (3) days after the date of mailing as indicated on the certified or registered mail receipt, or on the next business day if sent by express courier service or on the date of delivery or transmission if hand delivered or sent by electronic transmission.

13. BioPharma hereby confirms, that the Shares, the Warrants and any shares of Common Stock issuable upon exercise of the Warrants (the “ Warrant Shares ”) to be issued by BioPharma hereunder will be acquired for investment for BioPharma’s own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that BioPharma has no present intention of selling, granting any participation in, or otherwise distributing the same. BioPharma further represents that BioPharma does not presently have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Shares, the Warrants or the Warrant Shares (collectively, the “ Securities ”). BioPharma understands that the Securities have not been, and will not be, registered under the Securities Act of 1933, as amended (the “ Securities Act ”), by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of BioPharma’s representations as expressed herein. BioPharma understands that the Securities are “restricted securities” under applicable U.S. federal and state securities laws and that, pursuant to these laws, BioPharma must hold the Securities indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. BioPharma acknowledges that Lixte has no obligation to register or qualify the Securities for resale. BioPharma further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Securities, and on requirements relating to Lixte which are outside of BioPharma’s control, and which Lixte is under no obligation and may not be able to satisfy. BioPharma understands that the Securities may bear a restricted legend . BioPharma is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

14. No Shares, including any Shares issued to employees of BioPharma pursuant to Section 3(a) or transferred pursuant to the provisions of this Section 14 and the Warrant Shares, may be sold, exchanged, assigned, pledged or otherwise disposed of for a period of two years from the Effective Date except in connection with estate planning purposes. Notwithstanding the foregoing or the provisions of Section 13, a portion of the Securities may be transferred by BioPharma to its employees, consultants or members subject to any such transferee executing a representation letter in form and substance satisfactory to Lixte.

15. Any controversy or dispute arising during under this Agreement, which is not settled between the parties within 30 days, shall be settled by binding arbitration in New York, New York, according to the commercial arbitration rules of the American Arbitration Association. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York without regard to principles of conflicts of law. In the event of litigation relating to the subject matter of this Agreement (whether in contract, tort, or otherwise), the non-prevailing party shall reimburse the prevailing party for all reasonable attorney fees and costs resulting therefrom.

16. This Agreement represents the entire understanding of the parties with respect to the subject matter hereof and merge and supersedes all prior and contemporaneous agreements or understandings, oral or written, with respect thereto. This Agreement shall not be modified except by a written agreement signed by the parties hereto specifying that it is a modification to the Agreement. The failure of a party to insist upon strict adherence to any term of this Agreement on any occasion shall not be considered a waiver or deprive that party of the right to insist upon strict adherence to that term or any other term of this Agreement. Any waiver must be in writing and signed by the party making the waiver. The invalidity or unenforceability of any term or provision of this Agreement shall not affect the validity or enforceability of any other term or provision hereof.

17. The provisions of Sections 4, 5, 7, 10, 13, 14 and 15 shall survive the expiration or termination of this Agreement.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized representatives as of the day and year first above written, This Agreement may be executed in multiple counterparts which shall be deemed to be an original and collectively shall constitute one Agreement.

Lixte Biotechnology Holdings, Inc.

By:

John Kovach, M.D.
President and Chief Executive Officer

BioPharmaWorks LLC

By:

Name: Robert Volkmann
Title: Manager

SCHEDULE A

- (1) Assist Lixte with prioritization of steps to commercialize its products.
- (2) Advise Lixte as to steps to strengthen its present and future patent portfolio.
- (3) Be available for consultation in drug discovery and development ranging from chemical and biochemical characterization to patent review as needed by Lixte
- (4) Identify providers and oversee the quality and accomplishment of specific tasks needed for meeting the requirements of the FDA and the pharmaceutical industry for clinical use and commercialization of new compounds. BioPharma will manage specific projects such as the synthesis and evaluation of new compounds by outside experts. The costs of specific physical tasks-drug synthesis and biochemical and biological characterization are the responsibility of Lixte.
- (5) Assist Lixte in identifying and gaining entrée to large pharmaceutical companies with potential interest in Lixte products.
- (6) Assist Lixte in preparing and, as appropriate, delivering presentations concerning Lixte's products to regulatory agencies, pharmaceutical companies, and other interested parties including potential investors.
- (7) Assist in advising the Board of Directors of Lixte with respect to Lixte's scientific program for a period of up to 3 months in the event that the CEO and scientific leader of Lixte is unable to carry out this duty.
- (8) Provide a monthly report to Lixte of its activities under this Agreement.

THE WARRANT EVIDENCED OR CONSTITUTED HEREBY, AND ALL SHARES OF COMMON STOCK ISSUABLE HEREUNDER, HAVE BEEN AND WILL BE ISSUED WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND MAY NOT BE SOLD, OFFERED FOR SALE, TRANSFERRED, PLEDGED OR HYPOTHECATED WITHOUT REGISTRATION UNDER THE ACT UNLESS EITHER (i) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH DISPOSITION OR (ii) THE SALE OF SUCH SECURITIES IS MADE PURSUANT TO SEC RULE 144.

WARRANT TO PURCHASE COMMON STOCK
OF
LIXTE BIOTECHNOLOGY HOLDINGS, INC.

September 14, 2015

THIS CERTIFIES THAT, for value received BioPharmaWorks LLC (“Holder”) is entitled, subject to the terms and conditions of this Warrant, at any time or from time to time after the first anniversary of the issuance date of this Warrant (the “Effective Date”), and before 5:00 p.m., Eastern Time, on the fifth (5th) anniversary of the date hereof (the “Expiration Date”), to purchase from the Company, 500,000 shares of Common Stock of Lixte Biotechnology Holdings, Inc. (the “Company”) at a price per share equal to \$1.00 (the “Purchase Price”). Both the number of shares of Common Stock purchasable upon exercise of this Warrant and the Purchase Price are subject to adjustment and change as provided herein.

1. **CERTAIN DEFINITIONS** . As used in this Warrant the following terms shall have the following respective meanings:

1.1 “Fair Market Value” of a share of Common Stock as of a particular date shall mean:

(a) If traded on a securities exchange or the Nasdaq National Market, the Fair Market Value shall be deemed to be the average of the closing prices of the Common Stock of the Company on such exchange or market over the five (5) trading days ending immediately prior to the applicable date of valuation;

(b) If actively traded over-the-counter, the Fair Market Value shall be deemed to be the average of the closing bid prices over the thirty (30)-day period ending immediately prior to the applicable date of valuation; and

(c) If there is no active public market, the Fair Market Value shall be the value thereof, as agreed upon by the Company and the Holder; *provided, however* , that if the Company and the Holder cannot agree on such value, such value shall be determined by an independent valuation firm experienced in valuing businesses such as the Company and jointly selected in good faith by the Company and the Holder. Fees and expenses of the valuation firm shall be paid for by the Company.

1.2 “Registered Holder” shall mean any Holder in whose name this Warrant is registered upon the books and records maintained by the Company.

1.3 “Warrant” as used herein, shall include this Warrant and any warrant delivered in substitution or exchange therefor as provided herein.

1.4 “Common Stock” shall mean the Common Stock of the Company and any other securities at any time receivable or issuable upon exercise of this Warrant.

2. EXERCISE OF WARRANT .

2.1 Payment. Subject to compliance with the terms and conditions of this Warrant and applicable securities laws, this Warrant may be exercised, in whole or in part at any time or from time to time, on or before the Expiration Date by (a) the delivery (including, without limitation, delivery by facsimile) of the form of Notice of Exercise attached hereto as Exhibit A (the “Notice of Exercise”), duly executed by the Holder, at the principal office of the Company, and (b) as soon as practicable after such date, surrendering

(a) this Warrant at the principal office of the Company, and

(b) payment, in cash (by check) or by wire transfer, of an amount equal to the product obtained by multiplying the number of shares of Common Stock being purchased upon such exercise by the then effective Purchase Price (the “Exercise Amount”).

2.2 Net Issue Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, the Holder may elect to exchange all or some of this Warrant for shares of Common Stock equal to the value of the amount of the Warrant being exchanged on the date of exchange. If Holder elects to exchange this Warrant as provided in this Section 2.2, Holder shall tender to the Company the Warrant for the amount being exchanged, along with written notice of Holder’s election to exchange some or all of the Warrant, and the Company shall issue to Holder the number of shares of the Common Stock computed using the following formula:

$$X = \frac{Y (A-B)}{A}$$

Where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock purchasable under the amount of the Warrant being exchanged (as adjusted to the date of such calculation).

A = the Fair Market Value of one share of the Common Stock.

B = Purchase Price (as adjusted to the date of such calculation).

2.3 “Easy Sale” Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, when permitted by law and applicable regulations (including Nasdaq and NASD rules), the Holder may pay the Purchase Price through a “same day sale” commitment from the Holder (and if applicable a broker-dealer (a “Dealer”)), whereby the Holder irrevocably elects to exercise this Warrant and to sell a portion of the shares so purchased to pay the Purchase Price and the Holder (or, if applicable, a Dealer) commits upon sale (or, in the case of a Dealer, upon receipt) of such shares to forward the Purchase Price directly to the Company.

2.4 Stock Certificates; Fractional Shares. As soon as practicable on or after the date of any exercise of this Warrant, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of whole shares of Common Stock issuable upon such exercise. No fractional shares or scrip representing fractional shares shall be issued upon an exercise of this Warrant.

2.5 Partial Exercise; Effective Date of Exercise. In case of any partial exercise of this Warrant, the Company shall cancel this Warrant upon surrender hereof and shall execute and deliver a new Warrant of like tenor and date for the balance of the shares of Common Stock purchasable hereunder. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above. The person entitled to receive the shares of Common Stock issuable upon exercise of this Warrant shall be treated for all purposes as the holder of record of such shares as of the close of business on the date the Holder is deemed to have exercised this Warrant.

2.6 Vesting. This Warrant shall vest fully upon the first anniversary of the date of issuance.

3. VALID ISSUANCE: TAXES. All shares of Common Stock issued upon the exercise of this Warrant shall be validly issued, fully paid and nonassessable, and the Company shall pay all taxes and other governmental charges that may be imposed in respect of the issue or delivery thereof. The Company shall not be required to pay any tax or other charge imposed in connection with any transfer involved in the issuance of any certificate for shares of Common Stock in any name other than that of the Registered Holder of this Warrant, and in such case the Company shall not be required to issue or deliver any stock certificate or security until such tax or other charge has been paid, or it has been established to the Company's reasonable satisfaction that no tax or other charge is due.

4. ADJUSTMENT OF PURCHASE PRICE AND NUMBER OF SHARES. The number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities or property receivable or issuable upon exercise of this Warrant) and the Purchase Price are subject to adjustment upon occurrence of the following events:

4.1 Adjustment for Stock Splits, Stock Subdivisions or Combinations of Shares. The Purchase Price of this Warrant shall be proportionally decreased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally increased to reflect any stock split or subdivision of the Company's Common Stock. The Purchase Price of this Warrant shall be proportionally increased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally decreased to reflect any combination of the Company's Common Stock.

4.2 Adjustment for Dividends or Distributions of Stock or Other Securities or Property. In case the Company shall make or issue, or shall fix a record date for the determination of eligible holders entitled to receive, a dividend or other distribution with respect to the Common Stock (or any shares of stock or other securities at the time issuable upon exercise of the Warrant) payable in (a) securities of the Company or (b) assets (excluding cash dividends paid or payable solely out of retained earnings), then, in each such case, the Holder of this Warrant on exercise hereof at any time after the consummation, effective date or record date of such dividend or other distribution, shall receive, in addition to the shares of Common Stock (or such other stock or securities) issuable on such exercise prior to such date, and without the payment of additional consideration therefor, the securities or such other assets of the Company to which such Holder would have been entitled upon such date if such Holder had exercised this Warrant on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such additional securities or other assets distributed with respect to such shares as aforesaid during such period giving effect to all adjustments called for by this Section 4.

4.3 Reclassification. If the Company, by reclassification of securities or otherwise, shall change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change, and the Purchase Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 4. No adjustment shall be made pursuant to this Section 4.3 upon any conversion or redemption of the Common Stock, which is the subject of Section 4.5.

4.4 Adjustment for Capital Reorganization, Merger or Consolidation. In case of any capital reorganization of the capital stock of the Company (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or any merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all the assets of the Company then, and in each such case, as a part of such reorganization, merger, consolidation, sale or transfer, lawful provision shall be made so that the Holder of this Warrant shall thereafter be entitled to receive upon exercise of this Warrant, during the period specified herein and upon payment of the Purchase Price then in effect, the number of shares of stock or other securities or property of the successor corporation resulting from such reorganization, merger, consolidation, sale or transfer that a holder of the shares deliverable upon exercise of this Warrant would have been entitled to receive in such reorganization, consolidation, merger, sale or transfer if this Warrant had been exercised immediately before such reorganization, merger, consolidation, sale or transfer, all subject to further adjustment as provided in this Section 4. The foregoing provisions of this Section 4.4 shall similarly apply to successive reorganizations, consolidations, mergers, sales and transfers and to the stock or securities of any other corporation that are at the time receivable upon the exercise of this Warrant. If the per-share consideration payable to the Holder hereof for shares in connection with any such transaction is in a form other than cash or marketable securities, then the value of such consideration shall be determined in good faith by the Company's Board of Directors. In all events, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the transaction, to the end that the provisions of this Warrant shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after that event upon exercise of this Warrant.

4.5 Conversion of Common Stock. In case all or any portion of the authorized and outstanding shares of Common Stock of the Company are redeemed or converted or reclassified into other securities or property pursuant to the Company's Certificate of Incorporation or otherwise, or the Common Stock otherwise ceases to exist, then, in such case, the Holder of this Warrant, upon exercise hereof at any time after the date on which the Common Stock is so redeemed or converted, reclassified or ceases to exist (the "Termination Date"), shall receive, in lieu of the number of shares of Common Stock that would have been issuable upon such exercise immediately prior to the Termination Date, the securities or property that would have been received if this Warrant had been exercised in full and the Common Stock received thereupon had been simultaneously converted immediately prior to the Termination Date, all subject to further adjustment as provided in this Warrant. Additionally, the Purchase Price shall be immediately adjusted to equal the quotient obtained by dividing (x) the aggregate Purchase Price of the maximum number of shares of Common Stock for which this Warrant was exercisable immediately prior to the Termination Date by (y) the number of shares of Common Stock of the Company for which this Warrant is exercisable immediately after the Termination Date, all subject to further adjustment as provided herein.

5. CERTIFICATE AS TO ADJUSTMENTS. In each case of any adjustment in the Purchase Price, or number or type of shares issuable upon exercise of this Warrant, the Chief Financial Officer or Controller of the Company shall compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment and showing in detail the facts upon which such adjustment is based, including a statement of the adjusted Purchase Price. The Company shall promptly send (by facsimile and by either first class mail, postage prepaid or overnight delivery) a copy of each such certificate to the Holder.

6. LOSS OR MUTILATION. Upon receipt of evidence reasonably satisfactory to the Company of the ownership of and the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to it, and (in the case of mutilation) upon surrender and cancellation of this Warrant, the Company will execute and deliver in lieu thereof a new Warrant of like tenor as the lost, stolen, destroyed or mutilated Warrant.

7. RESERVATION OF COMMON STOCK. The Company hereby covenants that at all times there shall be reserved for issuance and delivery upon exercise of this Warrant such number of shares of Common Stock or other shares of capital stock of the Company as are from time to time issuable upon exercise of this Warrant and, from time to time, will take all steps necessary to amend its Certificate of Incorporation to provide sufficient reserves of shares of Common Stock issuable upon exercise of this Warrant. All such shares shall be duly authorized, and when issued upon such exercise, shall be validly issued, fully paid and non-assessable, free and clear of all liens, security interests, charges and other encumbrances or restrictions on sale and free and clear of all preemptive rights, except encumbrances or restrictions arising under federal or state securities laws. Issuance of this Warrant shall constitute full authority to the Company's Officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

8. TRANSFER AND EXCHANGE. Subject to the terms and conditions of this Warrant and compliance with all applicable securities laws, this Warrant and all rights hereunder may be transferred to any Registered Holder's parent, subsidiary or affiliate, in whole or in part, on the books of the Company maintained for such purpose at the principal office of the Company referred to above, by the Registered Holder hereof in person, or by duly authorized attorney, upon surrender of this Warrant properly endorsed and upon payment of any necessary transfer tax or other governmental charge imposed upon such transfer. Upon any permitted partial transfer, the Company will issue and deliver to the Registered Holder a new Warrant or Warrants with respect to the shares of Common Stock not so transferred. Each taker and holder of this Warrant, by taking or holding the same, consents and agrees that when this Warrant shall have been so endorsed, the person in possession of this Warrant may be treated by the Company, and all other persons dealing with this Warrant, as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, any notice to the contrary notwithstanding; *provided, however*, that until a transfer of this Warrant is duly registered on the books of the Company, the Company may treat the Registered Holder hereof as the owner for all purposes. Any other transfer shall require the approval of the Company in its sole discretion.

9. RESTRICTIONS ON TRANSFER. The Holder, by acceptance hereof, agrees that, absent an effective registration statement filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act") covering the disposition or sale of this Warrant or the Common Stock issued or issuable upon exercise hereof, as the case may be, and registration or qualification under applicable state securities laws, such Holder will not sell, transfer, pledge, or hypothecate any or all of this Warrant or such Common Stock, as the case may be, unless either (i) the Company has received an opinion of counsel, in form and substance reasonably satisfactory to the Company, to the effect that such registration is not required in connection with such disposition or (ii) the sale of such securities is made pursuant to SEC Rule 144. Notwithstanding the foregoing, it is understood that the Holder may transfer a portion of this Warrant to employees or consultants of Holder.

10. COMPLIANCE WITH SECURITIES LAWS. By acceptance of this Warrant, the Holder hereby represents, warrants and covenants that any shares of stock purchased upon exercise of this Warrant shall be acquired for investment only and not with a view to, or for sale in connection with, any distribution thereof; that the Holder has had such opportunity as such Holder has deemed adequate to obtain from representatives of the Company such information as is necessary to permit the Holder to evaluate the merits and risks of its investment in the Company; that the Holder is able to bear the economic risk of holding such shares as may be acquired pursuant to the exercise of this Warrant for an indefinite period; that the Holder understands that the shares of stock acquired pursuant to the exercise of this Warrant will not be registered under the Securities Act (unless otherwise required pursuant to exercise by the Holder of the registration rights, if any, granted to the Registered Holder) and will be “restricted securities” within the meaning of Rule 144 under the Securities Act and that the exemption from registration under Rule 144 will not be available for at least one (1) year from the date of exercise of this Warrant, subject to any special treatment by the SEC for exercise of this Warrant pursuant to Section 2.2, and even then will not be available unless a public market then exists for the stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and that all stock certificates representing shares of stock issued to the Holder upon exercise of this Warrant or upon conversion of such shares may have affixed thereto a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

11. NO RIGHTS OR LIABILITIES AS STOCKHOLDERS. This Warrant shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company. In the absence of affirmative action by such Holder to purchase Common Stock by exercise of this Warrant or Common Stock upon conversion thereof, no provisions of this Warrant, and no enumeration herein of the rights or privileges of the Holder hereof shall cause such Holder hereof to be a stockholder of the Company for any purpose.

12. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby represents and warrants to Holder that:

12.1 Due Authorization; Consents. All corporate action on the part of the Company, its officers, directors and stockholders necessary for (a) the authorization, execution and delivery of, and the performance of all obligations of the Company under, this Warrant, and (b) the authorization, issuance, reservation for issuance and delivery of all of the Common Stock issuable upon exercise of this Warrant, has been duly taken. This Warrant constitutes a valid and binding obligation of the Company enforceable in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors' rights generally and to general equitable principles. All consents, approvals and authorizations of, and registrations, qualifications and filings with, any federal or state governmental agency, authority or body, or any third party, required in connection with the execution, delivery and performance of this Warrant and the consummation of the transactions contemplated hereby and thereby have been obtained.

12.2 Organization. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power to own, lease and operate its property and to carry on its business as now being conducted and as currently proposed to be conducted.

12.3 Valid Issuance of Stock. The outstanding shares of the capital stock of the Company are duly and validly issued, fully paid and nonassessable, and such shares, and all outstanding options and other securities of the Company, have been issued in full compliance with the registration and prospectus delivery requirements of the Securities Act and the registration and qualification requirements of all applicable state securities laws, or in compliance with applicable exemptions therefrom, and all other provisions of applicable federal and state securities laws, including without limitation, anti-fraud provisions.

12.4 Governmental Consents. All consents, approvals, orders, authorizations or registrations, qualifications, declarations or filings with any federal or state governmental authority on the part of the Company required in connection with the consummation of the transactions contemplated herein shall have been obtained prior to and be effective as of the Effective Date.

13. NOTICES. Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other party; (b) when received when sent by facsimile at the address and number set forth below; (c) three business days after deposit in the U.S. mail with first class or certified mail receipt requested postage prepaid and addressed to the other party as set forth below; or (d) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the parties as set forth below with next-business-day delivery guaranteed, provided that the sending party receives a confirmation of delivery from the delivery service provider.

To the Company :

Lixte Biotechnology Holdings, Inc.
248 Route 25A, No. 2
East Setauket, New York 11733
Attn: John S. Kovach

To the Holder :

The address on the signature page hereto

Each person making a communication hereunder by facsimile shall promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity of any such communication. A party may change or supplement the addresses given above, or designate additional addresses, for purposes of this Section 13 by giving the other party written notice of the new address in the manner set forth above.

14. HEADINGS. The headings in this Warrant are for purposes of convenience in reference only, and shall not be deemed to constitute a part hereof.

15. LAW GOVERNING. This Warrant shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, with regard to conflict of law principles of such state.

16. NO IMPAIRMENT. The Company will not, by amendment of its Certificate of Incorporation or bylaws, or through reorganization, consolidation, merger, dissolution, issue or sale of securities, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Registered Holder of this Warrant against impairment. Without limiting the generality of the foregoing, the Company (a) will not increase the par value of any shares of stock issuable upon the exercise of this Warrant above the amount payable therefor upon such exercise, and (b) will take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon exercise of this Warrant.

17. NOTICES OF RECORD DATE. In case:

17.1 the Company shall take a record of the holders of its Common Stock (or other stock or securities at the time receivable upon the exercise of this Warrant), for the purpose of entitling them to receive any dividend or other distribution, or any right to subscribe for or purchase any shares of stock of any class or any other securities or to receive any other right; or

17.2 of any consolidation or merger of the Company with or into another corporation, any capital reorganization of the Company, any reclassification of the capital stock of the Company, or any conveyance of all or substantially all of the assets of the Company to another corporation in which holders of the Company's stock are to receive stock, securities or property of another corporation; or

17.3 of any voluntary dissolution, liquidation or winding-up of the Company; or

17.4 of any redemption or conversion of all outstanding Common Stock;

then, and in each such case, the Company will mail or cause to be mailed to the Registered Holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation, winding-up, redemption or conversion is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock or (such stock or securities as at the time are receivable upon the exercise of this Warrant), shall be entitled to exchange their shares of Common Stock (or such other stock or securities), for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. The Company shall use all reasonable efforts to ensure such notice shall be delivered at least thirty (30) days prior to the date therein specified.

18. SEVERABILITY. If any term, provision, covenant or restriction of this Warrant is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Warrant shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

19. COUNTERPARTS. For the convenience of the parties, any number of counterparts of this Warrant may be executed by the parties hereto and each such executed counterpart shall be, and shall be deemed to be, an original instrument.

20. NO INCONSISTENT AGREEMENTS. The Company will not on or after the date of this Warrant enter into any agreement with respect to its securities which is inconsistent with the rights granted to the Holders of this Warrant or otherwise conflicts with the provisions hereof. The rights granted to the Holders hereunder do not in any way conflict with and are not inconsistent with the rights granted to holders of the Company's securities under any other agreements, except rights that have been waived.

21. SATURDAYS, SUNDAYS AND HOLIDAYS. If the Expiration Date falls on a Saturday, Sunday or legal holiday, the Expiration Date shall automatically be extended until 5:00 p.m. the next business day.

22. ENTIRE AGREEMENT. This Warrant contains the sole and entire agreement and understanding of the parties with respect to the entire subject matter of this Warrant, and any and all prior discussions, negotiations, commitments and understandings, whether oral or otherwise, related to the subject matter of this Warrant are hereby merged herein.

[Signatures appear on following page.]

Exhibit A to
Collaboration Agreement
Page 9

IN WITNESS WHEREOF , the parties hereto have executed this Warrant as of the Effective Date.

Holder:

Lixte Biotechnology Holdings, Inc.

BioPharmaWorks LLC

By: _____
Robert Volkmann
Manager

By: _____
John S. Kovach
President

Address: 1084 Shennecossett Road
Groton, Connecticut 06340

SIGNATURE PAGE TO WARRANT TO PURCHASE COMMON STOCK

Exhibit A to
Collaboration Agreement
Page 10

Exhibit A

NOTICE OF EXERCISE

(To be executed upon exercise of Warrant)

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, the securities of the Company, as provided for therein, and (check the applicable box):

tenders herewith payment of the exercise price in full in the form of cash or a certified or official bank check in same-day funds in the amount of \$ _____ for _____ such securities.

elects the [Net Issue Exercise][Easy Sale Exercise] option pursuant to Section 2.2 or 2.3 of the Warrant, and accordingly requests delivery of a net of _____ of such securities.

Please issue a certificate or certificates for such securities in the name of, and pay any cash for any fractional share to (please print name, address and social security number):

Name: _____

Address: _____

Signature: _____

Note: The above signature should correspond exactly with the name on the first page of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

If said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the shares purchasable thereunder rounded up to the next higher whole number of shares.

Exhibit B

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

For value received, hereby sells, assigns and transfers unto _____ the within Warrant Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint _____ attorney, to transfer said Warrant Certificate on the books of the within-named Company with respect to the number of Warrants set forth below, with full power of substitution in the premises:

| Name(s) of Assignee(s) | Address | # of Warrants |
|-------------------------------|----------------|----------------------|
|-------------------------------|----------------|----------------------|

And if said number of Warrants shall not be all the Warrants represented by the Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the Warrants registered by said Warrant Certificate.

Dated: _____

Signature: _____

Notice: The signature to the foregoing Assignment must correspond to the name as written upon the face of this security in every particular, without alteration or any change whatsoever; signature(s) must be guaranteed by an eligible guarantor institution (banks, stock brokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program) pursuant to Securities and Exchange Commission Rule 17Ad-15.

THE WARRANT EVIDENCED OR CONSTITUTED HEREBY, AND ALL SHARES OF COMMON STOCK ISSUABLE HEREUNDER, HAVE BEEN AND WILL BE ISSUED WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND MAY NOT BE SOLD, OFFERED FOR SALE, TRANSFERRED, PLEDGED OR HYPOTHECATED WITHOUT REGISTRATION UNDER THE ACT UNLESS EITHER (i) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH DISPOSITION OR (ii) THE SALE OF SUCH SECURITIES IS MADE PURSUANT TO SEC RULE 144.

WARRANT TO PURCHASE COMMON STOCK

OF

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

September 14, 2015

THIS CERTIFIES THAT, for value received BioPharmaWorks LLC (“Holder”) is entitled, subject to the terms and conditions of this Warrant, at any time or from time to time after the second anniversary of the issuance date of this Warrant (the “Effective Date”), and before 5:00 p.m., Eastern Time, on the fifth (5th) anniversary of the date hereof (the “Expiration Date”), to purchase from the Company, 500,000 shares of Common Stock of Lixte Biotechnology Holdings, Inc. (the “Company”) at a price per share equal to \$2.00 (the “Purchase Price”). Both the number of shares of Common Stock purchasable upon exercise of this Warrant and the Purchase Price are subject to adjustment and change as provided herein.

1. **CERTAIN DEFINITIONS** . As used in this Warrant the following terms shall have the following respective meanings:

1.1 “Fair Market Value” of a share of Common Stock as of a particular date shall mean:

(a) If traded on a securities exchange or the Nasdaq National Market, the Fair Market Value shall be deemed to be the average of the closing prices of the Common Stock of the Company on such exchange or market over the five (5) trading days ending immediately prior to the applicable date of valuation;

(b) If actively traded over-the-counter, the Fair Market Value shall be deemed to be the average of the closing bid prices over the thirty (30)-day period ending immediately prior to the applicable date of valuation; and

(c) If there is no active public market, the Fair Market Value shall be the value thereof, as agreed upon by the Company and the Holder; *provided, however* , that if the Company and the Holder cannot agree on such value, such value shall be determined by an independent valuation firm experienced in valuing businesses such as the Company and jointly selected in good faith by the Company and the Holder. Fees and expenses of the valuation firm shall be paid for by the Company.

1.2 “Registered Holder” shall mean any Holder in whose name this Warrant is registered upon the books and records maintained by the Company.

1.3 “Warrant” as used herein, shall include this Warrant and any warrant delivered in substitution or exchange therefor as provided herein.

1.4 “Common Stock” shall mean the Common Stock of the Company and any other securities at any time receivable or issuable upon exercise of this Warrant.

2. EXERCISE OF WARRANT .

2.1 Payment. Subject to compliance with the terms and conditions of this Warrant and applicable securities laws, this Warrant may be exercised, in whole or in part at any time or from time to time, on or before the Expiration Date by (a) the delivery (including, without limitation, delivery by facsimile) of the form of Notice of Exercise attached hereto as Exhibit A (the “Notice of Exercise”), duly executed by the Holder, at the principal office of the Company, and (b) as soon as practicable after such date, surrendering

(a) this Warrant at the principal office of the Company, and

(b) payment, in cash (by check) or by wire transfer, of an amount equal to the product obtained by multiplying the number of shares of Common Stock being purchased upon such exercise by the then effective Purchase Price (the “Exercise Amount”).

2.2 Net Issue Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, the Holder may elect to exchange all or some of this Warrant for shares of Common Stock equal to the value of the amount of the Warrant being exchanged on the date of exchange. If Holder elects to exchange this Warrant as provided in this Section 2.2, Holder shall tender to the Company the Warrant for the amount being exchanged, along with written notice of Holder’s election to exchange some or all of the Warrant, and the Company shall issue to Holder the number of shares of the Common Stock computed using the following formula:

$$X = \frac{Y (A-B)}{A}$$

Where: X = the number of shares of Common Stock to be issued to Holder.

Y = the number of shares of Common Stock purchasable under the amount of the Warrant being exchanged (as adjusted to the date of such calculation).

A = the Fair Market Value of one share of the Common Stock.

B = Purchase Price (as adjusted to the date of such calculation).

2.3 “Easy Sale” Exercise. In lieu of the payment methods set forth in Section 2.1(b) above, when permitted by law and applicable regulations (including Nasdaq and NASD rules), the Holder may pay the Purchase Price through a “same day sale” commitment from the Holder (and if applicable a broker-dealer (a “Dealer”)), whereby the Holder irrevocably elects to exercise this Warrant and to sell a portion of the shares so purchased to pay the Purchase Price and the Holder (or, if applicable, a Dealer) commits upon sale (or, in the case of a Dealer, upon receipt) of such shares to forward the Purchase Price directly to the Company.

2.4 Stock Certificates; Fractional Shares. As soon as practicable on or after the date of any exercise of this Warrant, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for the number of whole shares of Common Stock issuable upon such exercise. No fractional shares or scrip representing fractional shares shall be issued upon an exercise of this Warrant.

2.5 Partial Exercise; Effective Date of Exercise. In case of any partial exercise of this Warrant, the Company shall cancel this Warrant upon surrender hereof and shall execute and deliver a new Warrant of like tenor and date for the balance of the shares of Common Stock purchasable hereunder. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above. The person entitled to receive the shares of Common Stock issuable upon exercise of this Warrant shall be treated for all purposes as the holder of record of such shares as of the close of business on the date the Holder is deemed to have exercised this Warrant.

2.6 Vesting. This Warrant shall vest fully upon the second anniversary of the date of issuance, provided the Collaboration Agreement dated as of the date hereof between the Company and Holder is then in full force and effect.

3. VALID ISSUANCE: TAXES. All shares of Common Stock issued upon the exercise of this Warrant shall be validly issued, fully paid and nonassessable, and the Company shall pay all taxes and other governmental charges that may be imposed in respect of the issue or delivery thereof. The Company shall not be required to pay any tax or other charge imposed in connection with any transfer involved in the issuance of any certificate for shares of Common Stock in any name other than that of the Registered Holder of this Warrant, and in such case the Company shall not be required to issue or deliver any stock certificate or security until such tax or other charge has been paid, or it has been established to the Company's reasonable satisfaction that no tax or other charge is due.

4. ADJUSTMENT OF PURCHASE PRICE AND NUMBER OF SHARES. The number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities or property receivable or issuable upon exercise of this Warrant) and the Purchase Price are subject to adjustment upon occurrence of the following events:

4.1 Adjustment for Stock Splits, Stock Subdivisions or Combinations of Shares. The Purchase Price of this Warrant shall be proportionally decreased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally increased to reflect any stock split or subdivision of the Company's Common Stock. The Purchase Price of this Warrant shall be proportionally increased and the number of shares of Common Stock issuable upon exercise of this Warrant (or any shares of stock or other securities at the time issuable upon exercise of this Warrant) shall be proportionally decreased to reflect any combination of the Company's Common Stock.

4.2 Adjustment for Dividends or Distributions of Stock or Other Securities or Property. In case the Company shall make or issue, or shall fix a record date for the determination of eligible holders entitled to receive, a dividend or other distribution with respect to the Common Stock (or any shares of stock or other securities at the time issuable upon exercise of the Warrant) payable in (a) securities of the Company or (b) assets (excluding cash dividends paid or payable solely out of retained earnings), then, in each such case, the Holder of this Warrant on exercise hereof at any time after the consummation, effective date or record date of such dividend or other distribution, shall receive, in addition to the shares of Common Stock (or such other stock or securities) issuable on such exercise prior to such date, and without the payment of additional consideration therefor, the securities or such other assets of the Company to which such Holder would have been entitled upon such date if such Holder had exercised this Warrant on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and all such additional securities or other assets distributed with respect to such shares as aforesaid during such period giving effect to all adjustments called for by this Section 4.

4.3 Reclassification. If the Company, by reclassification of securities or otherwise, shall change any of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, this Warrant shall thereafter represent the right to acquire such number and kind of securities as would have been issuable as the result of such change with respect to the securities that were subject to the purchase rights under this Warrant immediately prior to such reclassification or other change, and the Purchase Price therefor shall be appropriately adjusted, all subject to further adjustment as provided in this Section 4. No adjustment shall be made pursuant to this Section 4.3 upon any conversion or redemption of the Common Stock, which is the subject of Section 4.5.

4.4 Adjustment for Capital Reorganization, Merger or Consolidation. In case of any capital reorganization of the capital stock of the Company (other than a combination, reclassification, exchange or subdivision of shares otherwise provided for herein), or any merger or consolidation of the Company with or into another corporation, or the sale of all or substantially all the assets of the Company then, and in each such case, as a part of such reorganization, merger, consolidation, sale or transfer, lawful provision shall be made so that the Holder of this Warrant shall thereafter be entitled to receive upon exercise of this Warrant, during the period specified herein and upon payment of the Purchase Price then in effect, the number of shares of stock or other securities or property of the successor corporation resulting from such reorganization, merger, consolidation, sale or transfer that a holder of the shares deliverable upon exercise of this Warrant would have been entitled to receive in such reorganization, consolidation, merger, sale or transfer if this Warrant had been exercised immediately before such reorganization, merger, consolidation, sale or transfer, all subject to further adjustment as provided in this Section 4. The foregoing provisions of this Section 4.4 shall similarly apply to successive reorganizations, consolidations, mergers, sales and transfers and to the stock or securities of any other corporation that are at the time receivable upon the exercise of this Warrant. If the per-share consideration payable to the Holder hereof for shares in connection with any such transaction is in a form other than cash or marketable securities, then the value of such consideration shall be determined in good faith by the Company's Board of Directors. In all events, appropriate adjustment (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the transaction, to the end that the provisions of this Warrant shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after that event upon exercise of this Warrant.

4.5 Conversion of Common Stock. In case all or any portion of the authorized and outstanding shares of Common Stock of the Company are redeemed or converted or reclassified into other securities or property pursuant to the Company's Certificate of Incorporation or otherwise, or the Common Stock otherwise ceases to exist, then, in such case, the Holder of this Warrant, upon exercise hereof at any time after the date on which the Common Stock is so redeemed or converted, reclassified or ceases to exist (the "Termination Date"), shall receive, in lieu of the number of shares of Common Stock that would have been issuable upon such exercise immediately prior to the Termination Date, the securities or property that would have been received if this Warrant had been exercised in full and the Common Stock received thereupon had been simultaneously converted immediately prior to the Termination Date, all subject to further adjustment as provided in this Warrant. Additionally, the Purchase Price shall be immediately adjusted to equal the quotient obtained by dividing (x) the aggregate Purchase Price of the maximum number of shares of Common Stock for which this Warrant was exercisable immediately prior to the Termination Date by (y) the number of shares of Common Stock of the Company for which this Warrant is exercisable immediately after the Termination Date, all subject to further adjustment as provided herein.

5. CERTIFICATE AS TO ADJUSTMENTS. In each case of any adjustment in the Purchase Price, or number or type of shares issuable upon exercise of this Warrant, the Chief Financial Officer or Controller of the Company shall compute such adjustment in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment and showing in detail the facts upon which such adjustment is based, including a statement of the adjusted Purchase Price. The Company shall promptly send (by facsimile and by either first class mail, postage prepaid or overnight delivery) a copy of each such certificate to the Holder.

6. LOSS OR MUTILATION. Upon receipt of evidence reasonably satisfactory to the Company of the ownership of and the loss, theft, destruction or mutilation of this Warrant, and of indemnity reasonably satisfactory to it, and (in the case of mutilation) upon surrender and cancellation of this Warrant, the Company will execute and deliver in lieu thereof a new Warrant of like tenor as the lost, stolen, destroyed or mutilated Warrant.

7. RESERVATION OF COMMON STOCK. The Company hereby covenants that at all times there shall be reserved for issuance and delivery upon exercise of this Warrant such number of shares of Common Stock or other shares of capital stock of the Company as are from time to time issuable upon exercise of this Warrant and, from time to time, will take all steps necessary to amend its Certificate of Incorporation to provide sufficient reserves of shares of Common Stock issuable upon exercise of this Warrant. All such shares shall be duly authorized, and when issued upon such exercise, shall be validly issued, fully paid and non-assessable, free and clear of all liens, security interests, charges and other encumbrances or restrictions on sale and free and clear of all preemptive rights, except encumbrances or restrictions arising under federal or state securities laws. Issuance of this Warrant shall constitute full authority to the Company's Officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for shares of Common Stock upon the exercise of this Warrant.

8. TRANSFER AND EXCHANGE. Subject to the terms and conditions of this Warrant and compliance with all applicable securities laws, this Warrant and all rights hereunder may be transferred to any Registered Holder's parent, subsidiary or affiliate, in whole or in part, on the books of the Company maintained for such purpose at the principal office of the Company referred to above, by the Registered Holder hereof in person, or by duly authorized attorney, upon surrender of this Warrant properly endorsed and upon payment of any necessary transfer tax or other governmental charge imposed upon such transfer. Upon any permitted partial transfer, the Company will issue and deliver to the Registered Holder a new Warrant or Warrants with respect to the shares of Common Stock not so transferred. Each taker and holder of this Warrant, by taking or holding the same, consents and agrees that when this Warrant shall have been so endorsed, the person in possession of this Warrant may be treated by the Company, and all other persons dealing with this Warrant, as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, any notice to the contrary notwithstanding; *provided, however*, that until a transfer of this Warrant is duly registered on the books of the Company, the Company may treat the Registered Holder hereof as the owner for all purposes. Any other transfer shall require the approval of the Company in its sole discretion.

9. RESTRICTIONS ON TRANSFER. The Holder, by acceptance hereof, agrees that, absent an effective registration statement filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act") covering the disposition or sale of this Warrant or the Common Stock issued or issuable upon exercise hereof, as the case may be, and registration or qualification under applicable state securities laws, such Holder will not sell, transfer, pledge, or hypothecate any or all of this Warrant or such Common Stock, as the case may be, unless either (i) the Company has received an opinion of counsel, in form and substance reasonably satisfactory to the Company, to the effect that such registration is not required in connection with such disposition or (ii) the sale of such securities is made pursuant to SEC Rule 144. Notwithstanding the foregoing, it is understood that the Holder may transfer a portion of this Warrant to employees or consultants of Holder.

10. COMPLIANCE WITH SECURITIES LAWS. By acceptance of this Warrant, the Holder hereby represents, warrants and covenants that any shares of stock purchased upon exercise of this Warrant shall be acquired for investment only and not with a view to, or for sale in connection with, any distribution thereof; that the Holder has had such opportunity as such Holder has deemed adequate to obtain from representatives of the Company such information as is necessary to permit the Holder to evaluate the merits and risks of its investment in the Company; that the Holder is able to bear the economic risk of holding such shares as may be acquired pursuant to the exercise of this Warrant for an indefinite period; that the Holder understands that the shares of stock acquired pursuant to the exercise of this Warrant will not be registered under the Securities Act (unless otherwise required pursuant to exercise by the Holder of the registration rights, if any, granted to the Registered Holder) and will be “restricted securities” within the meaning of Rule 144 under the Securities Act and that the exemption from registration under Rule 144 will not be available for at least one (1) year from the date of exercise of this Warrant, subject to any special treatment by the SEC for exercise of this Warrant pursuant to Section 2.2, and even then will not be available unless a public market then exists for the stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and that all stock certificates representing shares of stock issued to the Holder upon exercise of this Warrant or upon conversion of such shares may have affixed thereto a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY MAY BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

11. NO RIGHTS OR LIABILITIES AS STOCKHOLDERS. This Warrant shall not entitle the Holder to any voting rights or other rights as a stockholder of the Company. In the absence of affirmative action by such Holder to purchase Common Stock by exercise of this Warrant or Common Stock upon conversion thereof, no provisions of this Warrant, and no enumeration herein of the rights or privileges of the Holder hereof shall cause such Holder hereof to be a stockholder of the Company for any purpose.

12. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby represents and warrants to Holder that:

12.1 Due Authorization; Consents. All corporate action on the part of the Company, its officers, directors and stockholders necessary for (a) the authorization, execution and delivery of, and the performance of all obligations of the Company under, this Warrant, and (b) the authorization, issuance, reservation for issuance and delivery of all of the Common Stock issuable upon exercise of this Warrant, has been duly taken. This Warrant constitutes a valid and binding obligation of the Company enforceable in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors' rights generally and to general equitable principles. All consents, approvals and authorizations of, and registrations, qualifications and filings with, any federal or state governmental agency, authority or body, or any third party, required in connection with the execution, delivery and performance of this Warrant and the consummation of the transactions contemplated hereby and thereby have been obtained.

12.2 Organization. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power to own, lease and operate its property and to carry on its business as now being conducted and as currently proposed to be conducted.

12.3 Valid Issuance of Stock. The outstanding shares of the capital stock of the Company are duly and validly issued, fully paid and nonassessable, and such shares, and all outstanding options and other securities of the Company, have been issued in full compliance with the registration and prospectus delivery requirements of the Securities Act and the registration and qualification requirements of all applicable state securities laws, or in compliance with applicable exemptions therefrom, and all other provisions of applicable federal and state securities laws, including without limitation, anti-fraud provisions.

12.4 Governmental Consents. All consents, approvals, orders, authorizations or registrations, qualifications, declarations or filings with any federal or state governmental authority on the part of the Company required in connection with the consummation of the transactions contemplated herein shall have been obtained prior to and be effective as of the Effective Date.

13. NOTICES. Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other party; (b) when received when sent by facsimile at the address and number set forth below; (c) three business days after deposit in the U.S. mail with first class or certified mail receipt requested postage prepaid and addressed to the other party as set forth below; or (d) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the parties as set forth below with next-business-day delivery guaranteed, provided that the sending party receives a confirmation of delivery from the delivery service provider.

To the Company :

Lixte Biotechnology Holdings, Inc.
248 Route 25A, No. 2
East Setauket, New York 11733
Attn: John S. Kovach

To the Holder :

The address on the signature page hereto

Each person making a communication hereunder by facsimile shall promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity of any such communication. A party may change or supplement the addresses given above, or designate additional addresses, for purposes of this Section 13 by giving the other party written notice of the new address in the manner set forth above.

14. HEADINGS. The headings in this Warrant are for purposes of convenience in reference only, and shall not be deemed to constitute a part hereof.

15. LAW GOVERNING. This Warrant shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, with regard to conflict of law principles of such state.

16. NO IMPAIRMENT. The Company will not, by amendment of its Certificate of Incorporation or bylaws, or through reorganization, consolidation, merger, dissolution, issue or sale of securities, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Registered Holder of this Warrant against impairment. Without limiting the generality of the foregoing, the Company (a) will not increase the par value of any shares of stock issuable upon the exercise of this Warrant above the amount payable therefor upon such exercise, and (b) will take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon exercise of this Warrant.

17. NOTICES OF RECORD DATE. In case:

17.1 the Company shall take a record of the holders of its Common Stock (or other stock or securities at the time receivable upon the exercise of this Warrant), for the purpose of entitling them to receive any dividend or other distribution, or any right to subscribe for or purchase any shares of stock of any class or any other securities or to receive any other right; or

17.2 of any consolidation or merger of the Company with or into another corporation, any capital reorganization of the Company, any reclassification of the capital stock of the Company, or any conveyance of all or substantially all of the assets of the Company to another corporation in which holders of the Company's stock are to receive stock, securities or property of another corporation; or

17.3 of any voluntary dissolution, liquidation or winding-up of the Company; or

17.4 of any redemption or conversion of all outstanding Common Stock;

then, and in each such case, the Company will mail or cause to be mailed to the Registered Holder of this Warrant a notice specifying, as the case may be, (i) the date on which a record is to be taken for the purpose of such dividend, distribution or right, or (ii) the date on which such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation, winding-up, redemption or conversion is to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock or (such stock or securities as at the time are receivable upon the exercise of this Warrant), shall be entitled to exchange their shares of Common Stock (or such other stock or securities), for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, conveyance, dissolution, liquidation or winding-up. The Company shall use all reasonable efforts to ensure such notice shall be delivered at least thirty (30) days prior to the date therein specified.

18. SEVERABILITY. If any term, provision, covenant or restriction of this Warrant is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Warrant shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

19. COUNTERPARTS. For the convenience of the parties, any number of counterparts of this Warrant may be executed by the parties hereto and each such executed counterpart shall be, and shall be deemed to be, an original instrument.

20. NO INCONSISTENT AGREEMENTS. The Company will not on or after the date of this Warrant enter into any agreement with respect to its securities which is inconsistent with the rights granted to the Holders of this Warrant or otherwise conflicts with the provisions hereof. The rights granted to the Holders hereunder do not in any way conflict with and are not inconsistent with the rights granted to holders of the Company's securities under any other agreements, except rights that have been waived.

21. SATURDAYS, SUNDAYS AND HOLIDAYS. If the Expiration Date falls on a Saturday, Sunday or legal holiday, the Expiration Date shall automatically be extended until 5:00 p.m. the next business day.

22. ENTIRE AGREEMENT. This Warrant contains the sole and entire agreement and understanding of the parties with respect to the entire subject matter of this Warrant, and any and all prior discussions, negotiations, commitments and understandings, whether oral or otherwise, related to the subject matter of this Warrant are hereby merged herein.

[Signatures appear on following page.]

Exhibit B to
Collaboration Agreement
Page 9

IN WITNESS WHEREOF , the parties hereto have executed this Warrant as of the Effective Date.

Holder:

Lixte Biotechnology Holdings, Inc.

BioPharmaWorks LLC

By: _____

By: _____

Robert Volkmann
Manager

John S. Kovach
President

Address: 1084 Shennecossett Road
Groton, Connecticut 06340

SIGNATURE PAGE TO WARRANT TO PURCHASE COMMON STOCK

Exhibit B to
Collaboration Agreement
Page 10

Exhibit A

NOTICE OF EXERCISE

(To be executed upon exercise of Warrant)

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, the securities of the Company, as provided for therein, and (check the applicable box):

tenders herewith payment of the exercise price in full in the form of cash or a certified or official bank check in same-day funds in the amount of \$ _____ for _____ such securities.

elects the [Net Issue Exercise][Easy Sale Exercise] option pursuant to Section 2.2 or 2.3 of the Warrant, and accordingly requests delivery of a net of _____ of such securities.

Please issue a certificate or certificates for such securities in the name of, and pay any cash for any fractional share to (please print name, address and social security number):

Name: _____

Address: _____

Signature: _____

Note: The above signature should correspond exactly with the name on the first page of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

If said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the shares purchasable thereunder rounded up to the next higher whole number of shares.

Exhibit B

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

For value received, hereby sells, assigns and transfers unto _____ the within Warrant Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint _____ attorney, to transfer said Warrant Certificate on the books of the within-named Company with respect to the number of Warrants set forth below, with full power of substitution in the premises:

| Name(s) of Assignee(s) | Address | # of Warrants |
|-------------------------------|----------------|----------------------|
|-------------------------------|----------------|----------------------|

And if said number of Warrants shall not be all the Warrants represented by the Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the Warrants registered by said Warrant Certificate.

Dated: _____

Signature: _____

Notice: The signature to the foregoing Assignment must correspond to the name as written upon the face of this security in every particular, without alteration or any change whatsoever; signature(s) must be guaranteed by an eligible guarantor institution (banks, stock brokers, savings and loan associations and credit unions with membership in an approved signature guarantee medallion program) pursuant to Securities and Exchange Commission Rule 17Ad-15.

PRESS RELEASE**LIXTE BIOTECHNOLOGY HOLDINGS, INC. ENGAGES BIOPHARMAWORKS LLC TO ENHANCE DEVELOPMENT OF ITS PIPELINE OF NOVEL COMPOUNDS**

East Setauket, N.Y., September 17, 2015 - Lixte Biotechnology Holdings, Inc. (OTCQB: LIXT) (“Lixte” or the “Company”) has engaged the services of BioPharmaWorks LLC (“BioPharmaWorks”) to enhance the value of its clinical candidate portfolio. The scientific team at BioPharmaWorks (www.biopharmaworks.com) provides expertise in multiple aspects of drug discovery, development and intellectual property.

Dr. John Kovach, founder and president of Lixte, commented, “BioPharmaWorks brings exceptional expertise in virtually all aspects of drug development, ranging from drug design, synthesis, pharmacokinetics and metabolism to intellectual property law, biostatistics and predictive toxicology. The BioPharmaWorks scientific team will be working closely with Lixte management to bring their expertise to Lixte, just as Lixte’s lead compound, LB-100, is nearing completion of its initial studies in patients.”

Added Dr. Kovach, “Lixte has emphasized the potential importance of its protein phosphatase inhibitors to the treatment of a variety of cancer types. These compounds also have potential applications to important non-neoplastic diseases, as do Lixte’s proprietary histone deacetylase inhibitors (HDACi). Some of these applications relate to chronic neurological disorders, an area in which BioPharmaWorks has special expertise. Lixte’s immediate task is to determine the most efficient approach to capitalizing on the clinical results of its nearly completed Phase I clinical trial of LB-100 as it moves into Phase II cancer studies and to complete pre-clinical development of other members of the Company’s pipeline, including the HDACi. Adding expertise in both the strategic development of compounds and their protection is an area of critical importance to Lixte, which now has 23 allowed patents and a larger number pending in various stages.”

About Lixte Biotechnology Holdings, Inc.

Lixte is a drug discovery company that uses biomarker technology to identify enzyme targets associated with serious common diseases and then design novel compounds to attack those targets. Lixte’s product pipeline encompasses two major categories of compounds at various stages of pre-clinical and clinical development which the Company believes have broad therapeutic potential not only for cancer but for other debilitating and life-threatening diseases. Lixte’s unique phosphatase inhibitor, LB-100, is in a Phase I clinical trial at two NCI designated Comprehensive Cancer Centers and three US Oncology Research sites (see ClinicalTrials.gov: Identifier NCT01837667).

Forward-Looking Statements

This announcement 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 Company’s filings with the United States Securities and Exchange Commission at www.edgar.com.

Additional information on the Company is available at www.lixte.com.

Corporate Contact:

Eric J. Forman, Esq.
646-894-3135
eforman@lixte.com