

RESEARCH PARTNERSHIP AGREEMENT

WHEREAS GB Sciences Louisiana, LLC, ("**Sponsor**") and the Board of Supervisors of Louisiana State University and Agricultural and Mechanical College represented by the LSU Agricultural Center ("**LSUAC**") wish to provide for a research partnership ("**Project**") that is of mutual interest to the parties; and whereas the Project will further LSUAC's instructional and research objectives in a manner that is consistent with LSUAC's tax-exempt status and in accordance with allowances provided under Louisiana Revised Statutes 40:1046 and specifically section H(2)(c) thereof; and whereas the Project may result in discoveries and inventions that could be of mutual benefit to the parties;

THEREFORE Sponsor and LSUAC have entered into this Research Partnership Agreement (the "**Agreement**"), effective the first day of the Project Period defined below.

Article 1 - Definitions

- 1.1 "**Project**" means the project described in Appendix A, under the direction of Dr. Ted Gauthier as Principal Investigator ("**P.I.**").
- 1.2 "**Project Period**" ends September 30, 2018.

Article 2 - Research Work

- 2.1 Both parties shall use reasonable efforts to perform the Project substantially in accordance with the terms of this Agreement.
- 2.2 If the P.I. becomes unable or unwilling to continue the Project, and a mutually acceptable substitute is not available, LSUAC and Sponsor each shall have the option to terminate the Project.

Article 3 - Communication

- 3.1 Both parties will provide regular updates through phone and email correspondence.

Article 4 - Obligations

- 4.1 No funds will be exchanged or provided for this work.
- 4.2 Sponsor shall be solely responsible for: 1) contracting and completing any facility renovation required to carry out the Project and shall be solely responsible for any financial obligations related to said facility renovation. Prior to any facility renovation, Sponsor must obtain approval in writing from LSU for the plan of work. Any facility renovation is expected to essentially conform to those facility renovations plans set forth in the Proposal, attached hereto and incorporated herein; and 2) providing all materials and supplies necessary to complete the Project.

- 4.3 Sponsor shall retain title to any equipment purchased by Sponsor for the Project and thereafter located in LSUAC facilities as part of the Project, however all improvements, attachments and appurtenances, including facility renovations, shall become the sole property of LSUAC upon completion of the Project. In the event Sponsor elects to remove equipment to which Sponsor retains title at the conclusion of the Project, Sponsor shall be responsible for all costs and expenses associated with the removal of said equipment, including without limitation the repair and restoration of the LSUAC facilities to normal working order should removal of said equipment result in any LSUAC facilities coming into disrepair.
- 4.4 If Sponsor loans any equipment or supplies to LSUAC, Sponsor shall bear all risk of damage or loss to the equipment or supplies, except to the extent due to LSUAC's negligence, gross negligence, willful or intentional acts. Sponsor shall maintain all such equipment or supplies while in LSUAC's custody.

Article 5 - Publicity

- 5.1 Without prior written approval, neither party may make any use whatsoever of the name, marks, insignia, or logos of the other party, or of any of its campuses, departments, centers, institutes, or employees; whether in news releases, advertisements, promotional materials, or otherwise; except that: (1) LSUAC may acknowledge Sponsor as the source of funding for the Project; and (2) Sponsor may use LSUAC's name to the extent necessary to supply information whose disclosure may be required by law. However, in no circumstance may Sponsor state or imply that LSUAC endorses a particular investment, product, process, or treatment.

Article 6 - Publications

- 6.1 Whereas LSUAC is an institution of higher education, and whereas the freedom to publish is of cardinal importance to universities and to their personnel, it is understood that LSUAC, the P.I., and other LSUAC personnel shall be free to make such publications as they see fit concerning the Project, except as provided in Article 7 respecting Sponsor's Confidential Information. LSUAC shall own the copyright in such works, except to the extent that LSUAC's Bylaws waive ownership of copyright in favor of the authors.

Article 7 - Non-Disclosure

- 7.1 "**Confidential Information**" shall mean information that one party discloses to other, and that is conspicuously marked "**CONFIDENTIAL INFORMATION**." "**Confidential Information**" shall also include information that is initially disclosed orally -- provided that within seven days the information is reduced to writing, is conspicuously marked "**CONFIDENTIAL INFORMATION**," and a copy of the information thus marked is delivered to the receiving party. Each party shall hold the other party's Confidential Information in strict confidence, and shall not disclose it to any third party. Neither party shall use the other party's Confidential Information for any

purpose other than to perform its obligations under the Agreement, or to evaluate a potential license under Article 8. A receiving party shall use reasonable efforts not to disclose the other's Confidential Information, but neither party will be financially liable for an inadvertent disclosure. Should either party realize that an inadvertent disclosure to a third party has occurred, then the parties shall promptly confer to determine an appropriate course of action. On request by the other party, the party who has made an inadvertent disclosure shall promptly notify the third party that the disclosure was inadvertent, and shall request that the third party promptly return all copies of the disclosed Confidential Information.

- 7.2 This Agreement shall not be construed to prevent a party from disclosing information that: **(a)** at the time of receipt is public knowledge, or later becomes public knowledge through no fault of the receiving party; or **(b)** is shown by written records to have been in the possession of the receiving party prior to its disclosure; or **(c)** is received from a third party who neither directly nor indirectly obtained it from the providing party; or **(d)** is required to be disclosed by a court or government agency, or is reasonably believed by either party to have significant implications for public health or public safety -- provided in such a case that the providing party is given reasonable notice and opportunity to contest the disclosure.
- 7.3 These confidentiality obligations shall continue until five years after the termination of the Agreement.

Article 8 - Intellectual Property Rights

- 8.1 During the course, scope and execution of the Project and as related to intellectual property rights arising therefrom: LSUAC shall own each invention that is conceived solely by one or more LSUAC employees. Sponsor shall own each invention that is conceived solely by one or more Sponsor employees. LSUAC and Sponsor shall jointly own an invention that is jointly conceived by one or more LSUAC employees and by one or more Sponsor employees. Conception of an invention shall be determined in accordance with United States patent law. Any and all Funded Inventions arising from the performance of the Project shall be subject to the financial obligations and revenue sharing obligations for intellectual property contained in the Agreement for Services between the parties entered into September 14, 2017, including without limitation Section VI thereof and any subsequent written agreement of the parties so related. Sponsor shall retain ownership of all previously existing Sponsor intellectual property provided to LSUAC under this Agreement, however Sponsor hereby grants LSUAC a limited license to use said Sponsor intellectual property for the sole purpose of executing the Project.
- 8.2 A "**Funded Invention**" shall mean an invention owned by LSUAC (or subject to an obligation of assignment to LSUAC) that is first actually reduced to practice in the scope of the Project, during the Project Period, at a time when Sponsor's financial obligations to LSUAC are current. If LSUAC is a co-owner of an invention that otherwise satisfies this definition, then LSUAC's part-interest in the invention shall be considered a "**Funded Invention**."

- 8.3** “**Patent Rights**” shall mean LSUAC’s interest in any United States or non-United States patent application or issued patent whose specification is based, in whole or in part, on data obtained in the course of the Project, and whose claims are directed specifically to one or more Funded Inventions.
- 8.4** LSUAC shall promptly notify Sponsor of any new Funded Invention, subject to Article 7. LSUAC may file such patent applications within the Patent Rights as LSUAC in its sole discretion sees fit. Within 180 days after LSUAC notifies Sponsor of a Funded Invention arising within the scope of the Project (the “**Negotiation Period**”), on Sponsor's written request LSUAC and Sponsor shall negotiate in good faith to try to reach mutually agreeable terms for an exclusive or non-exclusive license to Sponsor related to said Funded Invention. Any such license agreement will provide for reasonable compensation to LSUAC; will establish reasonable minimum performance standards for Sponsor; and will include other standard LSUAC patent license provisions, including (by way of example) provisions concerning reimbursement of patenting expenses, restrictions on the use of LSUAC's name, indemnity, insurance, inflation, and disclaimers of warranties. However, neither party shall be obligated to enter into such a license agreement if mutually agreeable terms cannot be found; the obligation imposed by this Paragraph is an obligation only to negotiate in good faith. If no license agreement has been entered by LSUAC and Sponsor by the end of the Negotiation Period, then LSUAC shall be free to dispose of LSUAC's rights in those Patent Rights as LSUAC in its sole discretion sees fit, with no further obligation to Sponsor with respect to those rights.
- 8.5** LSUAC makes no representation or warranty that the use of information derived from the Project (whether under a license contemplated above or otherwise) will be free from infringement of patents or other rights of third parties. Sponsor shall have no rights arising from this Agreement in any LSUAC inventions or in any LSUAC intellectual property rights other than the specific rights in Funded Inventions that are specified above.

Article 9 - Term and Termination

- 9.1** This Agreement is effective for the Project Period, unless terminated earlier in accordance with its terms or extended by the mutual written agreement of the parties. Either party may terminate this Agreement on thirty days written notice.
- 9.2** If either party commits a material breach of this Agreement, and fails to remedy that breach within thirty days of written notice, the other party may, at its option, in addition to any other legal remedies, terminate this Agreement immediately upon written notice.
- 9.3** In the Court's discretion, the prevailing party in any dispute arising out of this Agreement may be awarded reasonable attorneys’ fees, court costs and expenses, including those associated with appellate or enforcement proceedings.
- 9.4** Termination of this Agreement for any reason shall not affect rights and obligations

accrued prior to termination, nor release the parties from their respective rights and obligations under Articles 4, 5, 6, 7, 8, 10, 11, 12, 13 and 14.

Article 10 - Independent Contractors

- 10.1** In the performance of all obligations under this Agreement: **(a)** Each party shall be an independent contractor. Neither party shall be entitled to any benefits applicable to employees of the other party. **(b)** Neither party is authorized to act as agent for the other for any purpose. Neither party shall enter into any contract, warranty, or representation as to any matter on behalf of the other party. Neither party shall be bound by the acts of the other party.
- 10.2** Each party represents that it is acting on its own account and not on behalf of another private or governmental party. Sponsor represents that none of the funding to be provided under this Agreement is derived from a contract or grant from the United States government. Neither this Agreement nor any rights under this Agreement may be assigned by either party without the prior written consent of the other party.

Article 11 – Insurance and Indemnity

11.1 Insurance Requirements

All insurance requirements outlined in final contract for Louisiana State University Agricultural and Mechanical College Solicitation RFQ-0000000165 shall remain obligations of the Sponsor.

- 11.2** All Sponsor property stored at Louisiana State University shall be at Sponsor's sole risk except for losses resulting solely from the negligence, gross negligence, willful or intentional acts of LSUAC. LSUAC does not take custody or control over the Sponsor's property that is stored at LSU in connection with this Agreement. LSUAC shall not be held responsible for loss or damage to any of Sponsor's property when such loss or damage is caused by the negligence of third parties, rodents, insects, or acts of God.

Sponsor property includes but is not limited to: equipment, laboratory supplies, plant materials, product, personal items.

- 11.3** LSUAC represents that LSUAC has adequate liability insurance, such protection being applicable to LSUAC's officers, employees, and agents while acting within the scope of their employment by LSUAC. LSUAC has no liability insurance as such that extends protection to any other person.
- 11.4** Each party shall indemnify, defend, and hold harmless the other party, and its officers, directors, agents and employees, from and against any and all losses, liabilities, demands, suits, judgments and claims, including reasonable attorneys' fees, to the extent that such losses, liabilities, demands, suits, judgments, claims, or fees are attributable to the willful act, fault, omission, or negligence of the indemnifying party, or of its employees,

servants, or agents, in performing its obligations under this Agreement; provided, however, that neither party shall hereby be liable for consequential damages.

- 11.5** Sponsor shall indemnify, defend, and hold harmless LSUAC and LSUAC's officers, directors, agents and employees, from and against any and all losses, liabilities, demands, suits, judgments and claims, including reasonable attorneys' fees, for losses arising out of the use, by Sponsor or by a third party acting with Sponsor's authorization, of products or processes developed or made as a result of information or materials received from LSUAC.

Article 12 - Chemicals or Biological Materials

- 12.1** If Sponsor supplies chemicals or biological materials ("**Materials**") to LSUAC, then on LSUAC's request Sponsor shall accept any unused portions of the Materials and any progeny of the Materials, including the containers in which the Materials are shipped. Further, for each Material supplied, Sponsor shall furnish LSUAC with sufficient information to identify precautions necessary to protect health and safety, including all pertinent material safety data sheets. Any and all costs of material disposal shall be made in compliance with governmental requirements and are the obligation of the Supplier.

Article 13 – Export Controls

- 13.1** Notwithstanding any other provision of this Agreement, the parties understand and agree that they are subject to, and agree to abide by, any and all applicable United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities. LSUAC's obligations hereunder are contingent on its ability to comply with applicable United States export and embargo laws and regulations. As an institution of higher learning, LSUAC does not wish to allow its employees to receive export-controlled information except as may be knowingly and expressly agreed to in writing and signed by an authorized LSUAC representative and for which LSUAC has made specific arrangements. Sponsor certifies that it will not provide or make accessible to LSUAC employees any export-controlled materials (including, without limitation, equipment, information and/or data) without first informing LSUAC of the export-controlled nature and classification of the materials or information and obtaining the LSUAC's authorized representative's written consent to accept such materials, as well as any specific instructions regarding the mechanism pursuant to which such materials should be passed to LSUAC. Notwithstanding the above, LSUAC reserves the right to decline the receipt of any export controlled materials and to terminate this agreement, in whole or in part, in the event that the research specified therein cannot be performed without export-controlled materials.

Article 14 - Miscellaneous

- 14.1** This Agreement shall be construed in accordance with the laws of the State of Louisiana.
- 14.2** Any controversy arising out of or related to this Agreement that cannot be resolved by the

parties shall be resolved pursuant to the terms and conditions contained in the “Services Agreement” identified in 14.3 below.

- 14.3** This Agreement constitutes the entire understanding between Sponsor and LSUAC regarding the Project, and supersedes any prior agreement or understanding related to the Project, however the terms of this Agreement are intended to be interpreted in light of that certain agreement between the parties entered into September 14, 2017 and entitled, “Services Agreement.” The obligations of the Sponsor under this Agreement are separate and apart from any obligations of the September 14, 2017 Services Agreement. Any modification, extension, or amendment to this Agreement shall not be effective unless reduced to writing and signed by both parties.
- 14.4** LSUAC makes no representation or warranty regarding what the results of the Project will be.
- 14.5** Nothing in this Agreement shall be construed to limit the freedom of the P.I. or any other LSUAC personnel from engaging in research in the same field that is covered by this Agreement. Sponsor acknowledges that the rights specified in this Agreement are subject to the rights of other sponsors in other research agreements to which LSUAC is a party.
- 14.6** Any otherwise irresolvable inconsistency shall be resolved by giving precedence in the following order: **(a)** first, to the main body of this Research Agreement, and **(b)** second, to the attached Statement of Work (Appendix A). This Agreement shall not be altered by the acknowledgement or acceptance by LSUAC of any purchase order form or similar document containing terms or conditions at variance with, or in addition to those set forth herein.
- 14.7** If any part of this Agreement is deemed void or unenforceable by a court of competent jurisdiction, the remaining provisions shall remain in full force and effect. Furthermore, in lieu of that invalid part, there shall be automatically added to this Agreement a provision as similar in terms to that invalid part as may be possible, legal, valid, and enforceable.

- 14.8** Notices, invoices, and other communications shall be deemed made if sent postage prepaid, addressed as shown below, or to such other address as a party may hereafter designate by written notice:

<p>If to Sponsor (Business Matter):</p> <p>John B. Davis President GB Sciences Louisiana, LLC 18350 Petroleum Drive Baton Rouge, LA 70809 Phone: 225-938-3305 Email: john.davis@gbsciences.com</p>	<p>If to LSUAC (Business Matter):</p> <p>W. Wade Baumgartner, Ph.D., J.D. Office of Sponsored Programs 104 J. Norman Efferson Hall 110 LSU Union Square Baton Rouge, Louisiana 70803-0106 Phone: 225-578-7742 Fax: 225-578-6032 Email: wbaumgartner@agcenter.lsu.edu</p> <p>With copy to:</p> <p>Ashley W. Mullens, Ph.D Office of the Vice President for Agriculture 101 J. Norman Efferson Hall 110 LSU Union Square Baton Rouge, Louisiana 70803-0106 Phone: 225-578-2906 Fax: 225-578-4143 Email: awmullens@agcenter.lsu.edu</p>
<p>If to Sponsor (Technical Matter):</p> <p>John B. Davis President GB Sciences Louisiana, LLC 18350 Petroleum Drive Baton Rouge, LA 70809 Phone: 225-938-3305 Email: john.davis@gbsciences.com</p>	<p>If to LSUAC (Technical Matter):</p> <p>Ashley W. Mullens, Ph.D Office of the Vice President for Agriculture 101 J. Norman Efferson Hall 110 LSU Union Square Baton Rouge, Louisiana 70803-0106 Phone: 225-578-2906 Fax: 225-578-4143 Email: awmullens@agcenter.lsu.edu</p>

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in duplicate.

GB Sciences Louisiana, LLC



BY: John B. Davis,
President

Date: May 4, 2018

**Board of Supervisors of
Louisiana State University
and Agricultural and Mechanical College**



BY: William B. Richardson,
Vice President for Agriculture

Date: May 4, 2018

Title: Developing a plant propagation system to clonally propagate *Cannabis*

PI: Dr. Ted Gauthier, LSU AgCenter

Co-PI: Dr. Ulrich Reimann-Philipp, GB Sciences Louisiana, LLC

Background/Hypothesis: *Cannabis sativa* is normally propagated through seeds or cuttings which vary genetically from each other. To develop a reliable source of raw material to extract specific bio-chemicals, each plant needs to be genetically identical. The method to achieve this is to develop a system to clonally propagate plants through tissue culture (TC). This research aims to produce clonally propagated *Cannabis* plants for controlled production of pharmaceutical compounds. Clonally propagated cultivars are susceptible to gradual genetic changes through random mutagenesis and loss through disease and pest infestation. A method to store genetically identical plant tissue culture for long periods of time is needed. Cryopreservation of tissue that can be regenerated to whole plants is the best method to preserve valuable genetic assets. **The hypothesis of this research proposal is that *Cannabis* can be clonally propagated via tissue culture and the subsequent tissues can be cryopreserved for future propagation.**

Objectives:

1. Propagate genetically certifiable *Cannabis* clones through plant TC.
2. Develop a method to cryopreserve *Cannabis* tissue for long term storage and regeneration to whole plants when needed.

Procedure:

1. *Shoot Regeneration and Multiplication:* Research at the LSU AgCenter will first concentrate on improving and expanding the plant TC methods developed by Dr. Ulrich Reimann-Philipp at GB Sciences in Nevada.
2. *Cryopreservation of Cannabis Tissue:* Based on existing methods of cryopreservation of tissue from other plant species, protocols will be established for preparing the *Cannabis* tissue culture for freezing, preserving viability during storage in liquid N₂, thawing and regenerating to viable plants.

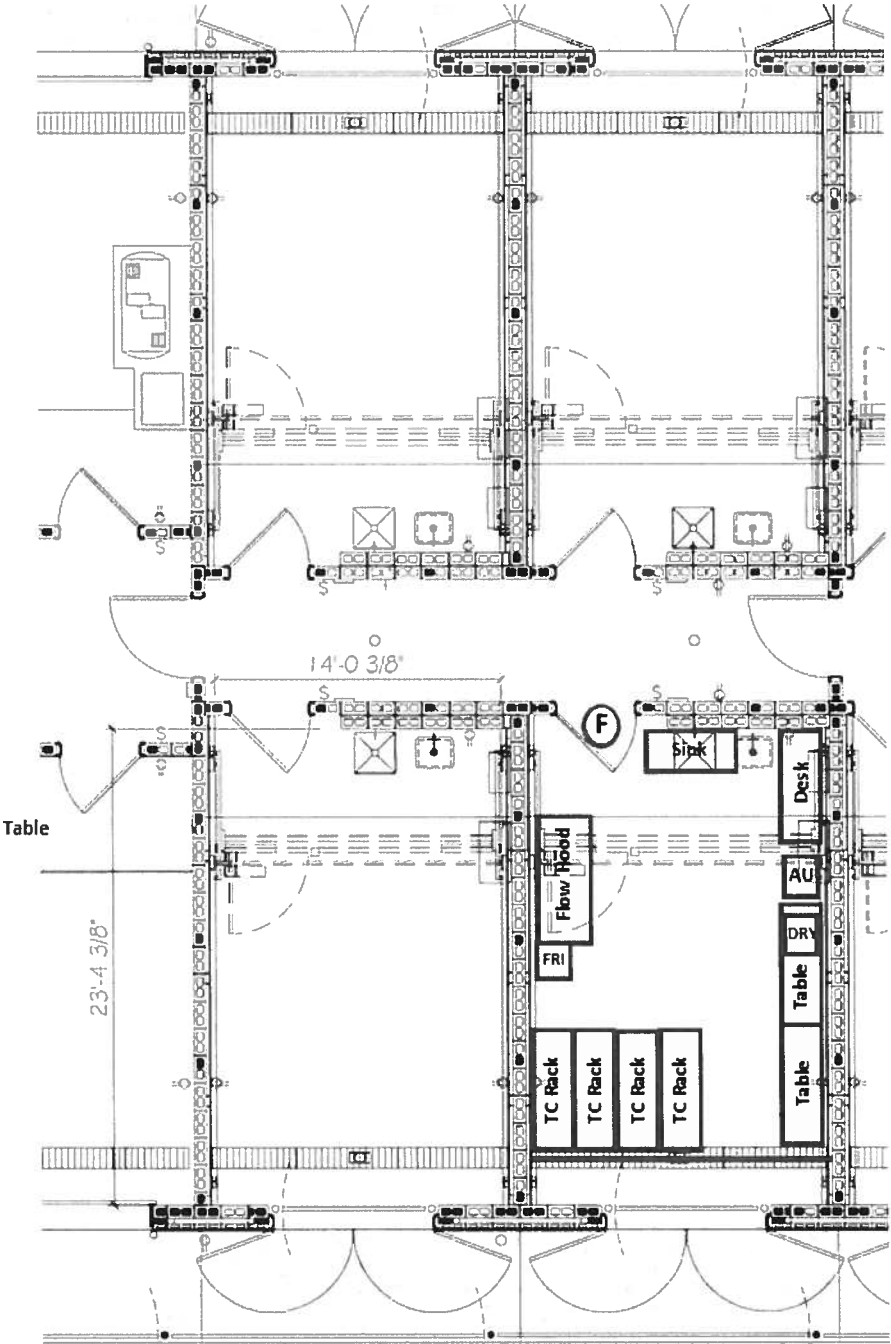
Facility

The laboratory will contain all necessary equipment for carrying out the proposed research. The entire facility is already fenced and equipped with a security/access control system. The door from the lab to the outside will be secured and sealed.

A second room in the facility will be considered for maintaining genetic stock plants in the future. A preliminary layout of the laboratory and floor plan are given below. Some slight modifications of the facility, which will be paid by GB

Sciences, are provided in the list below. A list of necessary equipment, which will be purchased by GB Sciences, is attached. Any consumables needed for this research project will be provided by GB Sciences. A database of all plant material will be maintained on site by GB Sciences. Plant waste will be rendered un-consumable by blending with bleach or isopropanol before disposal or incineration.

Preliminary Laboratory Layout



Facility Improvements

Data:	Data line to lab if wireless not available
Power:	minimum 8, 110V outlets 1 or 2, 220V outlet(s), depending on autoclave and flow hood
Power:	option
Sink:	Replace existing sink
Paint:	Paint room
Wall:	Move animal restrainer to roll-up door, install drywall (optional)
Wall:	Install wall mounted carbon/HEPA filter
Roll-up door:	Bolt shut and seal (foam?)
Access Control:	As needed
Security Camera:	Cover room, remote access