LSU LIFT\textsuperscript{2} Fund – Leveraging Innovation for Technology Transfer

Request for Proposals – Round Six

Release Date: February 22, 2017
Early Submission Dates: March 15, 2017, April 15, 2017
Final Due Date: May 15, 2017
Award Date: June 15, 2017
Submissions shall be made before 5 pm

1. PROGRAM DESCRIPTION
The LSU LIFT\textsuperscript{2} Fund was created by the LSU Board of Supervisors in January of 2014 to help “Leverage Innovation for Technology Transfer” across all the campuses of the LSU system. By permanently securing a portion of licensing income for the LSU LIFT\textsuperscript{2} Fund, LSU has ensured continual reinvestment in new innovation opportunities and affirmed its commitment to advancing discoveries for public benefit. Moving concepts closer to commercialization is the fundamental purpose of the LSU LIFT\textsuperscript{2} Fund.

A primary objective of technology transfer at LSU, like most other research universities nationwide, is the transition of innovations from the academy to the marketplace for public use and benefit. Many discoveries, however, require significant additional development to prove sufficient technical feasibility to attract commercial partners. Funding for this type of research is difficult to obtain from either government or private sources, leaving many promising innovations languishing in a funding gap often referred to as “the valley of death.” The LIFT\textsuperscript{2} Fund is specifically designed to increase the number of LSU innovations licensed to industry partners.

Grants awarded from the LIFT\textsuperscript{2} Fund will provide LSU’s entrepreneurial and creative community with small “proof-of-concept” funds to support further commercialization of innovations, help establish data which can support commercial feasibility of the innovations, and thus reduce the risk for companies interested in licensing them. “Innovations” are defined broadly, to include both creative and artistic works as well as devices, drugs, software, and other more traditional concepts; thus, faculty from all disciplines on all LSU campuses are encouraged to consider an application.

It is expected that some experiments to validate a proof-of-concept will fail. Such failures, however, should not be regarded as a failure of the LSU LIFT\textsuperscript{2} Fund purpose. It is better to be “fast to failure” if commercial potential for a concept cannot be demonstrated, so that future research efforts and funding can be re-directed to projects with a higher likelihood of success.

The LSU LIFT\textsuperscript{2} Fund will typically have two grant award cycles to faculty innovators per year, on a competitive basis, with individual grants in amounts up to $50,000. The grant funds must be used to further develop an innovation on record in an LSU campus technology transfer office (TTO) that has not yet been licensed, optioned or otherwise committed to a commercial partner. The LSU LIFT\textsuperscript{2} grants will
be time-limited and milestone-based, and awarded for applied research designed to validate the concept described by the innovation disclosure.

Please read all guidelines closely to assure full compliance with current program rules.

2. ELIGIBILITY

a. A full time LSU employee employed on any LSU campus, in any discipline, is eligible to submit an application for a LIFT² Grant if the proposal is to further develop and prove the concepts detailed in an innovation which previously has been disclosed to and is still actively being managed by the respective campus TTO.

b. LSU innovators who hold administrative appointments and who also maintain an active research program are eligible to apply for a LIFT² Grant.

c. LSU innovators who have an active LIFT² Grant shall not be eligible to apply for an additional LIFT² Grant until the open award has been completed in accord with all program rules and closed.

d. Proposals for basic research projects that do not further the commercial development of a previously disclosed innovation are not eligible and will not be considered.

e. Any proposal for a project to develop a previously disclosed innovation which is either (i) subject to an unexpired obligation under any university grant or contract or (ii) already licensed or optioned to a company at the time of application for a LIFT² Grant, are not eligible and will not be considered.

f. LSU innovators may submit only one application for a LIFT² Grant in each award cycle.

g. Each campus may establish further eligibility requirements for its own campus applicants in addition to those generally above.

3. TECHNOLOGY TRANSFER OFFICE LETTER OF ACKNOWLEDGEMENT

Each application for a LIFT² Grant must include a one-page letter of acknowledgement from the applicant’s primary campus technology transfer officer. This letter must contain the Sophia technology number and should confirm that (a) the innovation has been previously disclosed to the technology transfer office, (b) that the innovation is still under active management by that office and has not been relinquished or abandoned, (c) that the innovation is not otherwise encumbered, as described in section 2.e. above, and (d) the steps that have been or will be taken to protect the intellectual property developed from the innovation.

4. AWARD DESCRIPTION

In this Round 6 of the LSU LIFT² Fund, a maximum of $500,000 will be available to support proof-of-concept activities to further prepare innovations for commercialization including any awards made to
early submissions. There is no guarantee of either the amount of funding available or the number of awards in future grant cycles. Grants will be awarded in amounts up to $50,000, although projects requesting $25,000-$30,000 are strongly encouraged.

The application for a LIFT² Grant should be submitted electronically by the Principal Investigator, along with all required documentation to the email address listed on the application instruction page below. It is the responsibility of each applicant to ensure that the appropriate campus sponsored programs officers and any other required campus officials have approved the proposal prior to submission.

Allowable costs include supplies, equipment, travel, and professional services which can be justified as necessary for further support of commercialization. Unallowable budget items include F&A costs and graduate student tuition remission. Because the LIFT² funds are intended to support further commercialization of an innovation through experimental proof-of-concept, requests for salary and associated fringe support, whether for the principal investigator, a research associate, a graduate student, or other personnel, may decrease the attractiveness of the application and may result in a lower score, depending on the circumstances of a proposed project. All budgets must be reviewed and approved by the appropriate campus sponsored programs office prior to submission of the application by the principal investigator.

Payment of the awarded funds will typically be made in two installments, but may vary due to the nature of the innovation and will be determined by consultation with each campus. Upon project initiation through execution by each campus of a Letter Agreement for LIFT² Awards, a portion of funds awarded will be transferred to a campus account; the remainder will be transferred to the campus upon the completion of the milestones established in the Letter Agreement. Any unexpended funds remaining at the time of project completion shall be returned to the LSU LIFT² Fund.

5. DURATION OF AWARD
Work proposed in a LIFT² Grant must be completed within a maximum of twelve (12) months. One no-cost extension will be considered only upon request with sufficient justification and documented evidence of continued progress towards defined project milestones. The extension must be requested prior to the expiration of the project period to be considered. Only in exceptional circumstances will an additional extension be allowed.

6. ACTIVITY REPORTS
Technical and financial activity reports documenting progress towards stated goals will be required at least at the mid-term and conclusion of the project, but may be requested at additional times as established by the Letter Agreement and shall be submitted concurrently to the campus TTO and the LSU LIFT² Fund manager. The final balance will not be released until the milestones established in the Letter Agreement have been completed.

7. APPLICATION REVIEW PROCESS
Applications may be submitted early on the dates identified above. Early submission will be reviewed internally according to the scoring rubric within 15 days from submission and will be awarded if the
application receives an early fundable score. A fundable score is defined as when the application receives a score that would have placed that application in the top 15% of the prior round of reviewed LIFT² proposals, if the application does not receive an early fundable score it will be included with the applications that will be reviewed after the final due date for submissions identified above. For all early submissions, a score sheet will be provided without comments and the applicant may thereafter amend and resubmit the application by the final due date for submissions identified above.

All applications, including unsuccessful early submissions to the LIFT² Grant program will be scored by internal and external reviewers on criteria related primarily to commercial potential and technical merit, along with priority points for several other factors, as delineated in the following section. Since the LIFT² Fund is mainly focused on generating licenses for commercial development, reviewers with experience in developing new products and new businesses will be identified. Unsuccessful applicants will be provided with copies of scoring sheets with feedback regarding their proposals following review after the final due date for submission.

8. LIFT² Grant Proposal Scoring (Scoring Rubric is attached):

COMMERCIAL OPPORTUNITY- 60 points Maximum

- Market Need/Value Proposition
- Market Size/Societal Need
- Competition and Competitive Advantage

TECHNICAL MERIT- 30 points Maximum

- Ease/Cost of Proof-of-Concept
- Feasibility of R&D Plan
- Reasonableness of Project Goals

PRIORITY POINTS- 10 points Maximum

- Participation and/or Interest by External Parties
- Proposed Use of Funds
POTENTIAL OVERALL TOTAL SCORE = 100 points

INSTRUCTIONS FOR APPLICATION

Submit Applications To: arthur@lsurtf.com

Early Applications may be made on March 15, 2017 and April 15, 2017 by 5pm

All APPLICATIONS ARE DUE NO LATER THAN 5 pm on May 15, 2017

- Cover Sheet, 1 page, attached
- Biographical sketch, 1 page maximum for each key person.
  - The biosketch should provide clear evidence of ability to undertake projects similar to the one proposed as well as a sense of the cumulative experience. Length of time in the field of expertise is not as critical to the success of the proposed project as is the substance of the proposal and the likelihood that it will produce results which prove the concept and lead to a license agreement.
- Letter of Acknowledgement from Campus Technology Transfer Officer, 1 page maximum, see Section 3 above for required details
- It is strongly advised to follow the Rubric in drafting the application
- All confidential items should be marked “Confidential” as needed
- Commercial opportunity, technical merit and priority points– 6 pages maximum
  - Market Need/Value Proposition
  - Market Size/Societal Need
  - Competition and Competitive Advantage
  - Ease/Cost of Proof-of-Concept
  - R&D Plan
  - Scope of work, milestones and outcome that will be achieved within budget
  - Participation and/or interest by external parties
  - Proposed use of funds
- Budget worksheet, 1 page, attached
- Budget justification and explanation, 2 pages maximum
  - All budgets must be reviewed and approved by the appropriate campus sponsored programs office prior to submission.

THE APPLICATION MUST BE SUBMITTED AS ONE PDF FILE
Please email any questions to the LSU LIFT^2 Fund Manager or your campus tech transfer officer

LSU LIFT^2 Fund Manager
Arthur Cooper
CEO, LSU Research & Technology Foundation
Email: arthur@lsurft.com

LSU A&M Office of Intellectual Property
Andrew Maas
Assistant VP for Technology Transfer
Email: andrewm@lsu.edu
Also point of contact for LSUE & LSUA

LSU Health Sciences Center New Orleans
Patrick Reed
Director, Office of Technology Management
Email: preed3@lsuhsc.edu

LSU Health Sciences Center Shreveport
Anella Nelson
Director, Office for Sponsored Programs and Technology Transfer
Email: anelso@lsuhsc.edu

Pennington Biomedical Research Center
Leslie Smith
Director
Email: Leslie.Smith@pbrc.edu

LSU Ag Center
Wade Baumgartner
Director, Office of Sponsored Programs and Intellectual Property
Email: WBaumgartner@agcenter.lsu.edu

Louisiana State University Shreveport
Amanda Lewis
Professor of Mathematics and Director of Sponsored Research
Email: Amanda.Lewis@lsus.edu
LSU LIFT\textsuperscript{2} Application Cover Sheet

Project Title: _________________________________

Principal Investigator(s): _________________________________

Campus & Department: _________________________________

Sophia Technology Number: _______________________________

Phone Number: _________________________________

Email: _________________________________

Funds Requested: $ _________________________________

Summary of Proposed Effort (100 words maximum):

This Summary of Proposed Effort should provide a clear description, in layman’s terms, of the essential research that will be performed with the requested funds to prove the concept, along with the potential commercial advantage of the innovation if successfully completed. A description of the technology inherent in the core innovation should be included not in this summary but in the technical justification section; this section should highlight the steps needed to increase the likelihood of licensing the innovation to a business partner.
LSU LIFT\textsuperscript{2} Budget Worksheet

Project Duration: 12 Months

Project Title: 

Principal Investigator(s): 

**Attach Detailed Budget Line Item Justification and Vendor Quotes**

<table>
<thead>
<tr>
<th>Requested Funds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Supplies</td>
<td>$0</td>
</tr>
<tr>
<td>B. Equipment</td>
<td>$0</td>
</tr>
<tr>
<td>C. Travel</td>
<td>$0</td>
</tr>
<tr>
<td>D. Professional Services</td>
<td></td>
</tr>
<tr>
<td>1. Subcontracts</td>
<td>$0</td>
</tr>
<tr>
<td>2. Consultants</td>
<td>$0</td>
</tr>
<tr>
<td>3. Other Services</td>
<td>$0</td>
</tr>
<tr>
<td>E. Other Charges</td>
<td>$0</td>
</tr>
<tr>
<td>F. Salaries and Wages</td>
<td>$0</td>
</tr>
<tr>
<td>G. Fringe Benefits</td>
<td>$0</td>
</tr>
<tr>
<td>H. Tuition Remission</td>
<td></td>
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<tr>
<td>NOT ALLOWED</td>
<td></td>
</tr>
<tr>
<td>I. Facilities &amp;</td>
<td></td>
</tr>
<tr>
<td>Administrative (Indirect) Costs</td>
<td>NOT ALLOWED</td>
</tr>
<tr>
<td>J. Total Project Costs</td>
<td></td>
</tr>
</tbody>
</table>

Authorized Representative

Campus Office of Sponsored Programs
LIFT2 Scoring Rubric

Below is a scoring rubric that should serve as a guide to the applicants and will be used by the review committee in assessing each application. Also provided are the following definitions to provide additional guidance to applicants.

Definitions:

“Competitive Advantage” means a distinct trait or set of traits which set this technology apart from competitors such as more efficient cost parameters, greater availability to target audience, high barriers to entry for competitors, or the ability to displace a clear market leader or enter a space with no clear market leader.

“Proof-of-Concept” means that the principal investigator has provided evidence that this technology has moved past an abstract idea, and has made significant progress towards an actual product, where the evidence shows that the idea is feasible and may be used in its target marketplace for its stated purpose.

“Societal need” means that an underserved component of society would benefit from the furtherance of this technology such that an element of service or altruism is added to the category of market size and may balance a smaller market share.

“Value Proposition” means the benefit to a potential consumer of this technology that shows a dramatic improvement over the current state of the art such that the technology will meet the consumer need in a more efficient or effective manner.
<table>
<thead>
<tr>
<th><strong>COMMERCIAL OPPORTUNITY</strong></th>
<th>Low (0 points)</th>
<th>Maximum (20 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Need/Value Proposition</td>
<td>No evidence of value proposition and market need unclear.</td>
<td>Differentiated but not unique value proposition; Obtained customer feedback on value proposition and/or market research demonstrating strong likelihood of market penetration.</td>
</tr>
<tr>
<td>Market Size/Societal Need</td>
<td>The invention is in a small or very crowded market that will not be displaced by the invention and does not address a societal need.</td>
<td>The invention’s available market is of a moderate size or an important societal need is addressed.</td>
</tr>
<tr>
<td>Competition and Competitive Advantage</td>
<td>Many dominant competitors or monopolistic market leader. Product seems like a “me too” or could be easily copied.</td>
<td>Multiple competitors but no single market leader.</td>
</tr>
</tbody>
</table>

**Total available points for commercial opportunity** 60
### TECHNICAL MERIT

<table>
<thead>
<tr>
<th>Low (0 points)</th>
<th>Maximum (10 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ease/Cost of Proof-of-Concept</strong></td>
<td><strong>Feasibility of R&amp;D Plan</strong></td>
</tr>
<tr>
<td>Technology will require more than the funds available to create initial</td>
<td>It is unlikely that a commercial partner will be interested in the invention at</td>
</tr>
<tr>
<td>Proof-of-Concept and/or will be complicated to demonstrate the concept.</td>
<td>the completion of the R&amp;D.</td>
</tr>
<tr>
<td>Technology will require the maximum amount available to create initial</td>
<td>It is likely that a commercial partner will be interested in the invention at the</td>
</tr>
<tr>
<td>Proof-of-Concept and/or will be complicated to demonstrate the concept.</td>
<td>completion of the R&amp;D, but significant research will still be required.</td>
</tr>
<tr>
<td>Technology will require slightly less than the maximum amount available to</td>
<td>It is likely that a commercial partner will be interested in the invention at the</td>
</tr>
<tr>
<td>create initial Proof-of-Concept and/or will be complicated to demonstrate the</td>
<td>completion of the R&amp;D, but some research will still be required.</td>
</tr>
<tr>
<td>concept.</td>
<td></td>
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<tr>
<td>Technology will require significantly less than the maximum amount available</td>
<td>It is nearly certain that a commercial partner will be interested in the invention</td>
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<tr>
<td>to create initial Proof-of-Concept and/or will be simple to demonstrate the</td>
<td>at the completion of the R&amp;D.</td>
</tr>
<tr>
<td>concept.</td>
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<tr>
<td><strong>Reasonableness of the Goals</strong></td>
<td></td>
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<tr>
<td>The scope of work, milestones and outcomes cannot be accomplished within the</td>
<td>The scope of work, milestones and outcomes may be accomplished within the timeline</td>
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<tr>
<td>timeline and on budget.</td>
<td>and on budget.</td>
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<tr>
<td>The scope of work, milestones and outcomes can be accomplished within the</td>
<td>The scope of work, milestones and outcomes will be accomplished within the timeline</td>
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<tr>
<td>timeline and on budget.</td>
<td>and on budget and will achieve the goal of the application.</td>
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<tr>
<td><strong>Total available points for technical merit</strong></td>
<td></td>
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<tr>
<td>30</td>
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<tr>
<td>PRIORITY POINTS</td>
<td>Low (0 points)</td>
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<tr>
<td>---------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
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<tr>
<td>Participation by or Interest by External Parties</td>
<td>There has been no outreach to potential commercial partners or other collaborators.</td>
</tr>
<tr>
<td>Proposed Use of Funds</td>
<td>The funding is being used only to support staff salary and none is going into supplies, testing, or equipment.</td>
</tr>
<tr>
<td></td>
<td>Most of the funding is supporting staff salary with some going to supplies, testing or equipment.</td>
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<tr>
<td>Total available points for Priority points</td>
<td></td>
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<tr>
<td>Total available overall points</td>
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