LSU LIFT² Fund – Leveraging Innovation for Technology Transfer

Request for Proposals

Annual Schedule:

Funding Round Opens: August 15

Submission Dates: the 15th of Each Month

<u>Final Submission Date: May 15</u> <u>Final Award Date: June 15</u>

If an above date falls on a weekend or holiday the date will be extended until the next business day and submissions shall be made before 5PM

1. PROGRAM DESCRIPTION

The LSU Board of Supervisors created the LSU LIFT² Fund in January 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 LIFT² 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 LIFT² 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 LIFT² Fund is specifically designed to increase the number of LSU innovations licensed to industry partners.

Grants awarded from the LSU LIFT² Fund will provide LSU's entrepreneurial and creative community with small "proof-of-concept" funds to support further commercialization of innovations, help establish data that 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, employees 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 LIFT² Fund's 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 LIFT² Fund will accept applications each month of the fiscal year beginning on August 15 and on the 15th of each month until May 15, on a competitive basis. Individual grants up to \$50,000 will be made, with an applicant able to request up to \$75,000 with a one-page written justification explaining how the field of the innovation and the nature of the proof-of-concept studies require additional funding; such requests must also be approved by the LSU campus technology transfer office (TTO). The grant funds must be used to further develop an innovation on record in an LSU campus TTO that has not yet been licensed, optioned, or otherwise committed to a commercial partner. The LSU LIFT² 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 <u>innovation that previously has been</u> 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 <u>not</u> 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 <u>not</u> eligible and will <u>not</u> be considered.
- e. Any proposal for a project to develop a previously disclosed innovation that 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, is <u>not</u> eligible and will <u>not</u> be considered.
- f. LSU innovators may submit only one application as the primary Principle Investigator 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 TTO, (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

For each fiscal year of the LSU LIFT² Fund, the President's Committee on Technology Transfer will establish a budget to support proof-of-concept activities to further prepare innovations for commercialization including any awards made to early submissions. There is no guarantee of the amount of funding available or the number of awards made during a funding cycle. Grants will be awarded in amounts up to \$50,000, although projects requesting \$25,000-\$30,000 are strongly encouraged. Applicants may request up to \$75,000 with a one-page written justification explaining how the field of the innovation and the nature of the proof-of-concept studies require additional funding.

The application for a LSU 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 that 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 LIFT*² *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 LSU 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 for LIFT*² *Awards* 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 for LIFT*² *Awards* have been completed.

7. APPLICATION REVIEW PROCESS

Applications may be submitted on the dates identified above. Each submission will be reviewed according to the scoring rubric and scores will be returned by the 15th of the following month. An application will be funded if the application receives an early fundable score. An early fundable score is defined as when the application receives more than 80 points out of a possible 100 points. If the application does not receive an early fundable score, the TTO and Principal Investigator will receive a copy of the scoring sheet including comments by the evaluating judges. A Principal Investigator may choose to resubmit with an updated application based on reviewer's comments, in which case the proposal will be rescored. If a Principal Investigator chooses not to resubmit, then the score will be utilized to determine fundability at the end of the funding cycle (usually May 15). Applications may be resubmitted once during each funding cycle. Additional resubmissions beyond the first resubmission must be reviewed and approved by the TTO and the LSU LIFT² Fund manager.

All applications will be scored by reviewers on criteria related primarily to commercial potential and technical merit, along with priority points for several other factors, as delineated in Section 8 below. An application will be funded if it receives a fundable score. Each funding cycle, the fundable score will be determined by the reviewers based on the amount of funds available, the number of proposals, and the quality of the proposals. Since the LSU LIFT² Fund is mainly focused on generating licenses for commercial development, reviewers with experience in developing new products and new businesses will be utilized.

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: lift2@lsu.edu

All APPLICATIONS ARE DUE NO LATER THAN <u>5PM</u> ON DATES DEFINED ABOVE

- 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
 - o Market Size/Societal Need
 - Competition and Competitive Advantage
 - o Ease/Cost of Proof-of-Concept
 - o R&D Plan
 - Scope of work, milestones and outcome that will be achieved within budget
 - o Participation and/or interest by external parties
 - o Proposed use of funds
- Budget worksheet, 1 page, attached
- Budget justification and explanation, 2 pages maximum include a justification if the budget exceeds \$50,000 as outlined above.
 - o <u>All budgets must be reviewed and approved by the appropriate campus sponsored programs office prior to submission.</u>

THE APPLICATION MUST BE SUBMITTED AS ONE PDF FILE

Please email any questions to the LSU LIFT² Fund Manager or your campus technology transfer officer

LSU LIFT² Fund Manager

Tyler Kearney

Assistant VP for Finance &

Administration Email: <u>lift2@lsu.edu</u>

LSU Health Sciences Center New Orleans

Patrick Reed

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Pennington Biomedical Research Center

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Louisiana State University Shreveport

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LSU A&M Office of Innovation & Technology Commercialization

Andrew Maas

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Also point of contact for LSUE & LSUA

LSU Health Sciences Center Shreveport

Annella Nelson

Director, Office for Sponsored Programs and

Technology Transfer

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LSU Ag Center

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Intellectual Property

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LSU LIFT² 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 LIFT² Budget Worksheet

| Project Title: | | |
|----------------------|------------------------------------|-------------------------------|
| Principal Investigat | or(s): | |
| | | |
| At | tach Detailed Budget Line Item Jus | stification and Vendor Quotes |
| 110 | tach Betanea Bauget Eine Rein Jus | stilleation and vendor Quotes |
| | Reques | ted Funds |
| A. | Supplies | |
| B. | Equipment | |
| C. | Travel | |
| D. | Professional Services | |
| | | |
| | | |
| _ | 3. Other Services | |
| E. | Other Charges | |
| F. | | |
| G. | Fringe Benefits | |
| H. | Tuition Remission | NOT ALLOWED |
| I. | Facilities & | NOT ALLOWED |
| | Administrative (Indirect) Costs | NOI ALLOWED |
| J. | Total Project Costs | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | entative | |

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.

| LIFT ² Scoring | | | | |
|--|--|---|---|--|
| COMMERCIAL OPPORTUNITY | Low (0 points) | Rubric | | Maximum (20 points) |
| Market Need/Value Proposition | No evidence of value proposition and market need unclear. | Initial hypothesis on value proposition and market need developed. Needs customer feedback and/or additional market research to validate. | Differentiated but not unique value proposition; Obtained Customer feedback on value proposition and/or market research demonstrating strong likelihood of market penetrance. | Unique value proposition and significant market has received feedback from customers and/or strong market research evidence. |
| Market Size/Societal Need | 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. | The invention is in a small market but the invention may displace the competition or it does address a societal need. | The invention's available market is of a moderate size or an important societal need is addressed. | The invention's available market is large or it addresses a very important societal need. |
| Competition and Competitive Advantage | Many dominant competitors or monopolistic market leader. Product seems like a "me too" or could be easily copied. | Many strong competitors or one dominant market leader. Product seems somewhat unique and/or differentiated. | Multiple competitors but no single market leader. | No dominant competitor, or comparable alternative approach, exists and/or the solution is highly disruptive to current market leaders. |
| Total available points fo | 60 | | | |

| TECHNICAL MERIT | Low (0 points) | | | Maximum (10 points) |
|----------------------------|-----------------------|---------------------|---------------------|-----------------------|
| Ease/Cost of Proof-of- | Technology will | Technology will | Technology will | Technology will |
| Concept | require more than | require the | require slightly | require significantly |
| | the funds available | maximum amount | less than the | less than the |
| | to create initial | available to create | maximum amount | maximum amount |
| | Proof-of-Concept | initial Proof-of- | available to create | available to create |
| | and/or will be | Concept and/or | initial Proof-of- | initial Proof-of- |
| | complicated to | will be | Concept and/or | Concept and/or will |
| | demonstrate the | complicated to | will be simple to | be simple to |
| | concept. | demonstrate the | demonstrate the | demonstrate the |
| | | concept. | concept. | concept. |
| Feasibility of R&D Plan | It is unlikely that a | It is likely that a | It is likely that a | It is nearly certain |
| | commercial | commercial | commercial | that a commercial |
| | partner will be | partner will be | partner will be | partner will be |
| | interested in the | interested in the | interested in the | interested in the |
| | invention at the | invention at the | invention at the | invention at the |
| | completion of the | completion of the | completion of the | completion of the |
| | R&D. | R&D, but | R&D, but some | R&D. |
| | | significant | research will still | |
| | | research will still | be required. | |
| | | be required. | | |
| Reasonableness of the | The scope of work, | The scope of | The scope of | The scope of work, |
| Goals | milestones and | work, milestones | work, milestones | milestones and |
| | outcomes cannot | and outcomes | and outcomes can | outcomes will be |
| | be accomplished | may be | be accomplished | accomplished within |
| | within the timeline | accomplished | within the | the timeline and on |
| | and on budget. | within the | timeline and on | budget and will |
| | | timeline and on | budget. | achieve the goal of |
| | | budget. | | the application. |
| Total available points for | 30 | | | |

| PRIORITY POINTS | Low (0 points) | | | Maximum (5 points) |
|--|--|---|--|---|
| Participation by or Interest by External Parties | There has been no outreach to potential commercial partners or other collaborators. | Discussions are ongoing with potential commercial partners or other collaborators. | Potential commercial partners or other collaborators have expressed interest, but are not interested in pursuing the opportunity at this time. | Potential commercial partners or other collaborators have expressed interest, but are only interested if additional R&D is completed to prove the concept |
| Proposed Use of Funds | The funding is being used only to support staff salary and none is going into supplies, testing, or equipment. | Most of the funding is supporting staff salary with some going to supplies, testing or equipment. | Most of the funding is going to supplies, testing or equipment and some is supporting staff salary. | All of the funding is going to supplies, testing or equipment and none is supporting staff salary. |
| Total available points for Priority points | | | | 10 |
| Tatal and Balla annuall and at | | | | 100 |
| Total available overall points | | | | 100 |