

LSU LIFT² Fund – *Leveraging Innovation for Technology Transfer*

Request for Proposals – Round Four

Release Date: March 15, 2016

Due Date: May 2, 2016, no later than 5 pm

Award Date: June 3, 2016

1. PROGRAM DESCRIPTION

The LSU LIFT² 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 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 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 which can support commercial feasibility of the innovation, and thus reduce the risk for companies interested in licensing it. “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 LIFT² Fund purpose. It is better to be “fast to failure” if a concept cannot demonstrate commercial potential, so that future research efforts and funding can be re-directed to projects with a higher likelihood of success.

The LSU LIFT² Fund will typically award grants to faculty innovators twice a year, on a competitive basis, 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) which 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.

The RFP for Round 4 of the LSU LIFT² Grant Program incorporates several changes from prior rounds. 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 4 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. 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 at the website 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 particular 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 this may vary due to the nature of the innovation and this 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 an LIFT² Grant must be completed within a maximum of twelve (12) months. One no-cost extensions 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 milestone established in the Letter Agreement have been completed.

7. APPLICATION REVIEW PROCESS

Applications to the LIFT² Grant program will be scored by internal and external reviewers on criteria related to 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. All unsuccessful applicants will be provided with copies of scoring sheets with feedback regarding their proposals.

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

COMMERCIAL OPPORTUNITY- 50 points Maximum

- Market Need/Value Proposition
- Market Size/Societal need
- Competition and Compleitive Advantage
- Technology Readiness Level
- Understanding of revenue model

TECHNICAL MERIT- 30 points Maximum

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

PRIORITY POINTS- 20 points Maximum

- Participation by interest by external parties
- Proposed use of funds
- Intellectual Property Status
- Has established a commercialization plan

POTENTIAL OVERALL TOTAL SCORE = 100 points

INSTRUCTIONS FOR APPLICATION

Submit Applications Here: <http://lsu.infoready4.com/CompetitionSpace>

Then Search for “LSU LIFT Awards round 4”

APPLICATIONS ARE DUE NO LATER THAN 5 pm on May 2, 2016

- 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
 - Technology Readiness Level
 - Revenue Model
 - Ease/Cost of Proof-of-Concept
 - R&D Plan
 - Scope of work, milestones and outcome that will be achieved within budget
 - Participation by or interest by external parties
 - Proposed use of funds
 - Intellectual Property status
 - Commercialization Plan
- 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 ONLINE AS ONE PDF FILE

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

LSU LIFT² Fund Manager

Arthur Cooper
CEO, LSU Research & Technology Foundation
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LSU A&M Office of Intellectual Property

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Also point of contact for LSUS, LSUE, LSUA

LSU Health Sciences Center New Orleans

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Louisiana State University Shreveport

Professor of Mathematics and Director of Sponsored Research
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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 Duration: 12 Months

Project Title: _____

Principal Investigator(s): _____

Attach Detailed Budget Line Item Justification and Vendor Quotes

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

 Authorized Representative
 Campus Office of Sponsored Programs

 Date

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:

“Commercialization Plan” means the principal investigator has considered elements between innovation and the marketplace and has demonstrated an understanding of the time and effort required to commercialize a product and/or a willingness to develop a greater understanding of the phases of product development as a whole with more points being awarded for technologies in which principal investigators have a clear, defined, and thorough plan for taking their innovations from the laboratory to the market place and have demonstrated understanding of the many steps required to accomplish these plans.

“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.

“Revenue Model” means a direct and clear path to monetizing the technology and generating funds from the technology with a focus on revenue sources, cost to produce the technology vs. its potential sales price, timeline for generation of revenue and, hopefully, profits to serve as a backdrop for other elements of a commercialization plan.

“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.

“Technology Readiness Level” means this technology’s current place on the continuum of market readiness which begins with an initial concept on one end and a product that is ready for the consumer marketplace at other end. The middle of the continuum might involve a product that needs further experimentation; including clinical trials in the biomedical space or prototype development in the engineering space.

“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.

LIFT² Scoring Rubric				
COMMERCIAL OPPORTUNITY	Low (0 points)			Maximum (10 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 is assured of a place in the market.	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.
Technology Readiness Level (TRL)	Concept only; unproven idea/proposal. No analysis or testing has been performed.	Concept demonstrated. Basic functionality demonstrated by analysis, reference to features shared with existing technology or through testing.	Concept design or novel features of design validated through small scale testing in laboratory environment.	Model built and some functionality demonstrated, but additional testing needed.
Understanding of Revenue Model	No clear understanding of future revenue model or market evidence provided.	Revenue model outlined, but no market evidence provided.	Completed revenue model or market evidence provided, supporting the outline of revenue assumptions.	Completed revenue model with market evidence provided which supports future revenue assumptions.
Total available points for commercial opportunity				50

TECHNICAL MERIT	Low (0 points)			Maximum (10 points)
Ease/Cost of Proof-of-Concept	Technology will require more than the funds available to create initial Proof-of-Concept and/or will be complicated to demonstrate the concept.	Technology will require the maximum amount available to create initial Proof-of-Concept and/or will be complicated to demonstrate the concept.	Technology will require slightly less than the maximum amount available to create initial Proof-of-Concept and/or will be simple to demonstrate the concept.	Technology will require significantly less than the maximum amount available to create initial Proof-of-Concept and/or will be simple to demonstrate the concept.
Feasibility of R&D Plan	It is unlikely that a commercial partner will be interested in the invention at the completion of the R&D.	It is likely that a commercial partner will be interested in the invention at the completion of the R&D, but significant research will still be required.	It is likely that a commercial partner will be interested in the invention at the completion of the R&D, but some research will still be required.	It is nearly certain that a commercial partner will be interested in the invention at the completion of the R&D.
Reasonableness of the Goals, including scope of work, milestones and outcomes can be accomplished within the timeline and on budget to achieve the goals of the application	The scope of work, milestones and outcomes cannot be accomplished within the timeline and on budget.	The scope of work, milestones and outcomes may be accomplished within the timeline and on budget.	The scope of work, milestones and outcomes can be accomplished within the timeline and on budget.	The scope of work, milestones and outcomes will be accomplished within the timeline and on budget and will achieve the goal of the application.
Total available points for technical merit				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 to 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.
Intellectual Property (IP) Status	No IP protection is in place or the likelihood of obtaining meaningful protection is extremely low.	Low confidence that IP protection will be sufficient and/or IP position appears to be have significant hurdles to overcome.	Medium confidence that IP protection will be sufficient and/or IP position appears to have limited hurdles to overcome.	High confidence that IP protection will be sufficient and IP position seems solid.
Has Established a Commercialization Plan (CP)	No CP is provided.	There is a discussion of the steps to develop a CP.	There is an outline of a CP.	There is a complete CP provided.
Total available points for Priority points				20
Total available overall points				100