

# Seed Translational Research Project Grants

# **Summary**

Letters of Intent Due:	May 16, 2025	Invitation for Proposal Submission:	June 4, 2025
Proposal Due Date:	June 20, 2025	Project Start Date:	July 14, 2025

Maximum Award: \$100,000 per phase per year

Project Period: 1 Year

The grant funds must be used to increase the technology readiness level of innovations or concepts with the goal that it be viable for industry or public use by the end of the funding period. Detailed instructions regarding the requirements and process are provided in Section 8.

# Purpose of the Program

Funding for the IGNITE FSU Seed Translational Research Projects (STRPs) grants is provided under the "Accelerating Research Translation" (ART) award from the National Science Foundation (NSF). The NSF seeks to accelerate the pace of translational research at U.S. Institutions of Higher Education (IHEs). Florida State University is among the first cohort of NSF ART awardees.

The goal of the ART program is to build translational research capacity and infrastructure for U.S. IHEs and to enhance their role in regional innovation ecosystems. The STRP grant is one of the core components of the ART program. STRP's provide funding to conduct research (with strong translational potential) and serves as a mechanism for training and capacity building.

The leadership and core project members, including but not necessarily limited to the PI, of each STRP selected will participate in the NSF ART Ambassadors program. ART Ambassadors are intended to be advocates and mentors for research translation and will work together as a team to help build capacity, accelerate and scale translational and use-inspired research activities, and work to institutionalize a culture that recognizes and promotes such activities at Florida State University.

# **Program Requirements**

#### 1. Introduction

Early-stage innovations require sufficient development to determine and then attain translational viability. Funding for this type of development can be difficult to obtain, and until the advent of the NSF ART program, was made available only at IHEs with sufficient financial capacity to provide internal funding.

STRPs candidates would be an innovation that has emerged from prior fundamental research with a clear

underlying analytical and/or experimental proof of concept that has been completed. The STRP should have a justifiable path of achieving a prototype in an accelerated manner (< 2 years) that can be demonstrated in an environment relevant to the intended usage of the innovation. A STRP is deemed to be highly focused, with a clearly defined path for tangible deliverables, a timeline, and an exit strategy. The STRP description should provide details on how customer identification, user-centered design, development, validation, and testing of prototypes for specific potential customers will be performed and outline anticipated societal and/or economic impact.

Proposals will be evaluated on a competitive basis using the criteria provided in Section 8. STRP awards are time-limited, milestone-based, and awarded for applied projects designed to advance the innovation described in the proposal.

# The grant funds must be used to increase the technology readiness level of innovations or concepts with the goal that it be viable for industry or public use by the end of the funding period.

Guidance on the STRP application process will be provided by the FSU office of Commercialization, Research Development, and/or designated ART Ambassadors.

#### 2. Definitions

"Competitive Advantage" means a distinct trait or set of traits which sets 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.

"Market Need" means the unmet desires, wants, and problems of a target audience.

"Market Size" the number of people or customers who could potentially buy your product or service.

"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 Impact" Societal impact is the broader effect of research, policies, or actions on society, encompassing changes in various areas like the economy, culture, public policy, public services, health, the environment, or quality of life.

"Technology Readiness Level (TRL)" means the measurement system that assesses the maturity of a particular innovation.

	Technology Readiness Level Definition
TRL 1	<b>Basic Research:</b> Initial research conducted. Principles are qualitatively postulated and observed.
	Focus is on new discovery rather than applications.
TRL 2	Applied Research: Initial practical applications are identified. Potential of [sic] material or
	process to solve a problem, satisfy a need, or find application is confirmed.
TRL 3	Critical Function or Proof of Concept Established: Applied research advances and early-
	stage development begins. Studies and laboratory measurement validate analytical predictions of
	separate elements of the technology.
TRL 4	Lab Testing/Validation of Alpha Prototype: Design, development and lab testing of
	components/processes. Results provide evidence that performance targets may be attainable
	based on projected or modeled systems.
TRL 5	Laboratory Testing of Integrated/Semi-integrated System: System component and/or
	process validation is achieved in a relevant environment.

TRL 6	Prototype System Verified: System/process protypes demonstration in an operational
	environment (beta prototype system level).
TRL 7	Integrated Pilot System Demonstrated: System/process prototype demonstration in an
	operational environment (integrated pilot system level).
TRL 8	System Incorporated in Commercial Design: Actual system/process completed and qualifies
	through test and demonstration.
TRL 9	System Proven and Ready for Full Commercial Development: Actual system proven
	through successful operations in operating environment, and ready for full commercial
	deployment.

https://www.dst.defence.gov.au/sites/default/files/basic\_pages/documents/TRL%20Explanations\_1.pdf

"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.

## 3. Eligibility

Who is eligible to apply:

 Any full-time FSU employee (this includes faculty, staff, and post-doctoral scholars) in any discipline.

Other eligibility information:

- FSU employees with existing STRP awards may not apply for additional STRP awards until the existing STRP awards have been closed and all requirements are completed.
- Proposals must include involvement of graduate students and/or postdocs in the research.
   Undergraduate students may be included in cases where no graduate students or postdocs are available.
- Proposals for basic research that do not accelerate the development of an innovation are not eligible for STRP funding.
- FSU innovators may only submit one proposal as the PI per funding cycle.
- A proposal to develop an FSU innovation that is previously licensed is not eligible for STRP funding *unless the licensee commits to a cost share*.

#### 4. Commercialization Letter of Acknowledgement

Each invited applicant for STRP funding must include a letter from Commercialization. The letter must contain:

- a. A statement regarding the disclosure status of the technology. Specifically, whether the technology has or has not been disclosed to the office of Commercialization (this does not diminish the likelihood of funding)
  - i. If it has been disclosed, a statement that the technology is under active management

and has not been abandoned or otherwise relinquished.

b. A statement that the innovation is not licensed, or is not the subject of negotiations for licensing, or otherwise encumbered in a manner that would prevent commercial utilization.

Or

If it is licensed or the subject of negotiations for a license, a statement providing the level of support that will be provided by the licensee or potential licensee

- c. Whether there was any industry sponsored research funding that was used in the development of the innovation.
- d. If there are any materials that were used in the development of the innovation that were provided under a Materials Transfer Agreement.
- e. A description of the steps that have been or will be taken protect the intellectual property associated with the innovation.

#### 5. Award Description

Number of Projects Funded Annually: Up to five new STRP projects will be funded in this cycle.

Maximum Funding: up to \$100,000 for direct costs for one year

Allowable costs:

- a. Supplies, equipment, travel, and professional services that can be justified as necessary for further development of the innovation. Equipment should be a minor component of the award budget.
- b. Salaries for post-doctoral fellows or graduate students.
- c. Salaries for the principal investigator and core project members.
- d. US patent Costs up to \$15,000 per project.

Unallowable costs: graduate student tuition and human subjects research. This program is funded under an <u>Accelerating Research Translation</u> award from the National Science Foundation and includes any related funding restrictions.

Note: If a substantial part of the budget is for salary and associated fringe support for the principal investigator, it *may* decrease the priority of the application for funding, depending on the circumstances of a proposed project.

#### 6. Application Process

Letters of Intent Due:	May 16, 2025	Invitation for Proposal Submission:	June 4, 2025
Proposal Due Date:	June 20, 2025	Project Start Date:	July 14, 2025

#### Letter of Intent (LOI)

For the LOI, please provide a description (up to 2 pages) including background information, research,

objectives, and the rationale for seeking STRP funds, along with a brief budget and budget justification. Please submit this LOI to <u>commercialization-agreements@fsu.edu</u>. The selection committee will review the submissions received and will invite proposals to be submitted for funding. Invitations to submit will be provided by June 4, 2025.

#### **Full Proposal Submission**

Those invited to submit a full proposal must complete the application for the STRP program using the online submission portal. All sections must be completed to submit your application. Changes cannot be made to an application once the application has been submitted. Changes cannot be made to an application once the submission deadline has passed.

Applicants for the program are required to submit the following materials:

a. **Application.** Applicants must complete the application found within the internal funding online submission portal. All sections must be completed to submit the application.

#### b. Curriculum Vitae.

Applicants must submit a current CV formatted according to the requirements of one of the following standard brief CV templates:

- National Science Foundation (NSF) Biosketch
- National Institutes of Health (NIH) Biosketch
- Institute of Education Sciences (IES) Biosketch
- FSU Council on Research and Creativity CV Template: https://internalfunding.research.fsu.edu/media/1075/curriculum-vitae-form 2021.docx
- FEAS Short CV (final submission generated must be no more than 5 pages)

Applicants are encouraged to use SciENcv to create biosketches. SciENcv (Science Experts Network Curriculum Vitae) was developed by NIH to support the use of a common researcher profile system by federal agencies. Through SciENcv, individuals who apply for, receive, or are associated with research investments from federal agencies can create a biosketch using the official formatting requirements for the NIH, NSF, and IES. SciENcv can also be linked to your ORCID account, where information can be transferred to create a biosketch. For more information, please visit <a href="https://www.ncbi.nlm.nih.gov/sciencv/">https://www.ncbi.nlm.nih.gov/sciencv/</a>.

#### c. **Description of the project.** 5 Page Maximum

Applicants must identify an innovation that has emerged from prior fundamental research with a clear underlying analytical and/or experimental proof of concept that has been completed and submit a clear, complete, non-technical description of a justifiable path of achieving a prototype in an accelerated manner (< 2 years) that can be demonstrated in an environment relevant to the intended usage of the innovation. A STRP is deemed to be highly focused, with a clearly defined path for tangible deliverables, a timeline, and an exit strategy. The STRP description should provide details on how customer identification, user-centered design, development, validation, and testing of prototypes for specific potential customers will be performed and outline anticipated societal and/or economic impact.

Definitions of terms are provided in Section 2.

1. Explain your technology or concept, competitive advantage over what is currently

available, and the unmet need that it will address. Include the components below.

- Market Need/Value Proposition/Market Size
- Societal Impact
- Competition identify the existing competition to your solution or competition that is in development you are aware of.
- Competitive Advantage
- 2. To what extent does the proposed project address a critical step or milestone needed to advance a research discovery toward commercial development within two years?
  - Research and development plan proposed to be funded -- including scope of work, timeline, aims, and milestones. **Milestones should be defined clearly and represent critical steps along the project timeline and proposed timepoints for completion.**
  - Stage of Technology: Proof-of-Concept and Technology Readiness Levelidentify the current state of the innovation and what TRL the proposed plan will advance the technology to.
  - Exit plan What is the planned next step to move the technology to impact-licensing, startup or partnership? What are the next steps on the path to commercialization? Identify a partner or potential partners for the technology.

Applicants are encouraged to prepare descriptions that are written in clear, concise language <u>so that reviewers from any discipline will be able to understand</u>; field-specific jargon and acronyms are discouraged unless they are plainly defined within the text. Descriptions must not exceed 5 pages (not including References and Appendices). Pages must be single- spaced and formatted with 1" margins utilizing 11pt Times New Roman or Arial font and page numbers.

#### d. Research Compliance

Typically, research compliance approvals are not necessary for the application process. However, any proposed research activities requiring compliance review and approvals (such as Animal Subjects use, DNA/RNA use, Hazardous Materials, or Marine Lab facilities) require the completion and submission of forms to the appropriate FSU department or group. Applicants must seek and receive approval before such research is attempted and before any funds can be released, if awarded. See Animal Care and Use Committee, Environmental Health & Safety, or Research Compliance for other compliance requirements that may apply to the planned research. If necessary, applicants may pre-apply for Animal use approval prior to funding notifications. While not required in advance, having prior approval will prevent delays in receiving grant funds, if awarded. If approval has already been received for proposal-related certifications, the applicant may include the approval paperwork in the appendices of the application.

#### 7. Duration of award

The STRP project 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.

#### 8. Reports

Proposals should include milestones that will be achieved as detailed in the attached proposal template (Attachment A) and accompanied by a detailed budget (Attachment B). Quarterly technical and financial progress reports will be required. Reports should document progress towards the stated objectives of the proposal and milestones met.

#### 9. Selection Criteria

The review committee will consist of external reviewers and selected faculty and staff at Florida State University with emphasis on individuals who are engaged with research translation, incubation and early-stage technology funding.

Each full proposal will be reviewed according to the scoring rubric. The review committee will recommend finalists to the Office of the Vice President of Research. The Office of the Vice President of Research will make final funding decisions based on the funding allocated to the program, the number of proposals received, and the merit of each proposal.

Applicants will be notified of funding decisions within thirty (30) business days following the submission deadline.

A copy of the score and reviewer comments will be provided to the PI and Commercialization. Should a proposal not be funded, the PI can choose to resubmit the proposal in subsequent funding rounds (if available) taking in to account the reviewers' comments in the next funding cycle submission.

All applications will be scored by reviewers on criteria related primarily to commercial utilization, technical merit, and societal impact as outlined below. The scoring sheet is provided in Attachment C.

#### OPPORTUNITY - 50 points Maximum

- Market Need
- Value Proposition
- Societal Impact
- Competition
- Competitive Advantage

#### TECHNICAL MERIT - 50 points Maximum

- Stage of technology and TRL
- Feasibility of R&D Plan
- Proposed product viability

#### MARKETABILITY - 50 points Maximum

- Defined commercial application
- Potential partners identified or participation and/or Interest by External Parties
- Market Size

# OUTCOMES 25 points

- Barriers to acceptance or development
- Next steps and exit plan identified

POTENTIAL OVERALL TOTAL SCORE = 175 points

# **Attachment A: Letter of Intent Template**

### **Project Title**

Principal Investigator (PI)

PI contact information: email and phone number

#### Section I:

Identify the Project Team

Name	Position / Title	Expertise	Project Role

#### Section II: (500 words)

Explain your technology or concept and, competitive advantage over what is currently available, and the unmet need that it will address.

# Section III: (300 words)

To what extent does the proposed project address a critical step or milestone needed to advance a research discovery toward commercial development?

#### Section IV: (300 words)

How strong is the likelihood that the technology or concept will be advanced sufficiently in order to be utilized, licensed, or deployed at the end of the funding period?

# Scoring for the Letter of Intent

	Low (0 Points)		Maximum (10 Points)
Section I	(1 1 11)		( 1 2 11)
Team Capabilities			
Section II			
Innovation			
Description &			
Unmet Need			
Section III			
Likelihood of			
Increased TRL			
Section IV			
Likelihood of			
Utilization or			
Licensing			

# **Attachment B: Proposal Template**

## Page 1: Cover Sheet

Proposal Cover Sheet

Project Title:

FSU Tech ID (if available):

Principal Investigator(s):

Research Team Members:

Department:

Phone Number:

Email:

Funds Requested: \$

Abstract (250 words maximum):

Provide a clear description, in lay terms, of the essential research that will be performed to prove the concept, along with the potential impact of the innovation if successfully completed. This section should highlight the steps needed to increase the likelihood commercial utilization.

## Page 2 Commercialization Letter

Letter of Acknowledgement from Commercialization, 1 page maximum, see Section 4 above for required details.

#### Pages 3-7 Project Plan 5 pages maximum

It is strongly advised to follow the rubric in drafting the Proposal. All confidential items should be marked "Confidential."

## Page 8 Biosketch

Biographical sketch, 1 page maximum for each key person.

# Page 9-10 Budget and Budget justification

THE APPLICATION MUST BE SUBMITTED AS ONE PDF FILE

# Attachment C: Budget and Budget Justification

Project Duration:	12 Mon	nths	
All budgets must	be rev	iewed and approved by FSU's Research Offi	<u>ice</u>
Project Title:			
Tech ID:			
Principal Investiga	ator(s):		
Requested Funds			
	Α.	Salaries and Wages	
	В.	Fringe Benefits	
	C.	Equipment	
	D.	Travel	,
	E.	Materials & Supplies	
	F.	Publication Costs	
	G.	Consultant Services	,
	Н.	Subcontracts	,
	I.	Patent Costs	,
	J.	Other Charges	
	K.	Total Project Costs	
			,
Authorized Repres	sentativ	e Da	ite
Office of Research	n		

# **Budget Justification**

Attach Detailed Budget Line-Item Justification and Vendor Quotes

# **Attachment D: Scoring Rubric**

IGNITE FSU SEED TRANSLATION RESEARCH PROJECT PROPOSAL REVIEW RUBRIC					
REVIEWER INSTRUCTIONS: Please score each category based on the points allocated for each question.					
PRINCIPAL INVESTIGATOR REVIEWER					
NEVIEWER					
OPPORTUNITY					
50 points possible					
Item	Score	Points Available	Remarks		
Market Need		10			
Value Proposition		10			
Societal Impact:		10			
Competition		10			
Advantage(s) over current alternatives		10			
TOTAL SCORE	0	50			
TECHNICAL MERIT					
50 points possible					
Item	Score	Points Available	Remarks		
Stage of Technology		20			
R&D Plan		20			
Product Viability		10			
TOTAL SCORE	0	50			
MARKETABILITY					
50 points possible					
Item	Score	Points Available	Remarks		
Application		20			
Potential Partners		10			
Market Size		20			
TOTAL SCORE	0	50			
OUTCOMES					
25 points possible					
ltem	Score	Points Available	Remarks		
Barriers to Acceptance		15			
Next steps on the path to		10			
TOTAL SCORE	0	25			
22.112.42.22					
GRAND SCORE General Comments:	0	175			
General Comments:					