REQUEST FOR PROPOSALS

Clemson University & Prisma Health - Upstate
Innovation Maturation Fund
2022 CALL FOR RESEARCH PROPOSALS

Response Deadline: February 15, 2022

SUMMARY

The Innovation Maturation Fund is designed to serve as a grant mechanism to advance healthcare innovations for follow-on research, implementation into healthcare practices, commercialization and serve as a catalyst to further develop related research collaborations between Clemson research faculty/graduate students and Prisma Health Team Members. The innovation may be a device, an IT solution, a service, a business strategy, or anything else that improves South Carolina's healthcare needs (defined below).

ELIGIBILITY

All proposals must have a Principal Investigator representing Clemson University and Prisma Health. Eligibility is restricted to tenure and tenure- track faculty at Clemson AND Prisma Health clinical and administrative employees. Proposals must contemplate joint participation of both Clemson University and Prisma Health eligible staff.

FUNDING AND REQUIREMENTS

- The total funding available per project is $20,000. The funding requests for each project should be justified based on its significance and merit. Funding requests should target the following types of project opportunities:
  - Technical advancement of Clemson University Research Foundation (CURF)/Health Sciences Center (HSC) at Prisma Health joint intellectual property toward downstream translational/clinical phases of development
  - Pilot projects targeting "clinical opportunities" that advance a lead candidate technical or innovative solution generated from joint ideation/concept exercises to an initial prototype/minimal viable product stage of development
  - Telehealth innovations
  - Education & Training innovations that positively impacting value-based healthcare delivery
  - "Lean" or industrial solutions to existing healthcare delivery business/clinical practices or standard operating procedures (SOPs)
  - Projects to facilitate joint engagement with industry partners toward sponsored research and commercial partnership opportunities
- The proposal must directly improve one or multiple of the following healthcare needs:
  - Patient experience
  - Team Member experience
  - Patient access
  - Operational efficiencies
  - Clinical outcomes

- The grant period is twelve (12) months.
- Proposals with documented In-kind or cost share budget support through internal or 3rd party collaborations are highly encouraged. These contributions will be weighted heavily in the funding decision process.

RESEARCH COMPLIANCE

All applications selected for the award must have received all required approvals from the Office of Research Compliance before the award can be activated.

ALLOWABLE EXPENSES

- ✓ Prototyping and minimally viable product demonstration resources
- ✓ Unique software or IoT resources
- ✓ Laboratory materials & supplies
- ✓ Equipment or facility access to acquire key data
- ✓ Research Faculty, Post-Doc, Graduate student stipends (excludes PI salary, F&A, and GAD). **Note: salary requests below 50% of total budget are highly recommended**.
- ✓ Compensation for patient participation in a clinical trial or process improvement study
- ✓ All other requests should be clearly justified

UNALLOWABLE EXPENSES

- × Faculty salary
- × Facilities and administrative (F&A) costs

DELIVERABLES

A final report will be required of all awardees. In addition, tangible deliverables may also be required, such as data reports, demonstration of prototypes that have been developed, etc. The report should also detail grant(s) applications in preparation or submitted, including the overall requested amount(s), funding agency or agencies, and proposed specific aims. Also, include details on prior industry contacts and planned engagements. Final reports will be submitted to CURF via email at curf@clemson.edu no later than thirty (30) days after the grant period ends.

Examples of Expected Deliverables from Funded Project

- Prototypes/Minimal Viable Products or Services
- Final Reports inclusive of the following as appropriate:
  - i. CAD/CAM designs and drawings
  - ii. Engineering test and evaluation protocols/methods, presentations, summary reports and results
  - iii. Bills of Materials (BOMs), material/device specifications and tolerances
  - iv. Reliability, performance and life testing protocols/methods, acceptance criteria, and results
  - v. Biocompatibility, toxicity, sterility assurance testing protocols/methods, standards, acceptance criteria, and testing results
  - vi. Regulatory strategy and process plans
  - vii. Human factors/usability studies, protocols, methods, and results
  - viii. Product development plans
  - ix. Reimbursement and/or end-user payment analysis (i.e., “Who pays for it?”)

x. Use experience surveys
xi. Return on investment

- Plan to expand the implementation of the project within Prisma Health or cease development (i.e., Fail Fast).
- Generation of data to support the submission of follow-on federal grant applications
- Test & Evaluation reports to support pursuit of industry collaborations (sponsored research, licensing, etc.)
- Customer discovery and use case reports to support commercialization plans for SBIR/STTR grant submissions

APPLICATION PREPARATION

Proposals that are not in compliance with the requirements and the instructions may be returned without review.

Format all documents using 12 pt. Times New Roman Font, one-inch margins, single spacing, and 8 ½ x 11-inch paper size. Proposals should include the sections listed below. The overall length of the proposal should not exceed five pages. You are encouraged to attach additional information items to your proposal as Appendices (see below). It is not necessary to submit CVs. Submit the proposal as a single PDF file with the following ordered sections:

A. Cover Sheet [1 page]
- Project title
- List and titles of Joint PIs and other investigators/key personnel
- Joint PI contact information: phone number and email address
- List of entities providing significant cost-share to the project, if applicable

B. Abstract [0.5 page]
The abstract should briefly (1-2 paragraphs) explain the central idea of the proposal, unmet market/clinical/industry need, problem(s) addressed primary objectives to commercially advance the ideation generated concept or medical device technology.

C. Status of Intellectual Property (if applicable) [1 page]
List the patent(s), patent applications or copyrights for which the proposal is intended to be the topic of the maturation project, and CURF and/or HSC Tech ID.

D. Project Narrative [2 pages]
- Background/Clinical Opportunity/Benefit: State the specific benefits to be derived from successful completion of the project, including follow-on sponsored research opportunities (Federal, State or Industrial) and/or commercialization transactions (licensing) with identified industry partners at the conclusion of the proposed project.
- Technical Approach: Describe the nature of the work and the ultimate objectives of the project. If appropriate, break down the proposed approach into a series of distinct tasks. Each task should have a clearly defined deliverable. Include any plans to leverage external resources (e.g., collaborations with other academic, non-profit organizations, Industry partners). This section should contain enough information so that a technical evaluation of the proposal can be made, including the soundness of the project plan, likelihood of success, and adequacy of facilities, equipment, and workforce.

- Commercialization, Implementation and/or Adoption Approach: Describe your product/service development and funding strategy for continuing this effort after the Innovation Maturation project is completed. Identify specific Federal/State grant and/or industry commercial partnership opportunities. Demonstrate clear market research and/or analysis of the user/customer both in terms of who will purchase/reimburse the work product and initial implementation/adoption strategies. Your strategy should have sufficient detail such that future sponsored research or commercialization successes can be traced to projections made in this proposal.
- Milestones and Timeline

E. Budget & Justification [1 page]

Describe your budget in terms of the following categories: 1) personnel, 2) materials, 3) In-kind and/or cost share resources and 4) "other" if there are uses of funds for items other than personnel and materials.

UNALLOWABLE EXPENSES
Faculty salary
Facilities and administrative (F&A) costs

F. Cost Share Commitments (if applicable)

List of entities providing significant cost-share to the project, if applicable. Provide commitment emails or letters for the cost share funds, including their source(s).

TIMELINE

December 20, 2022	Solicitation announced
January 18, 2022	1st Informational session (Virtual)
February 1, 2022	2nd Information session (Virtual)
February 15, 2022	Proposals due
March 15, 2022	Funding decisions announced

SUBMISSION PROCEDURES AND DEADLINE

Proposals are accepted from. All proposal documents, including electronic signatures, must be received by **4:30pm, February 15, 2022 in InfoEd**. *PIs will contact their OSP Support Centers as they would normally do for an external submission*. Prisma PIs should submit a one-page Scope of Work and budget to the OSP Support Center on the Prisma-Upstate campus for institutional routing and approval. To ensure that all electronic signatures are received on time, **faculty are strongly encouraged to submit their proposals for routing and electronic signature at least five business days before the deadline.** Only those proposals having completed the InfoEd routing process by the deadline will be reviewed.

REVIEW PROCESS

Review panels with representation from CURF, Prisma HSC and external subject matter experts will convene on an ad hoc basis to provide funding recommendations to the Steering Committee. Final funding decisions are made by super-majority vote (4/5) of the Steering Committee members.

Evaluation Criteria:

- ✓ Does the project address a significant healthcare need?
- ✓ If the project is in the early stages of development, will the research approach establish feasibility and identify risk elements to be addressed in follow-on research activities?
- ✓ Are follow on funding opportunities available to continue to advance the subject technology?
- ✓ Does the proposed project have strong potential for adoption/implementation into existing healthcare practices?
- ✓ Does the proposed project have strong commercial potential leading to a near-term marketable product, service or process?
- ✓ Does the project demonstrate potential for the formation of highly competitive cross-disciplinary teams to pursue follow-on translational grant funding opportunities?

QUESTIONS

Questions about the **Clemson University Research Foundation (CURF) & Prisma Health-Upstate Health Sciences Center (HSC) Innovation Maturation Fund** program can be directed to Brittany Souto at bsouto@clemson.edu, 864-656-0797 or Cody Reynolds at Cody.Reynolds@prismahealth.org, 971-221-9587.