REQUEST FOR PROPOSALS

Clemson University & Prisma Health - Upstate
Innovation Maturation Fund
2019 CALL FOR PROPOSALS

Response Deadline: August 30, 2019

SUMMARY
The Innovation Maturation Fund is designed to serve as a grant mechanism to advance medical technology innovations for follow-on research and commercialization and serve as a catalyst to further develop research collaborations between Clemson research faculty/graduate students and Prisma Health – Upstate clinicians.

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

FUNDING AND REQUIREMENTS
- The total first year funding available is $200,000 for a total of up to 8 awards. The funding requests for each project should be justified based on its significance and merit. Funding requests should target the following 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 solution generated from joint ideation/concept exercises to initial prototype/minimal viable product stage of development
  - Projects to facilitate joint engagement with industry partners toward sponsored research and commercial partnership opportunities
- The grant period is between six (6) and 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.

ALLOWABLE EXPENSES
- Prototyping and minimally-viable product demonstration 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.**
- 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
- 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?”)
- 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
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 [1 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 [3 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 Approach: Describe your product 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 [2 pages]
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).

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

TIMELINE
July 9, 2019 Solicitation announced
August 30, 2019 Proposals due
Rolling submissions will be accepted by invitation only depending on available funds.

**SUBMISSION PROCEDURES AND DEADLINE**

Proposals are accepted from July 8 to August 30, 2019. All proposal documents, including electronic signatures, must be received by **4:30pm, August 30, 2019 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 two 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.

- Does the project address an important clinical unmet need?
- Evaluation of early-stage projects: 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 commercial potential leading to a marketable product, service or process?
- Does the project demonstrate potential for the formation of highly competitive teams that provide confidence in the delivery of high-quality, targeted, external follow-on proposals?

**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.

**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.