

Priority Innovation RFP Call - Spring 2024

Description

The Jump Applied Research for Community Health through Engineering and Simulation (Jump ARCHES) endowment offers this priority Request for Proposals to faculty and researchers of the University of Illinois at Urbana-Champaign, health care providers of the University of Illinois College of Medicine at Peoria, and/or OSF HealthCare clinicians.

The Innovation Track Program supports impactful projects that use research methods to design, implement, and evaluate innovative solutions to health system operational challenges and issues affecting patient outcomes. Jump ARCHES aims to provide seed support for critical projects that improve quality and safety at the health system level and create value for patients. We are looking for new tools, techniques and processes that remove barriers to care, improve patient outcomes, provide novel diagnostics and therapeutics, address health system challenges, and leverage technology to improve education, training and community outreach.

Note that the Jump ARCHES program supports a second parallel program, the Translation Track Program, for projects which are translational in nature and/or focused on implementation science. Please see the RFA for details.

Goals

The goal of this priority RFP is to address the challenges faced by our community and society as we develop policies and procedures for health care delivery through new mediums including tele-health platforms, and to improve health care quality and patient safety through the combined efforts of researchers, engineers, clinicians, and social and behavioral scientists.

The Jump ARCHES program seeks proposals from cross-institution and interdisciplinary teams for projects that will result in proof-of-concept demonstrations of innovative technology with the potential for significant clinical impact, scholarly contributions to the research literature, externally funded grants, intellectual property, and/or startup companies.

To be successful, applicants are expected to develop deep professional relationships that will result in highly collaborative and engaged interdisciplinary teams that can identify and tackle significant healthcare problems.

To achieve this goal and promote collaboration between institutions, OSF HealthCare and the Health Care Engineering Systems Center at the University of Illinois at Urbana-Champaign encourage applicants to inquire if their ideas require facilities or technologies that they cannot access at their home institution. Examples of such facilities and technologies may include simulation areas, computational resources, 3D printing, or other prototyping needs. View these facilities on [the HCESC website](#), [Jump Simulation Center Urbana website](#), [Jump Trading Simulation & Education Center Peoria website](#), and [Center for Social & Behavioral Science website](#).

Focus Areas

Project proposals should be focused on innovative approaches to improving health and lowering costs for high risk/high opportunity populations, including under-served and rural populations.

Funding will be awarded for projects that develop technologies, services, and processes via a close collaboration between researchers at UIUC and clinical collaborators at OSF HealthCare. It is expected that the funded project will lay the groundwork for a sustainable innovation effort which will lead to improved health outcomes, advanced healthcare delivery, improvements to the healthcare workforce, and/or a reduction in health disparities.

Special attention will be given to proposals addressing:

- Chronic conditions such as high blood pressure, diabetes, and heart failure, which require long-term management and care outside the clinic.
- The unique challenges that arise in providing care to remote and rural populations, including projects that address the needs of underserved groups, address maternal and child health, and provide scalable approaches to health screening and surveillance.
- [Topics in the social and behavioral sciences](#), especially related to social determinants of health, health inequity, developmental conditions such as autism spectrum disorders, social and behavioral health, social and behavioral influences on the cancer continuum, and the digital revolution.

Jump ARCHES has over 154 projects at a total of \$11 million since 2014. All funded projects can be viewed at: <https://healtheng.illinois.edu/jumparches/fundedgrants>.

Funding Support

There are two types of awards: Phase 1 and Phase 2

Phase 1 awards are for a duration of up to 24 months at a total level of support of up to \$100,000. These awards are expected to generate proof-of-concept implementations of innovative ideas and/or generate pilot data. These projects should enable the investigative team to develop effective working relationships and project concepts that may garner subsequent investment, for example in the form of external funding or additional commercial investments and will lead to sustainable technologies and services.

Phase 2 awards provide for continued funding of an especially promising Phase 1 project for a duration of up to 24 months at a maximum funding level of \$200,000. Prior phase 1 awards fulfilling the innovation tract criteria may apply for Phase 2 funding if two conditions are met:

- Investigators must have demonstrated at least one of the following outcomes: submission of invention disclosure with UIUC OTM - OSF OIM, evidence of application for external funding beyond UIUC, OSF, or UICOMP, or technology license or successful implementation of Phase 1 results at OSF or a related health care organization.
- Investigators must have sought and received pre-approval from program leadership.

Funding Criteria: Phase 2 proposal should provide a detailed plan for pursuing external funding after the program has been completed. The plan should identify candidate funding agencies, proposed aims and goals, and describe the proposed team and their qualifications, to make it clear

how the Phase 2 award will position the investigators for funding success. The requested project duration and level of funding **must be matched** to the project requirements and justified as part of the application process. Investigative teams are encouraged to apply for a duration and funding level which is appropriate for their project, and it is anticipated that the requested award amount will vary per project. **For Phase 2 applications, pre-approval via a discussion with Jump ARCHES program leadership is mandatory** to determine an appropriate duration and award amount. Phase 2 proposals that have not received pre-approval will be returned without review.

Evaluation Criteria

- Proposals will be specifically evaluated for the alignment of the project to program goals (relevance), the potential for innovative outcomes (impact), and the quality of the proposal plan and team (approach).
- Proposals will be examined for team composition (inclusion of appropriate UIUC and OSF/UICOMP investigators, and equitable distribution of funding between organizations) and. If the UIUC Co-PI is not from Grainger Engineering, the team should include a Granger Engineering Researcher.
- Evaluation will take into consideration the next steps and advancement of the work, as well as plans for future funding and/or product development activities (e.g., IP, start-up, who will advance the work, commercialization plan).

Application Preparation

For questions regarding the preparation of a responsive application, please contact:

Seth Stutzman, SS, BS
ARCHES Program Coordinator
(309) 308-9409
seth.t.stutzman@jumpsimulation.org

Questions can be sent to seth.t.stutzman@jumpsimulation.org.