



Applied Research for Community Health through Engineering and Simulation
A University of Illinois and OSF Health Care Collaboration

Request for Proposals

The Jump Applied Research for Community Health through Engineering and Simulation [Jump ARCHES] Endowment offers this Request for Proposals to members of faculty of the University of Illinois College of Engineering at Urbana-Champaign, members of faculty of the University of Illinois College of Medicine at Peoria, and/or OSF Healthcare System clinicians. The goal of this competitive grant is to improve healthcare quality and patient safety through the combined efforts of engineers and clinicians.

- **Deadlines**

The request for Proposals Opens: September 18, 2017

Submission Deadline: October 25, 2017 at 5pm CST

You are encouraged to attend the 4th Health Care Engineering Symposium on September 11th, 2017. A networking session is planned for those interested in submitting an application for the ARCHES grant. Please follow the link to register: <http://healthengsymp.illinois.edu/>

Proposals will be reviewed swiftly with an announcement of awards by first week of **January, 2018**.

NOTE: A link to this online submission mechanism, which will closely follow the NIH R21 mechanism format, will be available after September 18, on:

<http://healtheng.illinois.edu/funding/> and on

<https://jumpsimulation.org/research-innovation/research/jump-arches>

While a project may exceed \$50,000 in total funding for a single year, the strongest proposals will have a well-developed justification for expenses above this level.

- **How to prepare a responsive application**

The goal of this program is to use our combined expertise in the broad areas of Sensing Devices, Materials and Mechanics, Health Information Technologies, Simulation, Human Factors/Industrial Ergonomics and Design for executing collaborative projects which could be used for and directed to simulation in training of the healthcare practitioners of tomorrow.



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During the current cycle we encourage proposals in the following areas:

- ◆ **Serious Gaming for Medical Education and Training**
- ◆ **Virtual Reality and Augmented Reality in Simulation**
- ◆ **Advanced Software for Medical Education and Simulation**

The proposed research should address the needs of clinical simulations and training, and be amenable to translational activities, which lend themselves to full deployment and commercialization of the outcomes for use in medical training.

Proposals will be specifically evaluated for their respective alignment to program goals [Relevance], the potential impact on patient and learner outcomes [Impact], and the proposed plan and quality of the team proposed [Approach].

Proposals are required to include two Co-Investigators: one from the University of Illinois College of Engineering at Urbana-Champaign and one from among the clinicians providing care within OSF Healthcare System. Including additional Co-Investigators from other disciplines are acceptable, as long as the two required investigators are included.

- **About Jump ARCHES**

This endowed fund supports collaborative efforts between engineers and healthcare providers at OSF HealthCare and University of Illinois College of Medicine at Peoria as they work to solve healthcare challenges through innovative solutions that bend the cost curve of healthcare and optimize outcomes. Using the state-of-the-art resources available within the Jump Trading Simulation and Education Center (“Jump Sim Center”) at OSF Saint Francis Medical Center (the “Medical Center”), these collaborative efforts will impact the quality of healthcare on a global scale.

- **Use of Funds**

The Jump ARCHES grant program will fund:

- ◆ Salary support for engineers who will work primarily within Jump ARCHES in Peoria.
- ◆ Salary support for clinicians or investigators within OSF HealthCare, the University Of Illinois College, or others relevant to the research program.
- ◆ Salary support for other key personnel or consultants
- ◆ Administrative and staffing expenses within the Jump Simulation Center.
- ◆ Programmatic funding within project scope.

All proposals recommended for funding will be characterized by a statement of work and a budget. In addition the proposal must address how the research will meet the goals of the Jump ARCHES program. The application process and the steering panel’s recommendation for funding



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will be formalized by these two instruments and others which will define the background intellectual property of the contributing individuals and their institutions.

- **Review Process**

The steering panel for Jump ARCHES will prioritize:

- ◆ Applied research programs that evaluate the improvement of patient outcomes through clinical simulation.
- ◆ The creation of equipment and facilities to evaluate and improve health care through clinical simulation.
- ◆ Contributions to scholarship and support for advanced degrees to prepare new generations of experts in the field.
- ◆ Proposals which are competitive for additional external funding to advance the broader use of clinical simulation in healthcare.

Suitable space will be assigned to Jump ARCHES within the 3rd and 4th floor of the Jump Simulation Center building adjacent to the landmark Milestone building of OSF Saint Francis Medical Center, and at Health Care Engineering Systems Center if required. This location will provide access to a wide spectrum of clinical professionals and their existing healthcare technologies, and illuminate the challenges they face in the transformation of health care.

- **Phase 2 Continued Funding**

For the current ARCHES grantees, we invite you to submit a proposal for phase 2 funding to continue the project, if excellent progress has been made during the initial phase of the project. A final report will be required before continued funding request is reviewed. The proposal must show potential for translational research or external funding opportunity. Phase 2 proposal deadlines are the same as described earlier.

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