

# Opportunity Details

## JUMP ARCHES SPRING 2020 SPECIAL RFP CALL

### Description

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 at Urbana-Champaign, the health care providers of the University of Illinois College of Medicine at Peoria, and/or OSF HealthCare clinicians.

### Goals

A special and timely focus for this RFP is proposals addressing digital health, data science, health equities, community health, AI, and related areas in the development of technologies that may address COVID-19, pandemic flu, or similar health crises. The goal of this competitive grant is to improve health care quality and patient safety through the combined efforts of researchers, engineers, clinicians, and social and behavioral scientists.

In particular, proposals which identify future or matching funding from federal, state, county, or other governmental or non-governmental relief organizations will be regarded most favorably. The award is for 1 year of startup/seed money support. Requests for continuing funding will be based upon reported progress.

### Eligibility Information

The Primary Investigator may be from any discipline. Additionally, proposals are REQUIRED to include one investigator from the Grainger College of Engineering at the University of Illinois at Urbana-Champaign and one investigator from either the health care providers of the OSF HealthCare or the University of Illinois College of Medicine at Peoria Faculty.

### Evaluation Criterion

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].

For the preparation of a responsive application, please contact: Antonios Michalos, M.D., M.S., Associate Director (217) 244-4563  
michalos@illinois.edu

For questions on the submission of the application, please contact: Seth Stutzman, SS, BS, BS, ARCHES Program Coordinator (309) 308-9409  
seth.t.stutzman@jumpsimulation.org

Sensors, Mobile Health, Social and Behavioral Health, Population Health, Industrial Design, Human Factors, Ergonomics, Applied Health Sciences, Advance Care

# APPLICATION

This file should be submitted as PDF document via email to [michalos@illinois.edu](mailto:michalos@illinois.edu) and [seth.t.stutzman@jumpsimulation.org](mailto:seth.t.stutzman@jumpsimulation.org)

In the subject heading of the email mention: Jump ARCHES Last Name of PI

## Primary Investigator:

Institution	Department	Unit/Dpt	Phone number	Email
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## Project Team Members:

Name	Role	Institution	Unit/Dpt	Email
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Proposals must identify two Co-Investigators: one from the University of Illinois at Urbana-Champaign Grainger College of Engineering and one from among the clinicians providing care within OSF Healthcare System or University of Illinois College of Medicine-Peoria.

## Title of Project:

## Sections:

### A. Summary (Please limit to 1 page)

- **Project Summary**

State the application's broad, long-term objectives and specific aims with relevance to and how project meets ARCHES goals. The project summary is a succinct and accurate description of the proposed work and should be able to stand on its own (separate from the application). This section should be informative to other persons working in the same or related fields and understandable to a scientifically literate reader. Avoid both descriptions of past accomplishments and the use of the first person. Please be concise.

### B. Research Plan: (This should be NO MORE THAN 6 PAGES TOTAL - less references, facilities, Bios, budget and budget justification).

- **Specific Aims:**

List the specific aims of the proposed projects as actions to be taken. A list of bullet points is acceptable. If they are sequential, place them in a temporal order. If non-sequential, place them in priority.

- **Research Strategy:**

1. **Relevance/Significance** = Does this project address an important problem? If the aims of the application are achieved, how will scientific knowledge or clinical practice be advanced? What will be the effect of these studies on the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

2. **Impact/Innovation** = Is the project original and innovative? For example, does the project challenge existing paradigms or clinical practice; address an innovative hypothesis or critical barrier to progress in the field? Does the project develop or employ novel concepts, approaches or methodologies, tools, or technologies for this area?
3. **Approach** = Are the conceptual or clinical framework, design, methods, and analyses adequately developed, well- integrated, well-reasoned, and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative tactics?

- Expand upon your project concept and explain your Approach to the reviewers. The following content is therefore recommended:
- Introduction/Background: State what is currently known in the specific field. This part should not be very long (3-5 sentences) but it should ground the reader in the subject of your research. Provide the reviewer with only the necessary details to understand why you are proposing the work. Remember to be concise and focused on only the key points.
- The problem: The gap in knowledge is the piece of information that is not known. State, clearly, the gap in knowledge that needs to be addressed. Convey that your project will fill this gap using the funding that you are requesting.
- The critical need: This need is important to increase medically relevant knowledge or improve health care. The critical need is the reason your proposal should be funded. Emphasize the significance of the problem you are trying to address. Additionally, it should be clear in this paragraph that your research proposes the next logical step to advance the field.
- Introduce solution(s): In this paragraph, your goal should be to introduce the solution that fills the gap in knowledge. It is critical to convince your reviewers that you (and your colleagues) have the solution to address the current knowledge gap and the expertise to accomplish this solution. Keep your wording simple, relevant, and to the point.
- You will want to address specific aims both short and longer term (as applicable).
- Hypothesis and Proposal Objectives: Your proposal should contain both of these components, depending on the goal. State your central hypothesis clearly, specifically, and with simple language. You want to demonstrate to the reviewers that you have a hypothesis-driven proposal that is testable. Describe how your project addresses the critical need, and clearly state the proposed solution. In general, avoid vague hypotheses because it will be unclear to the reviewers what you expect to determine with the proposed research.
- Rationale: Explain how you arrived at your central hypothesis (for example, using past studies and published literature). Briefly, state what your project's completion would make possible (e.g., new simulators), and tie it to the funding entity's mission.
- Qualifications: Briefly state why your experimental design and your team are the best to accomplish the project goals. You can mention factors such as your preliminary data, personnel qualifications, laboratory equipment, etc., but it is important to keep it concise.
- Innovation: Plainly state what is innovative about your project. What would completion of this proposal bring to the field that is not present currently? Expected Outcomes: Specifically state your expected outcomes for this project. What do you expect to see at the completion of each aim? Include this information only if you have not placed it in the Aims. In addition, you may either embed or attached supplemental imaging or other diagrams to support your statements.
- Impact: State how your project would help those who need it. Include a broad impact statement about how your proposal will benefit the people or other subjects that you mentioned in the opening paragraph.

**C. Facilities \*:**

**D. Bibliography\*:**

**E. Budget and Budget Justification\***

NOTE: No Overhead and No Tuition remission allowed.

**F. Biosketches for Lead Investigators NIH/NSF style\*** (If not available, please include a short bio)

\*Not included in the 6 pages of the research plan