Opportunity Details

JUMP ARCHES SPRING 2022 PRIORITY RFP CALL

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.

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 award is for one year of seed money support up to $75,000. Short-duration proposals (up to six months, with rapid results) will be given highest priority and will receive funding up to $35,000. Proposals which identify future or matching funding from federal, state, county, or other governmental or non-governmental organizations will be regarded most favorably. Requests for continuing funding will be based upon reported progress and meeting specific requirements (e.g., submission of invention disclosure with OTM (if applicable) and evidence of application for external funding beyond UIUC, OSF, or UICOMP).

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, robotics technology, 3D printing, or other prototyping and manufacturing needs. View these facilities on the HCESC website, Jump Simulation Center Urbana website, and Jump Trading Simulation & Education Center Peoria website.

Focus Areas
This round, we are seeking proposals incorporating solutions in digital health, data science, health equities, community health, AI, and related areas in the development of technologies to:

- Promote recovery post-COVID-19, and/or similar health crises, both from a patient level perspective and the broader perspective of public health and the social and economic impact on healthcare. Specifically, diagnostics, modeling, artificial intelligence, assistive devices, surveillance, vaccination, and ready access to testing sites, test kits and/or test results with a focus on access across the nation will be of high importance.
- Addressing the evolving standards of care to incorporate personalized precision medicine and genomic best practices.

- In multiple capacities, address accuracy and completeness of diagnosis, treatment, and health literacy of historically underserved populations.
- Reduce administrative burden at the bedside to increase the quality of patient interactions.
- Assist in diagnosis and treatment of Neurological Disorders through collaborative efforts with the OSF Children's Hospital of Illinois and Illinois Neurological Institute. Emphasis will be on early diagnosis of neurological disorders, enhancement of social skills associated with chronic neurological disorders, support of children and adults with chronic neurological disorders as they navigate everyday life at home, in school, and in the workplace, and exploration of technologies to utilize unique skills of individuals with neurological disorders.
- Special attention will be given to proposals addressing
    - Social and Behavioral Sciences topics
    - Neurological sciences-particularly assistive technologies
    - Autism spectrum disorders
- Outstanding proposals in additional areas affecting health and wellness may be considered for funding.

Solutions should incorporate one or more aspects of the following:

I. Digital Health and Data Science: This area concerns designing technologies to improve tele-medicine, data gathering, sensor design, designing assistive technologies, robotics and advancing the use of data science, AI, and machine learning to augment and assist in improving the costs, quality, and patient/provider experience.
    a. Special consideration will be given to block chain and other decentralization associated technologies.

II. Health Equities and Community Health: This area concerns mitigating the impact of age, location, and social barriers in delivering quality health care to vulnerable populations. Special emphasis will be given to proposals that address racism, social justice, social and implicit biases, health equity, and access.

III. Simulation and Education: This area concerns using simulation and other virtual or augmented reality technologies to train and evaluate current and future medical professionals. New modalities, AR/VR/MR, design of hardware-based simulators with a focus on Human Factors, Interprofessional Education, etc. will be given preference.

Jump ARCHES has over 114 projects at a total of $7 million since 2014. View all funded projects here.

Submitting Your Application

Applications can be submitted beginning Tuesday, February 1. Submit your applications as a PDF document, following the Jump ARCHES application instructions, via email to michalos@illinois.edu and seth.t.stutzman@jumpsimulation.org.

JUMP ARCHES APPLICATION INSTRUCTIONS-**Please link the document to the instructions**

The deadline is Monday, February 28 at 5:00 p.m.