

Supplementary Notice to the Priority Innovation RFP Call - Spring 2025

In alignment with the strategic focus on improving patient and family care across key healthcare areas, the Jump Applied Research for Community Health through Engineering and Simulation (Jump ARCHES) program is pleased to announce an enhanced emphasis on four critical strategic areas for development:

1. **Children's Hospital of Illinois**
2. **Neurologic and Neuro Surgical Services of the OSF Illinois Neurologic Institute**
3. **OSF Cancer Institute**
4. **OSF Cardiovascular Institute**

This supplementary notice aims to guide applicants in tailoring their proposals to address the specific needs and opportunities within these focus areas. By doing so, we seek to foster innovation that directly impacts the quality of care, enhances operational efficiencies, and improves health outcomes for patients and their families.

Enhanced Focus Areas

Children's Hospital of Illinois

Projects should emphasize:

- **Pediatric Innovations:** Development of tools and technologies for early diagnosis and intervention in pediatric developmental and chronic conditions.
- **Chronic Care Management:** Novel solutions for managing long-term pediatric illnesses, ensuring continuity of care beyond the hospital setting.
- **Family-Centered Education:** Interactive platforms and educational tools to engage families in the care process, improving adherence and outcomes.

Neurologic and Neuro Surgical Services

Projects should target:

- **Advanced Neuro-Diagnostics:** Leveraging artificial intelligence and machine learning for early detection and monitoring of neurological disorders.
- **Innovative Therapies:** Development of minimally invasive or non-invasive treatments for neurological conditions.
- **Surgical Support Technologies:** Tools to improve pre-operative planning, intraoperative precision, and post-operative recovery in neurosurgical patients.

OSF Cancer Institute

Projects should address:

- **Cancer Disparities:** Solutions aimed at reducing disparities in cancer care for underserved populations.
- **Diagnostics and Screening:** Innovations in early detection, including biomarkers and imaging technologies.
- **Survivorship Care:** Personalized approaches to post-treatment survivorship, including mental health support, rehabilitation, and lifestyle adjustments.

OSF Cardiovascular Institute

Projects should prioritize:

- **Telehealth Solutions:** Scalable telemedicine models for managing chronic cardiovascular conditions, especially in rural and underserved areas.
- **Remote Monitoring Technologies:** Wearable devices and mobile platforms for continuous monitoring and management of cardiovascular health.
- **Preventive Cardiovascular Care:** Strategies to enhance early intervention and prevention, reducing the burden of heart disease.

Expanded Goals

This supplementary notice supports the original goals of the Jump ARCHES program while emphasizing the unique challenges and opportunities within the four focus areas. Applicants are encouraged to:

- Propose solutions that integrate seamlessly into existing workflows within these institutes.
- Collaborate with domain experts from the respective institutes to ensure relevance and impact.
- Demonstrate potential for significant clinical improvements, including scalability and sustainability of proposed solutions.

Enhanced Proposal Criteria

In addition to the standard evaluation criteria outlined in the original RFP, proposals tailored to these focus areas will be evaluated on:

- **Relevance to Strategic Areas:** Clear alignment with the identified challenges and priorities of the four focus areas.
- **Interdisciplinary Expertise:** Inclusion of collaborators with clinical, engineering, and social science expertise specific to the targeted institute.
- **Potential Impact:** Demonstrated capacity to improve patient outcomes, enhance operational efficiency, and contribute to health equity.

Additional Support and Resources

To assist applicants in addressing these enhanced focus areas, the following resources are available:

- Access to simulation and prototyping facilities tailored to pediatric, neurological, oncological, and cardiovascular applications.
- Direct consultation with clinical leaders from the respective institutes to refine project ideas.
- Expanded funding guidance to ensure equitable and impactful allocation of resources.

Submission and Inquiries

For questions specific to this supplementary notice, applicants may contact:

Dr. Antonios Michalos

Executive Associate Director, Health Care Engineering Systems Center
(217) 244-4563
michalos@illinois.edu

Seth Stutzman

Project Manager, Jump ARCHES
(309) 308-9409
seth.t.stutzman@jumpsimulation.org

We encourage all applicants to consider this supplementary notice as an opportunity to further tailor their innovative solutions to address the pressing needs of these critical areas, ensuring maximum impact and alignment with the strategic goals of Jump ARCHES and OSF HealthCare.