

CITRIS Seed Funding Opportunity for 2014

Deadline: Sunday, January 26, 2014, Midnight (PST)

The 2014 Seed Funding Opportunity invites CITRIS Principal Investigators at CITRIS campuses (Berkeley, Davis, Merced and Santa Cruz) to apply for a one-year Seed Grant that will support CITRIS research initiatives, enhance cooperation among campuses, and facilitate early-stage research that can lead to external funding.

Total funds available: \$500,000

Project Awards: \$10,000 to \$60,000

Requirements:

- Project must be a collaboration among CITRIS PIs on more than one campus
- Project must be relevant to one of the four CITRIS Initiatives: Health Care, Energy, Intelligent Infrastructure, Data & Democracy

Exclusions:

- CITRIS Seed Funding may not be used for faculty salary or non-resident tuition.
- CITRIS PIs who have previously received funding must have submitted a final report on their previous project.
- CITRIS PIs may participate in no more than two proposals and serve as lead researcher on no more than one.

Evaluation Criteria:

Seed Grant proposals will be evaluated by a committee according to the following criteria:

- A. The scientific and technical merits, novelty and rigor of the proposal
- B. The likelihood that the project will have a tangible and positive impact on society, and that it will lead to significant results
- C. The likelihood of larger-scale funding from government agencies or industries
- D. Evidence of cross-disciplinary collaboration among researchers based at the four CITRIS campuses
- E. Contributions to one (or more) of the four CITRIS research initiatives
- F. Use of the Marvell NanoLab is encouraged but not required

The CITRIS Seed Grant Program supports innovative early stage collaborative projects that, if successful, can attract larger-scale support from Federal/State funding agencies or the industrial/private sector.

CITRIS Initiatives

1. Health Care

This initiative is designed to improve access, and reduce disparities and costs, in health care through the development of telehealth, sensors and services, and gaming technologies. Particular emphasis is on improving outcomes and services to persons with chronic disease at the patient, provider, or system level, as aligned with the aims of the Affordable Care Act (ACA). Specific research topics solicited under this initiative include:

- a. Service and care management solutions: Complex chronic care management, integration of service/human factors and technology, advances in patient and provider engagement, services addressing access and disparities, innovative and sustainable telehealth and telemedicine programs
- b. New platforms and sensors: Tele-immersion, 3D visualization, virtual reality, wireless, telehealth and telemedicine devices, passive sensors, imbedded sensors, interoperable systems, improved user interface
- c. Integrated wireless, mobile and apps health care solutions: Game-based learning, behavior-change programs, social network solutions
- d. Technology solutions for aging and chronic disease: Health care technology solutions for prevention, health promotion, and chronic disease management for older adults, innovative technology solutions for informal and formal caregivers
- e. Data analytics: Sensor networks and algorithms, EMR integration and analytics, population health solutions, data management and analytics

2. i4Energy

CITRIS's research in energy supports the development of technologies that will help realize the "demand-side" potential of the smart grid. We invite proposals in three key areas:

- a. Integrated sensors to communicate vast amounts of real-time information
- b. Data management to gather, process and direct information. Projects involving the applications of sMAP (<http://code.google.com/p/smap-data/>) are encouraged.
- c. Advanced controls to act on the information, increasing the productivity and sustainability of energy systems

3. Intelligent Infrastructure

The invention of the wireless sensors and the smart phone created opportunities to understand, in real-time, the behavior of critical infrastructures and ultimately to manage such infrastructures more efficiently and effectively, as well as respond more effectively to disruptive events. Within this theme CITRIS seeks applications that will enhance its impact in:

- a. Intelligent Water Infrastructures. Applications are encouraged that create a water monitoring system enabling any country, state, region or city to:
 - Operate its water system *efficiently, sustainably and equitably*
 - Meet the challenges created by *climate change, population growth* and changing *demographics*
- b. Disaster Preparedness and Response. Wireless sensor networks and low-cost communication devices, combined with social media apps, will transform the way in which communities prepare for and respond to natural and man-made disasters. Projects that develop new technology or combine existing technology for early warning and quick, effective response will be encouraged. End users include first responders, emergency management professionals, and community members.

4. Data and Democracy

The Data and Democracy Initiative focuses on social media, interfaces, algorithms, and models that enhance community engagement in political, economic, and cultural issues. Audiences for these innovations may be at the grassroots level (community organizers, citizen journalists, students) or policymakers and organizational leaders. Projects that increase access to education, promote civic transparency and accountability, or raise awareness of policy issues are welcome. These may include novel applications for public open data, innovative use of data visualization tools, or use of game-based principles, video tools or social networking platforms for user engagement. Applications using mobile devices and those that recognize and mitigate disparities in access to technology are encouraged.

Submission Requirements:

- Complete **Project Proposal Online Form**
<http://form.jotformpro.com/form/33156723458963>
An online form to submit project summary, upload description and upload Budget Form (see below)

Proposal Description (3 pages, 12-point font)

- Title and abstract
- A description of the work to be undertaken
- An assessment of the project's intellectual merit, innovation, and potential for broad-scale impact
- The plan for requesting large-scale funding from government agencies, industry, or private foundations
- Evidence of collaboration among researchers based at the four CITRIS campuses and of a multi-disciplinary approach

- Discussion of any cross-over application to other CITRIS Initiatives is welcomed, but is not necessary for consideration of funding

- Complete and upload **Budget Form**
[http://citris-uc.org/files/CITRIS Seed Funding Proposal Budget Form 2014.xlsx](http://citris-uc.org/files/CITRIS_Seed_Funding_Proposal_Budget_Form_2014.xlsx)
Complete this form and upload at the end of the Project Proposal Form

Submissions will be acknowledged within one week.