Cybersecurity Innovation for Cyberinfrastructure (CICI)

Sponsor’s Name: NSF - National Science Foundation  
Funding Amount:  
Sponsor’s Deadline: April 19, 2016  
Response to OSP: February 18, 2016  
Most recent success: Two (2)  
SPIN URL: https://spin.infoedglobal.com/Program/Opportunity/51725

Synopsis

Advancements in data-driven scientific research depend on trustworthy and reliable cyberinfrastructure. Researchers rely on a variety of networked technologies and software tools to achieve their scientific goals. These may include local or remote instruments, wireless sensors, software programs, operating systems, database servers, high-performance computing, large-scale storage, and other critical infrastructure connected by high-speed networking. This complex, distributed, interconnected global cyberinfrastructure ecosystem presents unique cybersecurity challenges. NSF-funded scientific instruments, sensors and equipment are specialized, highly-visible assets that present attractive targets for both unintentional errors and malicious activity; untrustworthy software or a loss of integrity of the data collected by a scientific instrument may mean corrupt, skewed or incomplete results. Furthermore, often data-driven research, e.g., in the medical field or in the social sciences, requires access to private information, and exposure of such data may cause financial, reputational and/or other damage. Therefore, an increasing area of focus for NSF is the development and deployment of hardware and software technologies and techniques to protect research cyberinfrastructure across every stage of the scientific workflow.

The objective of the Cybersecurity Innovation for Cyberinfrastructure (CICI) program is to develop and deploy security solutions that benefit the scientific community by ensuring the integrity and reliability of the end-to-end scientific workflow. This solicitation seeks unique ways to protect scientific instruments, resources, cyberinfrastructure and data that extend beyond building better perimeters and point solutions. As funding agencies move toward providing openly accessible data, the possibilities for scientists and engineers to use data sources beyond those created by their own community grow.

Eligibility

Organizations are limited to 2 CICI proposals. These eligibility constraints will be strictly enforced in order to treat everyone fairly and consistently. In the event that an organization exceeds this limit, proposals received within the limit will be accepted based on earliest date and time of proposal submission (i.e., the first two proposals received will be accepted and the remainder will be returned without review). No exceptions will be made.

Funding Guidelines

Total funding for the CICI program is $7,000,000, subject to the availability of funds. Secure and Resilient Architecture awards will be supported at up to $1,000,000 total per award for up to three years. Regional Cybersecurity Collaboration awards will be supported at up to $500,000 total per award for up to two years. Source: Grants.gov (01/21/16).

The on-campus nomination process

• Research Associate Deans advise faculty of restricted funding opportunity. Web sites are included to help distribute program information.
• Applicants provide their Research Associate Dean with a nomination that includes a 2-page Curriculum Vitae and Nomination Cover Letter detailing how the nominee meets the requirements for the award.
• Colleges select only as many candidates as allowed (number specified above).
• Colleges fill out the Limited Submission RFP Nomination Form cover page found on the Limited Submission Program Announcements web page: (https://rsweb.research.colostate.edu/restrictedprograms/restricted_programs.aspx)
• Colleges forward nominations, including the Limited Submission RFP Nomination Form cover page, to Sponsored Programs via email (Restricted@research.colostate.edu). DUE: 2/18/2016
• The Vice President for Research and the VPR leadership team, in consultation with the Deans or other advisory groups as necessary, will determine which proposal(s)