

OAC Core Research Program (OAC-Core)

Solicitation NSF18-567

Office of Advanced Cyberinfrastructure Division (OAC)
Computer and Information Science & Engineering (CISE)
National Science Foundation

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OAC Core Webinar, Aug 7, 2018



National Science Foundation
WHERE DISCOVERIES BEGIN

Program Goals



- Advanced Cyberinfrastructure (CI) research to impact the future capabilities of research CI
 - New knowledge in design, development, and utilization of robust research CI
- Research career paths of cyber scientists/engineers
 - Computer as well as Computational and Data-driven Science and Engineering with advanced CI research thrusts



What is Advanced Cyberinfrastructure (CI)?

- Spectrum of resources, tools, and services
 - computational, data, software, networking, and security
- Computational and data skills

⇒ To transform science and engineering research



- Translational research
 - Design, development, deployment, experimentation, and application of advanced research CI
 - Spanning design to practice
- Other characteristics:
 - Multi-disciplinary,
 - Extreme-scale,
 - Driven by science and engineering research,
 - End-to-end, or
 - Deployable as robust research CI



- *Architecture & middleware for extreme-scale systems:*
 - Design, benchmarking, and analysis; storage, networks, and I/O; Resource management, monitoring, fault tolerance, and cybersecurity
- *Scalable Algorithms and Applications:*
 - Numerical and high-performance scientific computing methods; Data, software and visualization; and Modeling and simulation
- *Advanced Cyberinfrastructure Ecosystem:*
 - Programming languages, libraries, and environments; Tools; Sociotechnical aspects



- Validation plan:
 - Mechanisms or exploration of leading-edge production systems (or equivalent simulated, emulated, or experimental systems)
- Transition-to-practice:
 - Incorporation of research into production CI

Award Framework



- Only **Small** proposals in FY'19
 - Max \$500K/award for up to 3 years
- Estimated number of awards: 10-15
- Due **Nov 15, 2018**

Submission Logistics



- Part of CISE's coordinated core program solicitations
 - limit of 2
- Overlaps with other CISE programs (CCF, CNS, or IIS)
 - Choose OAC as primary, another as secondary
- Proposal titles should begin with "OAC Core"
 - for example, **OAC Core: Small: Title.**

Feedback from Program

Directors



- PI's *strongly encouraged* to send 1-page project summary for further guidance at least a month in advance
 - Project overview, Intellectual merit and Broader impact, + keywords.
- Cognizant PDs:
 - Sushil Prasad - sprasad@nsf.gov
 - Vipin Chaudhary - vipchaud@nsf.gov
 - Stefan Robila - srobila@nsf.gov



Q1. Can you explain the term translational research for OAC?

- Often employed in medicine
 - research needed from “bench to bedside”
- Analogously, OAC is interested in CI research that
 - builds on basic research results
 - spans design to practice stages



Q2. I have a project that I believe would align with OAC as well as another CISE program. How will the proposal be handled?

- Identify a primary and a secondary program
- May co-review and/or co-fund
- If co-paneled by two programs, not a double jeopardy!
 - If it reviews well in either, it has a chance of funding.



Q3. Explain the limit of 2 on number of proposals per PI or Co-PI or senior personnel.

- You may participate in 2 or fewer proposals across all size classes in response to the coordinated solicitations
- Coordinated solicitations include Core Programs in
 - CCF, CNS, IIS and OAC

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Thank you!

Questions: sprasad@nsf.gov

These slides, an audio recording, and a script of this webinar will be available at

https://www.nsf.gov/events/event_summ.jsp?cntn_id=296101&org=CISE