Research Infrastructure Improvement Program

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New Management
Same Mission, New Vision and
New Implementation

Office of the Director, Office of Integrative Activities
EPSCoR In Transition

• EPSCoR’s move to OIA in the Director’s Office raises its visibility and underlines the need for
  - Sharper research focus
  - Stronger integration across Foundation

• Increase EPSCoR competitiveness through
  - Increased co-funding
  - EPSCoR participation in NSF initiatives
  - Alignment of RII-supported S&E with discovery frontiers in Directorates and Offices across NSF
  - Catalyzing new, effective interactions
EPSCoR Goals

- Provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness, and
- Advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation, and overall knowledge-based prosperity.

*NSF’s Vision: Advancing discovery, innovation, and education beyond the frontiers of current knowledge, and empowering future generations in science and engineering*

(NSF Strategic Plan, FY 2006-2011)
EPSCoR Objectives

- Catalyze key research themes
- Activate effective collaborations
- Use Experimental PSCoR as a programmatic test bed
- Broaden participation in Science and Engineering
Strategic Investment Tools

- Research Infrastructure Improvement Program
- Workshops & Outreach
- Co-Funding Across NSF
Research Infrastructure Improvement

• **RII-Track 1**
  - Up to $4M per year for 5 years ($20M)
  - To improve physical and human infrastructure critical to R&D competitiveness in priority research areas

• **RII-Track 2**
  - Up to $2M per year for 3 years ($6M)
  - To consortia of EPSCoR jurisdictions to support innovation-enabling cyberinfrastructure of regional, thematic, or technological importance.
RII-Track 1 Criteria for Eligibility

• A jurisdiction's demonstrated commitment to develop their research bases and to improve the quality of science, technology, engineering, and mathematics (STEM) research conducted at their universities and colleges, and

• A jurisdiction’s most recent three-year history of research funds awarded by NSF relative to the Foundation's total research budget for that same period.
Changes in Recent RII-1 Solicitation

- Cost Sharing is required (50%)
- All RII Track-1 awards will be cooperative agreements
- Page limitations apply to RII proposals
Project Description Requirements

❖ Structure of the proposal
  • Makes it easier to write a proposal
  • Makes it easier to review all proposals

❖ Clearly Stated Goals and Milestones

❖ Balance among required elements

❖ Budget details for all
  • Institutions
  • Participants
  • Activities
Page Limitations

Overall for the whole project page limit is 25 pages

1) Status and Overview 3 pages
2) Results from Relevant Prior NSF Support 2 pages
3) Research Program 15 pages
4) Diversity Plan 2 pages
5) Workforce Development Plan 4 pages
6) Cyberinfrastructure Plan 2 pages
7) Outreach and Communication Plan 2 pages
8) Evaluation and Assessment Plan 3 pages
9) Sustainability Plan 4 pages
10) Management Plan 3 pages
   1. Jurisdictional and Other Support
   2. Summary Table of Requested NSF Support
11) Supplementary Documentation
   a) Lists of Participants
   b) Budget Tables
   c) Letters of Commitment

Σ total 40 pages
Research Program

- One or more focus research areas; for each area proposed
  - Long-term research goals and intellectual focus
  - Planned research activities in sufficient detail (scientific merit and broader impacts)
  - Identify the senior leadership and describe their intellectual roles
  - Outline the resources, available and planned
  - Estimate the numbers of postdoctoral, graduate, and undergraduate research participants

- Interactive, collaborative research approach involving several investigators and institutions should be clearly established

- Place the focus area in the context of the RII Track-1 as a whole, and describe interactions with other groups and organizations within the jurisdiction

- The narrative should demonstrate
  - How the activities of the specific focus areas are aligned with the jurisdiction’s S&T plan, and
  - How they will advance the jurisdiction’s future research competitiveness

Science Comes First!
Diversity Plan

• Diversity is the key to utilization of all of the nation’s intellectual and physical resources
• Diversity is broadly defined in EPSCoR and includes all types:

- Geographic
- Institutional
- Individual
- Disciplinary
- And all other types
Workforce Development

Focus on transformative workforce development

Conceptually novel programs

Synergy with other NSF investments

Jurisdiction-wide and fully inclusive

Continue established and successful programs
Sustainability Plan

Managing for Sustainability

Post RII extramural funding

Seed Funding and Emerging Areas

Education and Human Resources Development

High risk/high impact projects

Innovative Educational and WFD ventures

Transformative research

Recruitment and retention activities, conferences, workshops, summer schools

Collaboration with industry

Discovery based learning for K-12 teachers and students

Remote access to instrumentation
Cooperative Agreement is Partnership

Partnership is a two way street

- You *(state)* set your goals
  - NSF helps you to get there
- You propose your program
  - NSF reviews and funds it
- You assess what you do
  - NSF evaluates your individual program within NSF EPSCoR program as a whole
Thank you!