Experimental Program to Stimulate Competitive Research (EPSCoR)

W. Lance Haworth
Director, NSF Office of Integrative Activities
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http://www.nsf.gov/od/oia/
EPSCoR Origins

NSF’s 1979 statutory authority “authorizes the Director to operate an Experimental Program to Stimulate Competitive Research (EPSCoR) to assist states that:

- Have historically received little federal R&D funding; and
- Have demonstrated a commitment to develop their research bases and improve science and engineering research and education programs at their universities and colleges.”
EPSCoR Purpose

To build the capacity of educational institutions to participate more fully in NSF research activities.
EPSCoR Objectives

• To catalyze key research themes that empower knowledge generation, dissemination, and application,

• To activate effective jurisdictional and regional collaborations that advance scientific research, promote innovation, and benefit society,

• To broaden participation in S&E by institutions, organizations, and people within EPSCoR jurisdictions,

• To use EPSCoR for development, implementation, and evaluation of future programmatic experiments that motivate positive change and progression.
NSF EPSCoR Cohorts

- FY 1980: Arkansas, Maine, Montana, South Carolina, West Virginia
- FY 1985: Alabama, Kentucky, Nevada, North Dakota, Oklahoma, Puerto Rico, Vermont, Wyoming
- FY 1987: Idaho, Louisiana, Mississippi, South Dakota
- FY 1992: Kansas, Nebraska
- FY 2000: Alaska, Hawaii, New Mexico
- FY 2001: U.S. Virgin Islands
- FY 2002: Delaware
- FY 2003: New Hampshire, Rhode Island, Tennessee
- FY 2004: Delaware, New Hampshire, Rhode Island, Tennessee
Strategic Investment Tools

• **Research Infrastructure Improvement Grants (RII):** Up to 5 years and $15M to improve physical and human infrastructure critical to R&D competitiveness in priority research areas.

• **Co-funding:** Joint support of research proposals submitted by EPSCoR researchers to NSF disciplinary programs.

• **Outreach and Workshops:** Support of outreach activities by NSF disciplinary and professional staff; Support of strategic planning and capacity-building workshops.
Changes in RII Solicitation

• Maximum duration: 48 mos => 60 mos
• Maximum award: $9 million => 15 million
• Project Description now requires:
  ➢ Cyberinfrastructure plan
  ➢ Diversity plan
  ➢ Outreach and Communication plan
  ➢ Succession plan for project leadership
• New requirements reflected in review criteria
Issues to Consider in RII Projects

• Appropriateness of investments to increase research capacity

• Evidence of improved research competitiveness

• Extent of integration of research with education and innovation

• Performance of broadening participation strategies
Issues to Consider in RII Projects

- Evidence of linkages that enhance RII activities
- Suitability of evaluation plan and evidence for its implementation
- Progress toward project sustainability
- Effectiveness of communication and dissemination strategies
- Alignment of RII activities with NSF S&E programs and NSF Strategic Plan
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EPSCoR Investments Leveraged with Funds from NSF Disciplinary Directorates ($M)

- **NSF Directorate Co-funding**
- **EPSCoR Co-funding**
- **Infrastructure and Related Funding**
- **Workshops, Outreach, etc.**
Funding Rate for NSF Proposals: Effect of EPSCoR Co-funding (CF)
Strategic Investment Tools

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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
NSF-wide Investments FY09

- Cyber-enabled Discovery and Innovation
- Science and Engineering “Beyond Moore’s Law”
- Adaptive Systems Technology
- Dynamics of Water Processes in the Environment

Office of Integrative Activities

ABOUT OIA

The Office of Integrative Activities (OIA) supports the efforts and policy of the Director and the Deputy Director of the National Science Foundation to promote unity and alignment in support of the Foundation's mission. In this capacity, OIA:

- works across organizational boundaries to promote understanding of, and support, for the Foundation's traditional mission as well as new directions stemming from strategic planning undertaken by the NSF leadership;
- works in partnership with Directorates, major offices, and other parties to develop and promote a performance-based approach to NSF's management of its investment portfolio;
- supports the Office of the Director via policy analysis and implementation of special projects that span organizational boundaries and Foundation priorities with policy implications;
- provides operational and program policy support for the Senior Management Integration Group and the GPRA (Government Performance and Results Act) Implementation Council;
- provides support for NSF involvement in the National Science and Technology Council, COSEPUP (Committee on Science, Engineering and Public Policy), GUIRR (Government-University-Industry Research Roundtable), etc.;
- and analyzes external reports to identify and assess issues of importance to NSF.

W. Lance Haworth is the Director of the Office of Integrative Activities.
Thank You!

About EPSCoR

The mission of EPSCoR is to assist the National Science Foundation in its statutory function "to strengthen research and education in science and engineering throughout the United States and to avoid undue concentration of such research and education." EPSCoR goals are: a) to provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness; and b) to advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation and overall knowledge-based prosperity.

EPSCoR OBJECTIVES

- to catalyze key research themes and related activities within and among EPSCoR jurisdictions that empower knowledge generation, dissemination and application;
- to activate effective jurisdictional and regional collaborations among academic, government and private sector stakeholders that advance scientific research, promote innovation and provide multiple societal benefits;
- to broaden participation in science and engineering by institutions, organizations and people within and among EPSCoR jurisdictions;
- to use EPSCoR for development, implementation and evaluation of future programmatic experiments that motivate positive change and progression.