



## **EPSCoR/IDeA IN FISCAL YEAR 2011**

Prepared by: EPSCoR/IDeA Foundation (EIF)  
FEBRUARY 2010

### **BACKGROUND**

The Experimental Program to Stimulate Competitive Research (EPSCoR) and the Institutional Development Award (IDeA) Program were established to ensure that the research universities of all states participate in and benefit from federal science and technology (S&T) activities. Seven federal EPSCoR/IDeA programs have partnered with state governments and their research universities to improve the S&T capacity of these institutions. This effort has been highly successful. The federal and state EPSCoR/IDeA investment has created a flourishing research enterprise, and developed extensive scientific and technological expertise. EPSCoR/IDeA states are now home to more than one-fifth of the academic scientists and engineers who are engaged in research activities, and one-quarter of doctoral research universities. These institutions and their faculty represent an important American asset. These S&T resources must be utilized to overcome the current national economic crises and return our country to predominance in world markets.

President Obama and Congress have determined that a crucial component of the economic recovery will be an S&T effort involving all sectors of the economy and all states and regions. EPSCoR/IDeA states' academic scientists and engineers are already working on cutting edge research in energy, defense, climate change, health, transportation, homeland security, and agriculture. This research forms the base for discoveries that ultimately lead to the creation of new high tech businesses and new opportunities for the US workforce. The federal investment in EPSCoR and IDeA programs must be strengthened to ensure that the national research enterprise remains robust in all states and regions as our country works to restore and maintain its S&T supremacy in world markets.

EPSCoR/IDeA involves 27 states and two territories. Six agencies currently have EPSCoR or IDeA programs: the National Institutes of Health (where IDeA is located); and the agencies with EPSCoR programs including the National Science Foundation; the National Aeronautics and Space Administration; the Environmental Protection Agency; and the Departments of Defense, Energy, and Agriculture. Agencies use rigorous merit-review processes to guide funding decisions in each of the federal agencies. States and universities that participate in these programs contribute significant funding to the EPSCoR/IDeA effort.

Eligible EPSCoR/IDeA jurisdictions include: Alabama, Alaska, Arkansas, Delaware, Hawaii, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, West Virginia, Wyoming, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands.

The EPSCoR/IDeA programs are diverse and innovative, as are the people who conduct them. All programs and researchers contribute to state and national priorities, whether in basic science, engineering, technology and mathematics, health, defense, homeland security, environment, agriculture, space, energy, education, or other essential areas. Bold, strategic, and focused investments in people, tools and ideas are advancing scientific progress and catalyzing innovation across America.

## Summary of EPSCoR/IDeA Programs, by Agency

Agency	Date Enacted	FY10 Enacted	FY11 Goals	# of Eligible States	Types of Support/Award Mechanism
NSF/EPSCoR	1979	\$147.8M	\$170.0M	29	<ul style="list-style-type: none"> <li>◆ Research Infrastructure Improvement Awards</li> <li>◆ Co-Funding</li> </ul>
DOD/DEPSCoR	1991	\$0.0	Language	23	<ul style="list-style-type: none"> <li>◆ Basic and Applied Research Grants</li> <li>◆ Graduate Traineeships</li> <li>◆ Research Instrumentation</li> </ul>
EPA/EPSCoR	1991	0	Language	27	<ul style="list-style-type: none"> <li>◆ Co-Funding</li> </ul>
DOE/EPSCoR	1991	\$22.0M	\$52.0M	25	<ul style="list-style-type: none"> <li>◆ Laboratory-State Partnership Awards</li> <li>◆ Implementation Grants</li> </ul>
USDA/EPSCoR	1991	\$26.248M	\$42.0M	26	<ul style="list-style-type: none"> <li>◆ Research Career Enhancement Awards</li> <li>◆ Equipment Grants</li> <li>◆ Seed Grants</li> <li>◆ Strengthening Standard Research Project Awards</li> </ul>
NASA/EPSCoR	1993	\$25.0M	\$25.0M	28	<ul style="list-style-type: none"> <li>◆ Research Implementation Awards</li> <li>◆ Research Infrastructure Development Awards</li> </ul>
NIH/IDeA	1993	\$228.862 M	\$275.0M	24	<ul style="list-style-type: none"> <li>◆ Centers of Biomedical Research Excellence (COBRE)</li> <li>◆ IDeA Networks of Biomedical Research Excellence (INBRE)</li> <li>◆ Co-Funding</li> </ul>

**National Science Foundation  
NSF EPSCoR**

**Cognizant Office** Office of Integrative Activities

**P r o g r a m Description** NSF EPSCoR, established in 1979, develops and makes the best use of a state’s academic science and technology resources. Its goals are to: a) “provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness; and b) advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation and overall knowledge-based prosperity.” By improving research infrastructure and increasing the capability of scientists to compete for mainstream programs, NSF EPSCoR is building a high-quality, university-based research and education infrastructure, capable of supporting a strong and stable economic base into the 21<sup>st</sup> century. NSF EPSCoR works through a State Committee in each of its eligible jurisdictions.

**A w a r d Components** **Current funding mechanisms** – NSF EPSCoR provides funding support through the following types of awards:

**EPSCoR Research Infrastructure Improvement (RII) Awards:**

- **Track-1 RII Awards** provide up to \$4 million annually to support academic research infrastructure improvements in R&D areas critical to the state’s long-term S&T competitiveness and economic development. **EPSCoR states and institutions contribute additional funding (20 percent of the total NSF award).**
- **Track-1 awards are the most important investment mechanism in jurisdictions’** research infrastructure development and maintaining their competitiveness.
- **Track-2 RII Awards** provide up to \$2 million dollars per year to support research utilizing cyberinfrastructure. Track-2 awards are multi-jurisdictional and seek to develop regional strengths.

**EPSCoR Co-Funding:** The goal of co-funding is to accelerate movement of EPSCoR investigators into mainstream NSF research programs. Since 1998, NSF EPSCoR co-funding has enabled more than 2,000 EPSCoR researchers to win funding in the science and education programs at NSF. Co-funding allows the science, engineering, and education programs at NSF to fund more awards to researchers in EPSCoR states by providing partial EPSCoR support for proposals that have been highly rated by the merit review process but for which sufficient funding is not available through the regular process. A portion of the funding for such proposals comes from the EPSCoR program itself and a portion from NSF’s S&E programs.

**EPSCoR States** 29

<b>Budget History</b>	FY09 Enacted	FY10 Enacted	FY11 Budget Request	FY11 Goal
	\$133.0M	\$147.8M	\$154.36	\$170M

**EIF Liaisons** Chair, NSF EPSCoR Subcommittee Staff

Paul Hill, Ph.D.  
West Virginia Higher Education Policy Commission

Carolyn Fuller  
[cfuller@vsadc.com](mailto:cfuller@vsadc.com)

Jim Hoehn  
[jhoehn@epscofoundation.org](mailto:jhoehn@epscofoundation.org)

**National Institutes of Health (NIH)  
Institutional Development Award (IDeA) Program**

<b>Cognizant Office</b>	National Center for Research Resources (NCRR)
<b>P r o g r a m Description</b>	NIH established the Institutional Development Award (IDeA) program in 1993. IDeA – the largest of the EPSCoR-like programs – is designed to broaden the geographic distribution of NIH funding for biomedical research. As authorized by Congress, the program is intended to enhance the competitiveness for research funding of institutions located in states with historically low levels of funding and low aggregate success rates for grant applications to the NIH.
<b>Award Components</b>	<p>Currently, the two core components of IDeA are: 1) Centers of Biomedical Research Excellence (COBRE) program and 2) IDeA Networks of Biomedical Research Excellence (INBRE) program.</p> <p><b>COBRE:</b> The COBRE program is designed to increase the pool of well-trained investigators in the IDeA states by expanding research facilities, equipping laboratories with the latest research equipment, providing mentoring for promising candidates, and developing research faculty through support of a targeted multi-disciplinary center, led by an established, senior investigator with expertise in the research focus area of the center.</p> <p>COBRE goals are to: 1) develop a thematic scientific focus in an NIH area; 2) engage an established investigator, funded by NIH, NSF or other comparable Federal or private sector source to lead the effort; 3) develop the competitiveness of 3 to 5 research projects, each supervised by a junior investigator; 4) define a plan for mentoring, career development, graduation and replacement of junior investigators; and 5) establish long-term plans for developing and sustaining the center, research program, investigators, collaborations and physical infrastructure.</p> <p><b>INBRE (formerly BRIN):</b> INBRE increases the pipeline of outstanding students and enhances the quality of science faculty in the IDeA states by networking research intensive and undergraduate institutions. The INBRE program prepares students for graduate and professional schools as well as careers in the biomedical sciences, supports research and mentoring of young investigators, and enhances research infrastructure at participating institutions.</p> <p>INBRE goals are to: 1) develop a statewide, multi-disciplinary thematic research network of doctoral degree granting/research intensive institutions and undergraduate institutions; 2) build and increase research capacity by supporting faculty, fellows, and students at participating institutions; 3) provide undergraduate faculty and students research support, and serve as a “pipeline” to health research careers; 4) provide outreach to students at undergraduate institutions, community colleges and tribal colleges; and 5) enhance the science and technology knowledge base and the economy statewide.</p>

## NIH IDeA

### IDeA States

24

### Budget History

FY09 Enacted*	FY10 Enacted	FY11 Budget Request	FY11 Goal
\$224.043M	\$228.862M	\$235.728M	\$275.0M

\* Apply 1.747% across the board cut - \$216,647,870 post rescission

### EIF Liaisons

Chair, NIH IDeA Subcommittee  
Patricia Hand, Ph.D.  
Mount Desert Island Biological  
Laboratory

Staff

Jessica Malow      Jim Hoehn  
[jmalow@vsadc.com](mailto:jmalow@vsadc.com)    [jhoehn@tigdc.com](mailto:jhoehn@tigdc.com)

**Department of Defense  
DEPSCoR**

<b>C o g n i z a n t Offices</b>	Army Research Office Office of Naval Research Air Force Office of Scientific Research						
<b>P r o g r a m Description</b>	<p>Congress has appropriated funds for the Defense Department's EPSCoR program (DEPSCoR) since FY1992. This program was authorized in the FY1995 Defense Department Authorization Act (P.L. 103-337) and subsequent years. The program statute for DEPSCoR (section 257 of Public Law 103-337, as amended) states that DEPSCoR's objectives are to: (1) "enhance the capabilities of institutions of higher education ("universities") in eligible States to develop, plan, and execute science and engineering research that is competitive under the peer-review systems used for awarding Federal research assistance; and (2) increase the probability of long-term growth in competitively awarded financial assistance that universities in eligible states receive from the Federal Government for science and engineering research."</p> <p>Accordingly, DEPSCoR seeks to strengthen the national infrastructure of Defense R&amp;D capabilities by funding peer reviewed, merit-based research proposals that support research priorities identified by ARO, ONR and AFOSR.</p>						
<b>A w a r d Components</b>	The DEPSCoR program supports meritorious research to assist investigators in participating states to become more competitive for regular DoD research and training grants, as well as collaborative planning activities between DoD program and laboratory personnel and the DEPSCoR research communities. Specific award mechanisms include basic and applied research grants, graduate traineeships, and research instrumentation. The typical DEPSCoR research award is about \$100,000 a year for three years.						
<b>Key Issues</b>	<p>DoD had requested no funding for DEPSCoR in FY 2011, and plans to terminate the program.</p> <p>DoD also abandoned the state's committee approval requirement and increased the number of eligible state to 35. With 70% of the states now eligible, a new approach, a set-aside, will be pursued.</p>						
<b>D E P S C o R States</b>	35						
<b>Budget History</b>	FY09 Enacted \$14.833	FY10 Enacted \$0.0M	FY11 Budget Request \$0.0M	FY11 Goal Language			
<b>EIF Liaisons</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Chair, DEPSCoR Subcommittee Peter Alfonso, Ph.D. University of Rhode Island</td> <td style="width: 33%; text-align: center;">Staff  David Jolly <a href="mailto:djolly@vsadc.com">djolly@vsadc.com</a></td> <td style="width: 33%; text-align: center;">  Jan Schoonmaker <a href="mailto:jschoonmaker@vsadc.com">jschoonmaker@vsadc.com</a></td> </tr> </table>				Chair, DEPSCoR Subcommittee Peter Alfonso, Ph.D. University of Rhode Island	Staff  David Jolly <a href="mailto:djolly@vsadc.com">djolly@vsadc.com</a>	  Jan Schoonmaker <a href="mailto:jschoonmaker@vsadc.com">jschoonmaker@vsadc.com</a>
Chair, DEPSCoR Subcommittee Peter Alfonso, Ph.D. University of Rhode Island	Staff  David Jolly <a href="mailto:djolly@vsadc.com">djolly@vsadc.com</a>	  Jan Schoonmaker <a href="mailto:jschoonmaker@vsadc.com">jschoonmaker@vsadc.com</a>					

**Department of Energy  
DOE EPSCoR**

**Cognizant Office** Office of Science

**Program Description** The Department of Energy’s Experimental Program to Stimulate Competitive Research (DOE EPSCoR) was established by Section 2203 of the Energy Policy Act of 1992 (P.L. 102–486).

**Overview.** Positioned within the Office of Science at DOE, DOE EPSCoR assists the Office as the single largest supporter of basic research in the physical sciences in the United States by supporting basic and applied research and development across a wide range of interdisciplinary program areas including: Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics and Nuclear Physics. Through two principal funding mechanisms, Implementation Grants and EPSCoR–State/National Laboratory Partnership Grants, the goals of DOE EPSCoR are three fold: a) improve the capability of designated states and territories to conduct sustainable and nationally competitive energy–related research; b) jumpstart infrastructure development in designated states and territories through increased human and technical resources, train scientists and engineers in energy–related areas; and c) build beneficial relationships of designated states and territories with the 10 world–class laboratories managed by the Office of Science, leveraging DOE national user facilities and intellectual collaboration. Through broadened participation DOE EPSCoR seeks to provide the most comprehensive network of energy–related research across the nation. DOE EPSCoR supports an average annual budget request of approximately \$8 million per year with Notices for funding opportunities bi–annually.

**Awar Components** The Program funds basic research in energy–related, programmatic areas through two mechanisms: Implementation Grants, and Laboratory–Partnership Grants.

**Implementation Grants** fund group research projects for a maximum period of six years with an initial grant period of three years. Only one active implementation grant per jurisdiction is allowed. Maximum funding for Implementation Grants is \$750,000 per year. Fifty percent state matching funds are required.

The **Laboratory Partnership Grants** are for a maximum period of three years. Maximum funding for these grants is \$150,000 per year. Ten percent state matching funds are required. Laboratory Partnership Grants allow EPSCoR researchers to work closely with the DOE National Laboratories to conduct collaborative research and train students.

**EPSCoR States** R29

<b>Budget History</b>	FY09 Enacted	FY10 Enacted	FY11 Budget Request	FY11 Goal
	\$17.0M	\$22.0M	\$8.635M	\$52.0M

**EIF Liaisons** Chair, DOE EPSCoR Subcommittee  
 Tom McCoy, Ph.D. Montana State University  
 Tom Quinn [tquinn@vsadc.com](mailto:tquinn@vsadc.com)  
 Jim Hoehn [jhoehn@epscofoundation.org](mailto:jhoehn@epscofoundation.org)

**National Aeronautics and Space Administration  
NASA EPSCoR**

**Cognizant Office** Office of Education

**Program Description** NASA EPSCoR was authorized in 1993 to help develop academic research infrastructure in eligible jurisdictions that historically have not participated fully in competitive research activities, at NASA including space science, earth science, and aerospace technology. NASA EPSCoR is helping states develop an academic research enterprise directed toward long-term, self-sustaining, nationally competitive capabilities. "With partners from academe, industry, and state and local government, NASA's capacity building programs reach wide segments of the population." NASA EPSCoR interfaces with all four of the NASA Mission Directorates: Aeronautics, Exploration Systems, Science, and Space Operations.

**Award Components** NASA EPSCoR utilizes two primary funding mechanisms: NASA Research Infrastructure Development Cooperative Agreement Awards (RID) and the EPSCoR Research CAN awards. Both components emphasize student education and involvement in research.

**RID:** RID awards enable jurisdictions to build and strengthen relationships with NASA researchers. Awards, which are \$125,000 per year, have a three-year period of performance, with a potential single, two-year renewable continuation. A one-to-one match (cash or in-kind) is required for every NASA dollar awarded.

**CAN:** CAN awards address high-priority NASA research and technology development needs. Awards are up to \$750,000 for a three-year performance period. A one-to-one match (cash or in-kind) is required for every NASA dollar awarded.

**Key Issues** Program eligibility; new funding mechanism for Implementation awards; limited state participation; budget

**EPSCoR States** 28

<b>Budget History</b>	FY09 Enacted	FY10 Enacted	FY11 Budget Request	FY11 Goal
	\$20.0M	\$25.0M	\$9.3M	\$25.0M

**EIF Liaisons**

Chair, NASA EPSCoR Subcommittee Keith Hudson, Ph.D. Arkansas	Staff Carolyn Fuller <a href="mailto:cfuller@vsadc.com">cfuller@vsadc.com</a>
--	---

**Environmental Protection Agency  
EPA EPSCoR**

**Cognizant Office** National Center for Environmental Research

**Program Description** The Environmental Protection Agency established its EPSCoR program in 1991 to improve and enhance nationally competitive environmental science and engineering research programs conducted by academic institutions within the EPSCoR states and Puerto Rico.

EPA EPSCoR was open to any state eligible for NSF EPSCoR and was part of the Science to Achieve Results (STAR) program. EPSCoR funds were used to make additional awards within the STAR program to investigators from EPSCoR states that would not otherwise have been awarded.

From FY 2002 through FY 2005, EPA EPSCoR was funded at \$2.5M per year. EPA EPSCoR has received no funding since.

**Award Component** Co-funding

**Key Issues** Analysis of the geographic distribution of STAR funding; restore program funding. Language is being sought in FY11

**EPSCoR States** 27

<b>Budget History</b>	FY09 Enacted	FY10 Enacted	FY11 Budget Request	FY11 Goal
	\$0	0	\$0	Language

**EIF Liaisons** Chair, EPA EPSCoR Subcommittee      Staff  
 TBD      Carolyn Fuller      Jim Hoehn  
                  [cfuller@vsadc.com](mailto:cfuller@vsadc.com)      [jhoehn@tigdc.com](mailto:jhoehn@tigdc.com)

## United States Department of Agriculture Strengthening Awards & EPSCoR Program

**Cognizant Office** National Institute of Food and Agriculture

**Program Description** USDA EPSCoR was established in 1992. The Food and Agricultural Science Enhancement and Experimental Program for Stimulating Competitive Research program is designed to help institutions develop competitive research, education and extension/outreach programs in high-priority areas of national need in agriculture, food, and environmental sciences. Strengthening Awards consist of Sabbatical Grants, Equipment Grants, Seed Grants, and Strengthening Standard Project Awards. Ten percent of the AFRI budget is set aside for strengthening awards and post doctoral fellowships.

**Award Components** Sabbatical Grants, Equipment Grants, Seed Grants, and Strengthening Standard Project Awards are available during each funding cycle to ensure that researchers at institutions and states that are underrepresented in terms of Federal research, education, and extension/outreach funding receive a portion of AFRI funds. Eligibility for all strengthening categories except Equipment grants includes (a) faculties of small and mid-sized academic institutions that are not among the most successful universities and colleges for receiving Federal funds for science and engineering research (b) Project Directors at degree-granting institutions in USDA Experimental Program for Stimulating Competitive Research (EPSCoR) states, and (c) minority serving institutions. All degree-granting institutions that are not among the most successful in receiving federal science and engineering research funds are eligible for Equipment grants. When determining eligibility for these grant types, the following definitions apply:

- ♦ Small and mid-sized institutions are academic institutions with a current total enrollment of 17,500 or less including graduate and undergraduate and full- and part-time students.
- ♦ Limited institutional success means institutions that are not among the most successful universities and colleges for receiving Federal funds for science and engineering research.

**Key Issues** n/a

**EPSCoR States** 26 – Every 3 years the NRI determines which states are eligible for USDA EPSCoR funding by determining those that have had a funding level from the NRI no higher than the 38th percentile of all states, based on total funding for the previous 3-year period (excluding strengthening set-aside funds).

Budget History	FY09 Enacted	FY10 Enacted	FY11 Budget Request	FY11 Goal
	\$20.1M	\$26.248M	\$0.0M	\$42.0M

**EIF Liaisons** Chair, USDA EPSCoR Subcommittee      Staff  
TBD      Stephanie Roehl  
[sroehl@vsadc.com](mailto:sroehl@vsadc.com)

### EPSCoR/IDeA Participating Jurisdictions, by Agency

Different states are eligible for EPSCoR/IDeA programs in each agency, based on eligibility formulas. The chart below shows which states are eligible for which EPSCoR/IDeA programs.

State	<u>DOD</u>	<u>DOE</u>	<u>EPA</u>	<u>NASA</u>	<u>NIH</u>	<u>NSF</u>	<u>USDA</u>
Alabama		X	X	X		X	X
Alaska	X	X	X	X	X	X	X
Arkansas	X	X	X	X	X	X	
Connecticut							X
Delaware	X	X	X	X	X	X	X
Hawaii		X	X	X	X	X	X
Idaho	X	X	X	X	X	X	X
Iowa		X		X		X	
Kansas	X	X	X	X	X	X	
Kentucky	X	X	X	X	X	X	X
Louisiana	X	X	X	X	X	X	X
Maine	X	X	X	X	X	X	X
Mississippi		X	X	X	X	X	X
Montana	X	X	X	X	X	X	
Nebraska	X	X	X	X	X	X	
Nevada	X	X	X	X	X	X	X
New Hampshire	X		X	X	X	X	X
New Mexico		X	X	X	X	X	
North Dakota	X	X	X	X	X	X	X
Oklahoma	X	X	X	X	X	X	
Puerto Rico	X	X	X	X	X	X	X
Rhode Island	X	X	X	X	X	X	X
South Carolina	X	X	X	X	X	X	X
South Dakota	X	X	X	X	X	X	X
Tennessee	X	X	X	X		X	
Utah		X		X		X	
Vermont	X	X	X	X	X	X	X
West Virginia	X	X	X	X	X	X	X
Wyoming	X	X	X	X	X	X	X
Virgin Islands	X	X	X				X
TOTAL	23	29	27	29	24	28	26*

\*Other entities eligible for USDA EPSCoR in FY 2009 include: American Samoa, District of Columbia, Guam, Micronesia, and Northern Mariana Islands.