

## ESPP BIWEEKLY FUNDING OPPORTUNITIES - DECEMBER 7, 2012

[Frequently Asked Questions for Solicitation NSF 13-508 - Division of Environmental Biology \(Core Programs\)](#)

[Frequently Asked Questions for NSF 12-594: Coastal SEES](#)

[U.S. Universities Report Highest-ever R&D Spending in Fiscal Year 2011](#)

### OPPORTUNITIES FOR STUDENTS AND RECENT GRADUATES

[SBE Doctoral Dissertation Research Improvement Grants - SBE DDRIG – NSF 11-547](#)

The National Science Foundation's Division of Behavioral and Cognitive Sciences (BCS), Division of Social and Economic Sciences (SES), National Center for Science and Engineering Statistics (NCSES), and the SBE Office of Multidisciplinary Activities (SMA) award grants to doctoral students to improve the quality of dissertation research. These grants provide funds for items not normally available through the student's university. Additionally, these grants allow doctoral students to undertake significant data-gathering projects and to conduct field research in settings away from their campus that would not otherwise be possible. Proposals are judged on the basis of their scientific merit, including the theoretical importance of the research question and the appropriateness of the proposed data and methodology to be used in addressing the question. See the solicitation web site for a complete list of participating NSF programs.

### OPPORTUNITIES FOR FACULTY

#### *Agriculture/Land Use*

[Agriculture and Natural Resources Science for Climate Variability and Change Challenge Area](#)

NIFA/AFRI - Department of Agriculture

**Letter of Intent Due: Dec. 31, 2012**

**Application Due: Apr. 15, 2013**

**Estimated Total Funding: \$5,000,000**

The Agriculture and Natural Resources Science for Climate Variability and Change Challenge Area RFA focuses on the societal challenge to adapt agro ecosystems and natural resource systems to climate variability and change and implement mitigation strategies in those systems. Project types supported by AFRI within this RFA include multi-function integrated research, education, and/or extension projects and Food and Agricultural Science Enhancement (FASE) Grants.

[Nitrogen: Improving on Nature – NITROGEN - NSF 12-579](#)

A joint Ideas Lab activity between NSF and BBSRC

**Full Proposal Due: Feb. 1, 2013**

**Anticipated Type of Award:** Standard Grant or Continuing Grant  
**Estimated Number of Awards:** 5 to 10  
Up to 10 awards will be made in FY 2013 pending availability of funds and the type, scale, and variety of project ideas developed at the Ideas Lab or submitted directly to NSF.  
**Anticipated Funding Amount:** \$8,000,000 Up to \$6,000,000 will be available for US researchers in FY 2013 pending availability of funds. Equivalent funds will be available from BBSRC for UK researchers. Up to \$2,000,000 in additional funds will be available to US Researchers in FY 2013 for proposals in this competition not developed through the Ideas Lab.

The ultimate aim of this Ideas Lab between the Biotechnology and Biological Sciences Research Council (BBSRC) in the UK and the National Science Foundation (NSF) in the US is to help meet the challenge of sustainably producing enough food for a growing population while reducing pollution and greenhouse gas emissions. The key objective of this joint activity is to stimulate innovative and transformative research proposals that will reduce inputs of nitrogen fertilizers to non-leguminous crops whilst maintaining or increasing yield. The aspiration is that mixing researchers from diverse scientific backgrounds will engender fresh thinking and new approaches that can be used to increase nitrogen availability to crop plants while maintaining or increasing yield, and hence decrease the need for the application of fertilizer.

## *Climate Change*

### [Agriculture and Food Research Initiative - Agriculture and Natural Resources Science for Climate Variability and Change](#)

This AFRI Challenge Area focuses on the priority to mitigate and adapt to climate variability and change. It supports activities that reduce greenhouse gas emissions, increase carbon sequestration in agricultural and forest production systems, and prepare the nation's agriculture and forests to adapt to variable climates.

**Letter of Intent Due Date:** December 31, 2012

**Application Deadline:** April 15, 2013

**Estimated Total Program Funding:** \$5,000,000.00

## *Conservation and ecosystem management*

### [Great Lakes Habitat Restoration Regional Partnership Grants](#)

NOAA – Department of Commerce NOAA-NMFS-HCPO-2013-2003590

**Closing Date for Applications:** Jan. 15, 2013

**Funding Instrument Type:** Cooperative Agreement

**Expected Number of Awards:** 6

**Award Ceiling:** \$10,000,000

**Award Floor:** \$200,000

The principal objective of these NOAA Great Lakes Habitat Restoration Regional Partnerships is to provide federal financial and technical assistance to organizations that have the capacity and

expertise to identify, evaluate, fund, and administer coastal habitat restoration projects in U.S. Great Lakes Areas of Concern (AOCs). These projects must meet NOAA's mission to restore coastal habitats and must also support the Great Lakes Restoration Initiative Action Plan.

### **Coastal SEES - Science, Engineering and Education for Sustainability – NSF 12-594**

**Full Proposal Due:** Jan. 17, 2013

**Anticipated Type of Award:** Standard Grant or Continuing Grant

**Estimated Number of Awards:** 15

**NSF anticipates funding projects in both tracks:  
up to 10 Track 1 proposals and up to 5 Track 2 proposals.**

**Anticipated Funding Amount:** \$15,000,000

The Coastal SEES Program seeks proposals that create inter/trans-disciplinary research teams. To assist in the development of new potential partnerships, the initial competition provides two funding tracks:

**Track 1: Incubator Research Proposals.** These proposals bring new or emerging inter/trans-disciplinary teams together to develop ideas and approaches. Projects could, for example, do one or more of the following: mine, integrate, and synthesize existing data sets; collect new data; conduct modeling experiments, test new integrative approaches, and/or identify new conceptual ideas and key gaps in knowledge and methods. It is anticipated that some funded incubator projects will lead to mature teams and ideas that will be submitted as full research proposals in a later round of Coastal SEES, pending availability of funds. However, the emphasis of a Track 1 proposal should be the conduct of research and its outcomes, not preparation of plans and proposals. Incubator proposals should be in the range of \$200-600K over 2 years.

**Track 2: Research Proposals.** These proposals support inter/trans-disciplinary teams to conduct major new integrated coastal systems research. These may include theoretical, field, laboratory and/or modeling activities. Research proposal budgets can be up to \$3 million over 5 years. When developing proposals, investigators are encouraged to look for synergies with other activities that may provide data, infrastructure support, and/or intellectual linkages. However, funding for Coastal SEES is distinct from funding for other activities that take place in the coastal zone. Whereas a proposal to Coastal SEES may include elements that are being investigated in one or more of these other programs, a distinguishing feature of a proposal to Coastal SEES should be its integrated, systems-oriented approach and its holistic and long-term viewpoint. Successful proposals will fit clearly and convincingly within the broader context of human-natural system interactions and sustainability, and the proposal must make this case.

### **Division of Environmental Biology (DEB) Core programs – NSF 13-508**

**Preliminary Proposal Due:** January 23, 2013  
January 16, Annually Thereafter

**Full Proposal Due:** August 02, 2013  
August 2, Annually Thereafter  
Full proposals, by invitation only

**Anticipated Type of Award:** Standard Grant or Continuing Grant

**Estimated Number of Awards:** 200 each year pending availability of funds.

**Anticipated Funding Amount:** \$72,000,000 for new awards pending funds availability

The DEB supports fundamental research on populations, species, communities, and ecosystems. Scientific emphases range across many evolutionary and ecological patterns and processes at all

spatial and temporal scales. Areas of research include biodiversity, phylogenetic systematics, molecular evolution, life history evolution, natural selection, ecology, biogeography, ecosystem structure, function and services, conservation biology, global change, and biogeochemical cycles. Research on organismal origins, functions, relationships, interactions, and evolutionary history may incorporate field, laboratory, or collection-based approaches; observational or manipulative experiments; synthesis activities; as well as theoretical approaches involving analytical, statistical, or computational modeling.

*Proposals are welcome in all areas of science supported by the Ecosystem Science Cluster:*

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503663&org=DEB&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503663&org=DEB&from=home)  
**Ecosystem Studies Program**

*Proposals are welcome in all areas of science supported by the Evolutionary Processes Cluster:*

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503664&org=DEB&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503664&org=DEB&from=home)

- **Evolutionary Ecology Program**
- **Evolutionary Genetics Program**

*Proposals are welcome in all areas of science supported by the Population and Community Ecology Cluster:*

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503665&org=DEB&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503665&org=DEB&from=home)

- **Population and Community Ecology Program**

*Proposals are welcome in all areas of science supported by the Systematics and Biodiversity Science Cluster:*

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503666&org=DEB&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503666&org=DEB&from=home)

- **Biodiversity: Discovery and Analysis**
- **Phylogenetic Systematics**

### **Small Grants**

The Division welcomes proposals for Small Grants to the core programs via this solicitation. Projects intending total budgets of \$150,000 or less should be identified as such with the designation "SG:" as a prefix to the project title. These awards are intended to support full-fledged research projects that simply require smaller budgets. Small Grant projects will be assessed based on the same merit review criteria as all other proposals.

### **[Great Lakes Restoration Initiative Joint Venture Habitat Restoration and Protection Grant](#)**

**Fish and Wildlife Service - Department of the Interior**

**Application Closing Date: Feb. 01, 2013**

**Estimated Total Funding: \$1,000,000**

**Award Ceiling: \$295,000**

**Award Floor: \$25,000**

The goal of the Great Lakes Restoration Initiative is to target the most significant environmental problems in the Great Lakes ecosystem by funding and implementing federal projects that address these problems. As part of this initiative, the two bird habitat joint ventures that are in the Great Lakes watershed - the Upper Mississippi and Great Lakes Region Joint Venture and the Atlantic Coast Joint Venture - will be working with the Wildlife and Sport Fish Restoration programs in the Midwest and Northeast Regions of the U.S. Fish and Wildlife Service to competitively fund state and other partner projects for long-term habitat restoration, enhancement or protection, for conservation of native Great Lakes fish and wildlife populations,

particularly migratory birds. Preference will be given to activities that help meet the habitat goals of the Upper Mississippi River and Great Lakes Region Joint Venture Implementation Plan or the Lower Great Lakes/St. Lawrence Plain (BCR 13) Bird Conservation Region Plan, other relevant bird conservation plans, and State Wildlife Action Plans.

## *Environment*

### Coastal and Marine Habitat Restoration Project Grants - FY 2013

**NOAA – Department of Commerce**      **NOAA-NMFS-HCPO-2013-2003587**

**Closing Date for Applications:**      **Feb. 19, 2013**

**Expected Number of Awards:**      **10**

**Award Ceiling:**      **\$10,000,000**

**Award Floor:**      **\$100,000**

The principal objective of the National Marine Fisheries Service's (NMFS) Coastal and Marine Habitat Restoration Project solicitation is to identify and support proactive restoration project(s), which use a habitat-based approach to foster species recovery and increase fish production. Proposals submitted under this solicitation will be selected based on their ability to demonstrate how the proposed habitat restoration actions will help recover threatened and endangered species listed under the Endangered Species Act (hereafter, Listed Species), sustain or help rebuild fish stocks managed under the Magnuson-Stevens Fishery Conservation and Management Act (hereafter, Managed Species), or benefit other coastal and marine species with a nexus to NMFS management. Successful proposals will 1) identify a habitat-based issue/concern limiting the recovery or sustainability of one or more target species (e.g. fish, marine mammals, sea turtles); 2) identify the project(s)' outcome goal(s) and describe in detail the actions and on-the-ground habitat restoration project(s) to be undertaken to resolve the issue/concern and; 3) describe the measurable impact on the target species, including evaluation techniques. Proposals selected for funding through this solicitation will primarily be funded through cooperative agreements. Multi-year cooperative agreement awards will be considered, and additional releases of funds may be used to fund selected proposals through FY15 without further competition. NOAA anticipates typical awards will range from \$500,000 to \$5 million over three years. One, two, or three year proposals will be accepted. Funds will be administered by the NOAA Restoration Center.

## *Other*

### Interdisciplinary Behavioral and Social Science Research IBSS – NSF 12-614

**Full Proposal Due:**      **Jan. 23, 2013**

**Anticipated Type of Award:**      Standard Grant or Continuing Grant

**Estimated Number of Awards:**      10 to 15

**Anticipated Funding Amount:**      \$10,000,000

This is a new solicitation for a new competition. Following are important points that distinguish the Interdisciplinary Behavioral and Social Science Research (IBSS) competition from other competitions. IBSS emphasizes the conduct of interdisciplinary research by teams of investigators in the social and behavioral sciences. There are two types of projects that may be supported by IBSS:

**IBSS Large Interdisciplinary Research Projects - maximum award of \$1,000,000**  
**IBSS Interdisciplinary Team Exploratory Projects - maximum award of \$250,000**

The Interdisciplinary Behavioral and Social Science Research (IBSS) competition seeks to support research conducted by behavioral and social scientists as collaborating members of teams that come from multiple disciplines, who engage in integrated research that employs methods and techniques from multiple disciplines, and whose results are likely to enhance theories and/or methodological approaches or have other stimulating and/or catalytic impact across a range of disciplinary fields.

**MRI: Major Research Instrumentation Program, NSF 13-517**

**Full Proposal Deadline Date: February 21, 2013**

The Major Research Instrumentation Program (MRI) serves to increase access to shared scientific and engineering instruments for research and research training in our Nation's institutions of higher education, and not-for-profit museums, science centers and scientific/engineering research organizations.

**Estimated Number of Awards:** 175 awards - Proposals that request funds from NSF in the range \$100,000-\$4 million may be accepted from any MRI-eligible organization. Proposals that request funds from NSF less than \$100,000 may also be accepted from any MRI-eligible organization for the disciplines of mathematics or social, behavioral and economic sciences and from non-Ph.D.-granting institutions of higher education for all NSF-supported disciplines.

**Anticipated Funding Amount:** \$90,000,000

**Research Coordination Networks (RCN SEES) NSF 13-520**

<b>Deadlines:</b>	<b>RCN SEES Track</b>	<b>March 04, 2013</b>
	<b>RCN UBE &amp; UBE incubator Track</b>	<b>June 14, 2013</b>
	<b>RCN General Track</b>	<b>Proposals Accepted Anytime</b>

**Anticipated Type of Award:** **Standard Grant or Continuing Grant**

**Estimated Number of Awards:** 15 to 25 Varies across disciplinary research programs and RCN tracks.

**Anticipated Funding Amount:** \$7,500,000 to \$17,500,000 Varies across disciplinary research programs and RCN tracks.

The goal of the RCN program is to advance a field or create new directions in research or education by supporting groups of investigators to communicate and coordinate their research, training and educational activities across disciplinary, organizational, geographic and international boundaries. RCN provides opportunities to foster new collaborations, including international partnerships, and address interdisciplinary topics. Innovative ideas for implementing novel networking strategies, collaborative technologies, and development of community standards for data and meta-data are especially encouraged. RCN awards are not meant to support existing networks; nor are they meant to support the activities of established collaborations. RCN awards do not support primary research.

**General RCN proposals.** General RCN proposals should focus on a research question, topic or particular technologies, approaches, or development of standards relevant to one or more participating units. For the general RCN program, consideration will be given to all well-justified, cohesive proposals advancing research coordination in a field or combination of fields under the purview of the NSF Directorates and Offices.

**Targeted Undergraduate Biology Education track.** RCN-UBE proposals could focus on improving learning in "gateway" courses (e.g., exploring the use of methods that foster active learning or inquiry-based learning), improving learning through the use of emerging technologies in the biology curriculum, strategies and approaches for engaging biology faculty in professional development activities related to undergraduate education, incorporating emerging sub-disciplines into the biology curriculum (e.g., informatics research, proteomics, systems and computational approaches, ecological stoichiometry), improving assessment of student learning, improving the transition of students from two-year to four-year institutions, or incorporating authentic research experiences in undergraduate laboratory courses, with an emphasis on introductory and lower division courses.

**Targeted Science, Engineering and Education for Sustainability track.** The RCN Science, Engineering and Education for Sustainability (RCN-SEES) track represents an NSF-wide activity seeking to foster interdisciplinary research and education that advances sustainability science and engineering as an integrative approach to the challenges of adapting to environmental, social and cultural changes associated with growth and development of human populations and attaining a sustainable energy future.

### **INSPIRE - Integrated Support Promoting Interdisciplinary Research and Education NSF 13-518**

**Letter of Intent Due:** Track 1 Inquiries Dec. 10, 2012 – Mar. 29, 2013  
Track 2 Inquiries Dec. 10, 2012 – Feb. 20, 2013

**Full Proposal Due:** Track 1 Full Proposals May 29, 2013  
Track 2 Full Proposals May 13, 2013

**Director's INSPIRE Awards Full Proposals:** May 29, 2013

The INSPIRE awards program is intended to encourage investigators to submit bold, exceptional proposals that some may consider to be at a disadvantage in a standard NSF review process; it is *not* intended for proposals that are more appropriate for existing award mechanisms.

#### ***Note to all prospective INSPIRE principal investigators about contacts at NSF:***

Before writing or submitting an INSPIRE proposal, PIs must make a formal inquiry by submitting a FastLane Letter of Intent (LOI), and must obtain a full-proposal authorized by the INSPIRE Management Team on the basis of an evaluation by NSF staff.

## ***Water***

### **Great Lakes Fish and Wildlife Restoration Act Grant**

USFWS – Department of Interior

**Pre-proposals and Regional Project Proposals:** Dec. 17, 2012

**Estimated Number of Awards:** 8

**Estimated Total Program Funding:** \$2,000,000

The U.S. Fish and Wildlife Service (Service) requests interested entities to submit restoration, research and Regional Project proposals for the restoration of the Great Lakes Basin fish and wildlife resources, as authorized under the Great Lakes Fish and Wildlife Restoration Act (16 USC 941c). Pre-proposals and Regional Project proposals are due on Monday, December 17, 2012 by 9:00 PM EST.