Welcome to NSF Day!







Welcome to NSF Day!





"To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..."

NATIONAL SCIENCE FOUNDATION

NSF Mission

We carry out our mission by supporting basic research

Basic research ... results in general knowledge and an understanding of nature and its laws. This general knowledge provides the means of answering a large number of important practical problems

- Vannevar Bush



NSF by the Numbers



Characteristics of NSF: Ubiquity, Urgency, and Engagement



Ubiquity Advances in science and engineering are permeating the way we work, communicate, learn, and discover.

Urgency

NSF research and education are rapidly evolving and accelerating the pace of discovery and innovation, with profound societal and economic impact.

Engagement

The key strength and asset of NSF is the scientific community and the general public and their engagement.

NSF Funding: As a percentage of total federal support



Source: NSF/NCSES, "Survey of Federal Funds for Research& Development, FY 2013. From NSF FY2016 Budget Request to Congress Request

Addressing National Priorities











- Data science to mine Big Data in all fields
- Smart & connected cities
- Ubiquitous computing & communications
- Optimizing decision making through data and computer modeling
- Quantum X (computing, algorithms, sensors/detectors)
- Dark Universe
- Gravity and the Standard Model
- Matter-Antimatter
- Understanding the Brain
- Biologically inspired nano-engineering
- Clean energy technologies
- Prediction of and resilience to disasters, through robust infrastructure
- Human behavior and game theory in engineered systems and design of technology
- Promise and peril of gene editing
- New innovations for translating research to market
- New approaches to inclusion across the Nation

The U.S. has Fallen to 10th place in R&D Investment U.S. ranking among OECD nations by national R&D investment as a percentage of GDP



National R&D Investment

as a percentage of GDP





NSF's Organization

The NSF Directorates & Offices

















Biological Sciences (BIO)

Christopher Meyer Division of Biological Infrastructure (DBI) cmeyer@nsf.gov



Works with variety of programs: REU, RCN-UBE, iCORPS, NRT and Broadening Participation

California State University, Fullerton: faculty, chemistry and biochemistry faculty and department chair

PI and Mentor for an NSF Ideas Lab

Biological Sciences (BIO)

James Olds, Assistant Director Jane Silverthorne, Deputy Assistant Director

Emerging Frontiers (EF)

Division of Biological Infrastructure (DBI)

Muriel Poston, Division Director James Deshler, Deputy Division Director

> Division of Environmental Biology (DEB)

Paula Mabee, Acting Division Director Alan Tessier, Deputy Division Director Division of Molecular and Cellular Biosciences (MCB)

Linda Hyman, Division Director Theresa Good, Deputy Division Director

Division of Integrative Organismal Systems (IOS)

Heinz Gert de Couet, Division Director Rob Miller, Deputy Division Director

Biological Sciences (BIO)

Priorities

Investigator-driven projects in all areas of **Biological Research Brain Research through Advancing** Innovative Neurotechnologies (BRAIN) National Ecological Observatory Network (NEON) Plant Genome Research Program (PGRP) **Dimensions of Biodiversity** Projects at interface of biology, mathematics, and engineering (BIOMAPS) **NEW: Enabling Discovery through Genomic** Tools (EDGE) Crosscutting: Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS)







The NSF Directorates & Offices

















Computer & Information Science & Engineering (CISE)



Tatiana (Tanya) Korelsky Information Intelligence Systems (IIS) Division <u>tkorelsk@nsf.gov</u>

Robust Intelligence Program Director

Expertise in Human Languages Technologies: natural language and speech analysis and synthesis, dialogue systems

Engaged in cross-directorate programs involving Cyber-learning, Science of Learning, the National Robotics Initiative and Smart and Connected Health



Computer & Information Science & Engineering (CISE)

James F. Kurose, Assistant Director Erwin Gianchandani, Deputy Assistant Director (Acting)



Computer & Information Science & Engineering (CISE)

Directorate Priorities

- Core research programs across computer science (CS)
- Cross-directorate and cross-NSF programs (e.g., BRAIN, Cyberlearning, Secure and Trustworthy Cyberspace, Cyber-Physical Systems, NRI, BIG DATA, Smart and Connected Health)
- CS education STEM+C
- Building cyber infrastructure for science and engineering



The NSF Directorates & Offices

















Education & Human Resources (EHR)

Tom Higgins Division of Undergraduate Education <u>thhiggins@nsf.gov</u>



- Distinguished award winning Professor of Chemistry, Harold Washington College, Chicago, IL
- Chair, Physical Sciences
- Active member, American Chemical Society, Society Committee on Education, Two-Year College Chemistry Consortium



Education & Human Resources (EHR)



Education & Human Resources (EHR)





Learning and learning environments



Cognitive and non-cognitive foundations of STEM Creative uses of formal and informal STEM learning



Broadening participation in STEM Access to and success in high-quality STEM education for underrepresented groups



STEM professional workforce development



Capitalize on scientific advances Address not yet imagined global, social & econ challenges

The NSF Directorates and Offices

















Engineering (ENG)

Zhijian (ZJ) Pei ENG / CBET aleoness@nsf.gov



Manufacturing Machines and Equipment program director

Professor, Department of Industrial and Manufacturing Systems Engineering, Kansas State University

Received Director's Award for Excellence

NSF CAREER Awardee, initiated CAREER Proposal Writing Workshop



Engineering (ENG)



ENG Initiatives and Priorities Address National Interests

- INFEWS
- Risk and Resilience: CRISP
- Urban Science
- Clean Energy Technology*
- Cyber-Enabled Materials, Manufacturing, and Smart Systems - Advanced Manufacturing*

- Optics and Photonics
- Understanding the Brain
- Education and Broadening Participation: INCLUDES
- Innovation Corps
- Emerging Frontiers in Research and Innovation
- Research Centers
- National Nanotechnology Initiative*
- Communications and Cyberinfrastructure

Geosciences (GEO)



Division of Atmospheric and Geospace Sciences amadams@nsf.gov

Education and Cross-Cutting Programs

- Research Experiences for Undergraduates (REU)
- NSF Research Traineeship (NRT)
- Postdoctoral Research Fellowships (AGS-PRF)
- Pathways into the Geosciences (IUSE:GEOPATHS)
- GEO Opportunities for Leadership in Diversity (GOLD)
- Dynamics of Coupled Natural and Human Systems (CNH)
- National Center for Atmospheric Research (NCAR)

Former faculty member:

University of North Carolina-Charlotte (tenure track) Madison Area Technical College (adjunct)

Board of Directors, Earth Science Women's Network

Research interests in mesoscale modeling, boundary layer processes, wind energy, atmosphere-energy system interactions and workforce capacity building



Geosciences (GEO)



Geosciences (GEO)



Directorate Priorities

- Support basic research in atmosphere, earth, ocean sciences, and polar studies
- Support research facilities and infrastructure (NCAR, research vessels, Antarctic base, Geochronology, EarthScope)
- Develop community-driven cyberinfrastructure
- Promote education and diversity in geosciences
- Initiatives in hazards and resilience and the water cycle (PREevents, INFEWS)

Mathematical & Physical Sciences (MPS)

Carlos Murillo Chemistry Division cmurillo@nsf.gov



Interested in compounds with metal-tometal-bonds

Adjunct Professor at Texas A&M University and the University of Texas at El Paso

Charter member, Costa Rican Academy of Sciences

Fellow, AAAS

Mathematical & Physical Sciences (MPS)



Mathematical & Physical Sciences (MPS)



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Emphasis Areas

Physical sciences at the nanoscale • Advances in optics and photonics • Materials by design Physics of the universe • World-class, shared-use Facilities • Quantum information science • Complex systems (multi-scale, emergent phenomena) Innovations at the Nexus of Food, Energy and Water Systems Sustainability (energy, environment, climate) Interfaces between the mathematical, physical, & life sciences
The NSF Directorates and Offices

















Social, Behavioral, and Economic Science (SBE)



Thomas J. Baerwald Division of Behavioral and Cognitive Sciences tbaerwal@nsf.gov

Senior Science Advisor Program Director Geography and Spatial Sciences (GSS) Dynamics of Coupled Natural and Human Systems (CNH) Interdisciplinary Behavioral and Social Science Research (IBSS)

28 years of service at NSF



Go Twins, Nationals, Vikings, Gophers, Valpo, and Boise State!

Social, Behavioral and Economic Sciences

Fay Lomax Cook, Assistant Director Kellina Craig-Henderson, Deputy Assistant Director Multidisciplinary Activities (SMA) Science of Learning Science of Science and innovation

SBE Office of

Policy Interdisciplinary Behavioral and Social Sciences Resource Implementation for Data Intensive Research in SBE

Behavioral and Cognitive Sciences (BCS) Howard Nusbaum, Division Director Amber Story, Deputy Division Director	Social and Economic Sciences (SES) Alan Tomkins, Acting Division Director Kay Meyer, Acting Deputy Division Director	National Center for Science and Engineering Statistics (NCSES) John Gawalt, Division Director Jeri Mulrow, Deputy Division Director
Archeology and Archaeometry Biological Anthropology Cultural Anthropology Geography and Spatial Sciences Cognitive Neuroscience Developmental and Learning Sciences Documenting Endangered Languages Linguistics Perception, Action and Cognition Social Psychology	Decision Risk and Management Sciences Economics Law and Social Sciences Methodology, Measurement, and Statistics Political Science Science of Organizations Science, Technology, and Society Secure and Trustworthy Cyberspace Sociology	



SBE-Related Cross-Directorate Initiatives

Science of Broadening Participation & INCLUDES Understanding the Brain Forensic Sciences Big Data Coupled Natural and Human Systems Interdependent Infrastructure Systems and Processes Food, Energy, and Water Systems



The NSF Directorates and Offices

















Office of International Science and Engineering (OD/OISE)



Anne Emig Office of International Science & Engineering aemig@nsf.gov

NSF program manager since 2005

Manages funding opportunities to support graduate student international research experiences

Facilitates international collaborations in East Asia, Latin America and elsewhere

Past director of NSF Tokyo Regional Office

Research and project management in universities and multilateral organizations



International Science and Engineering (ISE)

Priorities

- <u>Advance</u> the FRONTIERS of S&E via international collaboration
- <u>Prepare</u> a GLOBALLY-ENGAGED U.S. S&E workforce
- <u>Develop</u> GLOBAL KNOWLEDGE NETWORKS that link U.S. faculty and students to the world
- <u>Leverage</u> RESOURCES, EXPERTISE, FACILITIES around the globe











The NSF Directorates and Offices

















Budget, Finance & Award Management (BFA)



Anne Doyle

Policy Office Division of Institution & Award Support adoyle@nsf.gov

Senior policy specialist for proposal & award policy

Coordinates the review and approval of funding opportunity documents and other documents issued by NSF

Serves as the executive secretary of the Director's Review Board

Budget, Finance & Award Management (BFA)





Questions?



Break





Getting Started The Essentials

www.NSF.gov



Navigating www.NSF.gov



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Navigating www.NSF.gov



Navigating www.NSF.gov

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Additional Information on Resources

Join Directorate Specific Listserves!

Use Grants.gov's search feature

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				View More »		 covered in the Applicant Release Notes, click here »
Funding Opportunity Number	C	pportunity Title		Agency		
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CDC-RFA-DP14-1419PPHF14	PPHF 2014: Racial and Ethnic App financed in part by Prevention and	roaches to Community Public Health Funding	Health (REACH) -	Chronic Disease Prevention and Health Promotion		 applications on Grants.gov? Please allow 24-48 hours from the date of the SAM email notification to complete the electronic process. To guickly
HHS-2014-ACL-CDAP-SO-0089	State Health Insurance Assistance Innovation Grant	Program Performance	Improvement and	Administration for Community Living		and easily verify Grants.gov AOR status, click here »
DARPA-BAA-14-46	DSO Office-Wide			DARPA - Defense Sciences		

What is the Proposal & Award Policies & Procedures Guide?

The Proposal and Award Policies and Procedures Guide (PAPPG) contains documents relating to NSF's proposal and award process. It has been designed for use by both our customer community and NSF staff and consists of two parts:



THE NATIONAL SCIENCE FOUNDATION PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE





What is the Proposal & Award Policies & Procedures Guide?

Part I is NSF's proposal preparation and submission guidelines -- the NSF Grant Proposal Guide (GPG) and the NSF Grants.gov Application Guide.





PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE

THE NATIONAL SCIENCE FOUNDATION

Part I - Grant Proposal Guide





What is the Proposal & Award Policies & Procedures Guide?

Part II is NSF's award and administration guidelines -- the documents used to guide, manage, and monitor the award and administration of grants and cooperative agreements made by NSF.



THE NATIONAL SCIENCE FOUNDATION PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE

Part II - Award & Administration Guide





Grant Proposal Guide

- Provides guidance for preparation and submission of proposals to NSF
- Describes process and criteria by which proposals will be reviewed
- Outlines reasons why a proposal may not be accepted or may be returned without review
- Describes process for withdrawals, returns, and declinations
- Describes the NSF Reconsideration Process



PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE

Part I - Grant Proposal Guide





Types of Funding Opportunities

Program || Descriptions

Program Announcements

Program Solicitations

Dear Colleague Letters Proposals for a **Program Description** must follow the instructions in the GPG.

Proposals for a **Program Announcement** must follow the instructions in the GPG.

Proposals must follow the instructions in the **Program Solicitation**; the instructions in the GPG apply unless otherwise stated in the solicitation.

Dear Colleague Letters are notifications of opportunities or special competitions for supplements to existing NSF awards.

Navigating a Program Description

Division of Mathematical Sciences

Algebra and Number Theory

CONTACTS

Name	Email	Phone	Room
<u>Tie Luo</u>	<u>tluo@nsf.gov</u>	(703) 292-8448	1025 N
J. Matthew Douglass	mdouglas@nsf.gov	(703) 292-2467	1025 N
Andrew Pollington	adpollin@nsf.gov	(703) 292-4878	1025 N
Victoria Powers	vpowers@nsf.gov	(703) 292-2113	1025 N

PROGRAM GUIDELINES

Apply to PD 10-1264 as follows:



For full proposals submitted via FastLane: standard <u>Grant Proposal Guide</u> proposal preparation guidelines apply.

For full proposals submitted via Grants.gov: the NSF Grants.gov Application Guide; A Guide for the Preparation and Submission of NSF Applications via Grants.gov Guidelines applies. (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: <u>http://www.nsf.gov/publications/pub_summ.isp?</u> ods_key=grantsgovguide)

Important Information for Proposers

A revised version of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 15-1), is effective for proposals submitted, or due, on or after December 26, 2014. The PAPPG is consistent with, and, implements the new Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) (2 CFR § 200). Please be advised that the guidelines contained in NSF 15-1 apply to proposals submitted in response to this funding opportunity.

DUE DATES

Full Proposal Target Date: October 9, 2015 Second Friday of October Second Friday in October, Annually Thereafter

Research proposals (as opposed to conference proposals) are expected to be submitted by the target date. An extension may be granted under unusual extenuating circumstances, provided that approval is obtained from the cognizant Program Director prior to the target date.

SYNOPSIS

The Algebra and Number Theory program supports research in algebra, algebraic and arithmetic geometry, number theory, and representation theory.

Conferences

Principal Investigators should carefully read the program solicitation "Conferences and Workshops in the Mathematical Sciences" (link below) to obtain important information regarding the substance of proposals for conferences, workshops, summer/winter schools, and similar activities.

For conference proposals with budgets not exceeding \$50,000, which in accordance with NSF policy can be reviewed internally at NSF, the following target dates are in effect: For an event that will take place at some time prior to October 1 during a given year, the proposal should be submitted in October of the previous year. For an event that will occur in the period October 1 through December 31 of a given year, the proposal should be submitted in May of that year. A conference proposal with a budget request exceeding \$50,000 should be submitted roughly seven months before the event is scheduled to take place, in order to allow time for external review.

RELATED PROGRAMS

Focused Research Groups in the Mathematical Sciences Research Training Groups in the Mathematical Sciences Faculty Early Career Development Program Mathematical Sciences Postdoctoral Research Fellowships NSF Graduate Research Fellowship Program

RELATED URLS

Conferences and Workshops in the Mathematical Sciences

THIS PROGRAM IS PART OF

Disciplinary Research Programs



Map of Recent Awards Made Through This Program

News

Navigating a Program Solicitation



NSF Proposal & Award Process Timeline



PAPP - Table of Contents Grant Proposal Guide Grant Proposal Guide Grant Proposal Cuide Grant Proposal Proposal Foregrants I. Pre-Submission Information II. Pre-Submission Information IV. Non-Award Decisions and Review V. Non-Award Decisions and Transactions Award and Administration Guide Award proteets (Including context information Burder for the textment also principle for subbits provides the most control for proteets (Including context information Burder for textment also principle for subbits provides the most control for the textment also principle for subbits provides the most control for textment also principle for subbits provides the most control for textment also principle for subbits provides the most control for textment also principle for subbits provides the most control for textment also principle for subbits provides the most control for textment also principle for subbits provides the most control for textment also principle for subbits provides the most control for textment also prevised for contextes (Including context information Burder for te	Vittorial S WHERED W	Incce Foundation Incce Foundation Increased and the second action Increased and the second action Increased and the second action Increased and the second action action Increased and the second action action Increased action	
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C. Acronym List	A. NSF Proposal Preparation	and Subr	nission		
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Target Dates –

Talk to the Program Office if you think you might miss the date

nit Proposals

allow adequate time for NSF review and processing of proposals (see or further information). Many NSF programs accept proposals at any ams, however, establish due dates for submission of proposals. The due dates are utilized by NSF:

- tes: dates after which proposals will still be accepted, although they particular panel or committee meeting.
- dates: dates after which proposals be returned without review by NSF. e date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with GPG Chapter II.A.

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A. About the NSF	NSF 13-1 January 2013	
B. Foreword	chapter 1 - Pre-Submis	sion Information
C. Acronym List	A. NSF Proposal Preparation and Sub	mirrin
D. Definitions	Proposala e bering	sinistion.
E. NSF Organizations	NSF FastLane System uses Internet/Web	nitted via use of the NSF FastLane system. The
Exhibit 1 - NSF Organizational Chart	System may be used for proposal prepar checking, project reporting, and post-aw functions are accessed by using a Web about the Fastlane System is available	d related communities. The NSF FastLane ation, file update, submission and status
PAPP - Table of Contents	https://www.fastlane.nsf.gov.	F. When to Submit Pr
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Deadline Dates –

Proposals will not be accepted after this date and time (5 pm submitter's local time)

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late time for NSF review and processing of proposals (see nformation). Many NSF programs accept proposals at any ver, establish due dates for submission of proposals. The are utilized by NSF:

- after which proposals will still be accepted, although they panel or committee meeting.
- es after which proposals be returned without review by NSF. be waived only in extenuating circumstances. Such a authorized in accordance with GPG Chapter II.A.



Submission Windows – Closing date converts to a deadline date

 Submission windows: designated periods of time during which proposals will be accepted for review by NSF. It is NSF's policy that the end date of a submission window converts to, and is subject to, the same policies as a deadline date.

National Science Foundation WHERE DISCOVERIES BEGIN FUNDING AWARDS DISCOVERIES NEWS PUBLICATIONS STATISTICS Grant Proposal Guide PAPP - Introduction NSF 13-1 January 2013 A. About the NSF **Chapter I - Pre-Submission Information** B. Foreword A. NSF Proposal Preparation and Submission C. Acronym List D. Definitions Proposals submitted to NSF must be submitted via use of the NSF fastiane system. The NSF fastLane System uses Internet/Web technology to facilitate the way NSF does business with the research, education, and related communities. The NSF does E. NSF Organizations Exhibit 1 - NSF Organizational System may be used for proposal prepara Chart checking, project reporting, and post-aw functions are accessed by using a Web br about the FastLane System is available if PAPP - Table of Contents https://www.fastlane.nsf.gov. Contact with NSF program personnel pri Grant Pronosal Guide encouraged. Some NSF programs have p provisions the GPG, and, in such cases, th GPG - Table of Contents be followed. (See GPG Section C.4 below I. Pre-Submission Information solicitations.) **II.** Proposal Preparation B. NSF Programs and Funding Oppo III. NSF Proposal Processing NSF does not normally support technica security classification, the development or research for a particular project or inverand Review IV. Non-Award Decisions and including work on the etiology, diagnosis abnormality, or malfunction in human be Transactions Animal models of such conditions or the V. Renewal Proposals procedures for their treatment also are n bioengineering, with diagnosis- or treatm principles to problems in biology and me GPG Subject Index principles to problems in biology and mee eligible for support. Bioengineering resea eligible. For further information about the & Award Policies & Procedures Guide Intr **GPG - PDF Version** Award and Administration Foundation. The NSF website provides the most com Directorates (including contact information this website by potential proposers is structure AAG - Table of Contents

I. NSF Awards

1. Letter of Intent

SEARCI

ABOUT NSF FASTLANE

Letters of Intent – Enables better management of reviewers and panelists

Some NSF program solicitations require or request submission of a letter of intent (LOI) in advance of submission of a full proposal. A LOI is not binding. The predominant reason for its use is to help NSF program staff to gauge the size and range of the competition, enabling earlier selection and better management of reviewers and panelists. In addition, the information contained in a LOI is used to help avoid potential conflicts of interest in the review process.

A LOI normally contains the PI's and co-PI's names, a proposed title, a list of possible participating organizations (if applicable), and a synopsis that describes the work in sufficient detail to permit an appropriate selection of reviewers. A LOI is not externally evaluated or used to decide on funding. The requirement to submit a LOI will be identified in the program solicitation, and such letters are submitted electronically via the NSF FastLane System.



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B. Foreword	Chapter I - Pre-Submission	Information
C. Acronym List	A. NSF Proposal Preparation	
D. Definitions	and Submissi	ion
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Exhibit 1 - NSF Organizational Chart	business with the research, education, and relat System may be used for proposal preparation, checking, project reporting, and post-award ac functions are accorded by the second	logy to facilitate the way NSF does ted communities. The NSF FastLane file update, submission and statue
PAPP - Table of Contents	about the FastLane System is available from th https://www.fastlane.nsf.gov.	2. Preliminary P
Grant Proposal Guide	Contact with NSF program personnel prior to p	
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Preliminary Proposals – Sometimes required, sometimes optional

posal

solicitations require or request submission of a preliminary proposal ssion of a full proposal. The two predominant reasons for requiring iminary proposal are to:

- oposers' unnecessary effort in proposal preparation when the cess is very small. This is particularly true of exploratory initiatives mmunity senses that a major new direction is being identified, or that will result in a small number of actual awards; and
- overall quality of the full submission.



Types of Proposals

- RAPID
- EAGER
- Research (Other than RAPID or EAGER_
- Ideas Lab
- Equipment
- Conference
- International Travel
- Fellowship
- Facility/Center

Questions on Funding Opportunities?



Contact your NSF program officer

Work with your organization's sponsored projects office

Ask early, ask often policy@nsf.gov





Things to Consider Before Applying...

Five Key Elements



- 1. Great idea
- 2. Fit with current research expertise and career development plans
- 3. Ability to devise a strategy including benchmarks, timelines, and metrics
- 4. Adequate resources to accomplish
 - your project
- 5. Assessment Plan
Developing your Proposal

Key Questions for Prospective Investigators

- What has already been done?
- What do you intend to do?
- Why is the work important?
- How is the work unique or cutting edge?
- How are you going to do the work?
- Do you have the right team?

Proposal Development Strategies:

What Do You Need Besides \$???

- Prepare to do the preject
 - Realistically assess needs
 - Determine available resources
 - Develop preliminary data
 - Present to colleagues/mentors/students
- Determine possible funding sources (NSF may not be the right or the only one)



Proposal Development Strategies: What details should you glean from the solicitation?



- Overall scope and mission
- Instructions (deviations from the GPG)
- How your proposed project fits with the solicitation
- Review procedures and criteria
- Deadlines

Proposal Development Strategies:

Who Should You Talk To?

NSF Program Officer

- Your proposed project
- Clarifications on specific program requirements/limitations
- Current program patterns

Your Organization's Sponsored Projects Office

- University guidelines for applications
- Institutional Review Board "IRB" Approvals

e.g. institutional Animal Care and Use Committee (IACUC) approvals



So You Want to Write a Proposal...

What to Look for in a Program Announcement or Solicitation

• Goals

- Eligibility Requirements
- Special proposal preparation and/or award requirements
- Review Criteria



Sample Cover Page of a Solicitation



Program Solicitation Number

NSF Directorates and Offices providing funding for this opportunity

Solicitation — Award Information

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 37 to 38

37 in FY2016 and 38 in FY2017; The anticipated number of new awards to be made across fiscal years 2016 and 2017 is 75. Award sizes and durations vary for the different LSAMP award types.

The estimated number of awards by type is as follows:

Alliances. 19 alliance grants in FY2016 and 18 in FY2017.

Awards for alliances will be made as Continuing Grants. The progress and plans of each alliance will be reviewed annually by NSF, prior to approving continued NSF support. Alliances that are not meeting the expectations set forth in this solicitation may have their level of funding reduced or may be terminated.

Bridge to the Doctorate. 10 BD grants in FY2016 and 10 in FY2017.

Pre-Alliance Planning Grants. 8 planning grants in FY2016 and 10 in FY2017.

Anticipated Funding Amount: \$45,600,000

Annually for new and continuing awards

Approximately \$32 million, pending availability of funds, for new awards in FY2016 to support Alliances (including Bridge to the Baccalaureate), Bridge to the Doctorate, Pre-Alliance Planning grants, and other funding opportunities.



Expected funds available to the program per year

Sample Cover Page — Eligibility

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

• Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in, the US acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.

Who May Serve as PI:

The Principal Investigator (PI) for Alliances (including B2B) should be the President, Chancellor, or Provost of the lead institution. A full justification is needed for a PI designation in variance with this requirement. Co-principal investigators (Co-PIs) from partner institutions may be designated, as appropriate, for the project. At least one of the Co-PIs must have expertise in social science or education research for proposals from alliances funded more than 10 years.

The Principal Investigator for a **Bridge to the Doctorate** activity should be on the leadership team at the lead institution and listed as one of the Co-PIs of the alliance. One or more of the listed Co-PIs must be from the host institution (site of the BD activity).

The Principal Investigator for a **Pre-Alliance Planning** grant should be the key personnel that will be responsible for organizing and implementing the planning activities.

Limit on Number of Proposals per Organization:

Alliances (including B2B): Only one proposal may be submitted by an eligible (lead) institution. Alliances may hold only one active award at a time, not including BD awards. Institutions partnering in an alliance may not be a formal partner in more than one alliance at the same time. See Section II (Program Description 1. Alliances, Special Conditions for Alliances funded more than 10 years) for an exception.

Bridge to the Doctorate (BD): Only one proposal for BD support may be submitted by an eligible lead institution of an alliance. See Section II, Program Description 2. Bridge to the Doctorate, for eligibility criteria.

Pre-Alliance Planning: Only one proposal may be submitted by ap eligible institution.

Limit on Number of Proposals per PI or Co-PI:

Alliances (including B2B) and Pre-Alliance Planning: 1

Bridge to the Doctorate (BD): 1

Exception: Alliances funded more than 10 years are allowed to submit an alliance proposal as well as a BD proposal.

Eligibility information for institutions/PIs submitting proposals



Parts of a Proposal



NSF

PROPOSAL

INGREDIENTS

Cover Page Project Summary (1 page) □ Table of Contents (auto-generated) Project Description (15 pages) Reference Cited Biographical Sketches (for all senior personnel) Budget Current and Pending Support **Facilities**, Equipment, and Other Resources Post-doctoral mentoring plan (if applicable) Data management plan Supplementary Documentation (if applicable)

Parts of an NSF Proposal

Cover Sheet Many of the boxes on the cover sheet are electronically prefilled as part of the FastLane login process.

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE if not in resconse to a program approachement/solidation enter NSF 14-1									
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NSF 14-1							NSFF	NSF PROPOSAL NUMBER	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(s) (indicate the most specific unit known, i.e. program, division, etc.)									
PHY - ASTROPHYSICS & COSMOLOGY THEOR IJUJ402									
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Page 1 of 3									

Parts of an NSF Proposal

Project Summary Requirements:

Overview Statement on Intellectual Merit Statement of adder Impacts Special characters (e.g., formulas) may be uploaded as a PDF



Project Description Addresses:

What you want to do Why you want to do it How you plan to do it How you measure success What are the benefits Results from prior NSF support

Parts of an NSF Proposal

A separate section, Broader Impacts of the Proposal Work, must be completed





Budgetary Guidelines

Amounts should be:

- Realistic and reasonable
- Well-justified and should establish need
- Consistent w/program guidelines in solicitation, GPG, and in Award and Administration Guide (AAG)



Eligible costs consist of:

- Personnel
- Equipment
- Travel
- Participant support
- Other (e.g., subawards, consultant and computer services, publications costs)
- Indirect costs (as appropriate)

NSF Cost Sharing Policy

Inclusion of *voluntary committed* cost sharing is <u>prohibited</u> in the budget of solicited & unsolicited proposals.



Organizations may, at their own discretion, continue to contribute voluntary uncommitted cost sharing to NSF-sponsored projects as part of the section for Facilities, Equipment, and Other Resources.

Sections of an NSF Proposal

Facilities, Equipment, and Other Resources

Used to assess the adequacy of the organizational resources available to perform the effort proposed. Should not contain quantifiable financial information.

Current and Pending Support

This section of the proposal requires reporting on all current and pending support for ongoing projects and proposals from any funding source.



Special Information and Supplementary Documentation

Letters of support versus letters of commitment

Postdoctoral mentoring plans

Data management plans

You should alert NSF officials to unusual circumstances that require special handling (i.e. proprietary information)

Solicitations may specify what is and is not allowed to be submitted



Mentoring for Postdoctoral Researchers

- Explicit description of the mentoring activities
- Must include a mentoring plan as a supplementary document (maximum one-page)
- For collaborative proposals, lead organization must submit a single mentoring plan for all postdoctoral researchers supported under the <u>entire</u> project.



Data Management Plan Requirements

Requirements by Directorate, Office, Division, Program, or other NSF Unit

Links to data management requirements and plans relevant to specific Directorates, Offices, Divisions, Programs, or other NSF units, are provided below. If guidance specific to the program is not provided, then the requirements established in <u>Grant Proposal</u> <u>Guide, Chapter II.C.2.i</u> apply.

Please note that if a specific program solicitation provides guidance on preparation of data management plans, such guidance must be followed.

- Engineering Directorate (ENG)
 - <u>Directorate-wide Guidance</u>
- Geological Sciences Directorate (GEO)
 - Division of Earth Sciences
 - Integrated Ocean Drilling Program
 - Division of Ocean Sciences
- Mathematical and Physical Sciences Directorate (MPS)
 - Division of Astronomical Sciences
 - Division of Chemistry
 - Division of Materials Research
 - Division of Mathematical Sciences
 - Division of Physics
- Social, Behavioral and Economic Sciences Directorate (SBE)
 - o Directorate-wide Guidance

Data Management & Sharing Frequently Asked Questions (FAQs) - updated November 30, 2010

nsf.gov/bfa/dias/policy/dmp.jsp

Requirements may vary by Directorate or Office

Questions?



The Merit Review Process



Video

http://www.nsf.gov/news/mmg/mmg_disp.jsp?med_id=76467

NSF's Proposal & Award Process Timeline

Black Box?

MERIT REVIEW CRITERIA

Intellectual Merit: the potential to advance knowledge

Broader Impacts: the potential to benefit society and contribute to the achievement of specific, desired societal outcomes

When Preparing Proposals

- Read the funding opportunity; ask a Program Officer for clarifications if needed
- Address all the proposal review criteria
- Understand the NSF merit review process
- Avoid omissions and mistakes
- Check your proposal to verify that it is complete!

• Double Check that the proposal NSF receives is the one you intended to send

Merit Review Guiding Principles & Criteria

The Grant Proposal Guide (GPG) contains a description of the Merit Review Criteria

NSF 14-1 February 2014 Chapter III - NSF Proposal Processing and Revie

National Science Foundation WHERE DISCOVERIES BEGIN

Grant Proposal Guide

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The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.

Review Format in FastLane

b

- Reviewers provide feedback to NSF based on the Review Criteria and the Review Elements
- Review Criteria and Elements are available as reviewers provide feedback

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to

a. advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and

benefit society or advance desired societal outcomes (Broader Impacts)?

- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or institution to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to intellectual merit.



In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to broader impacts.



Please evaluate the strengths and weaknesses of the proposal with respect to any additional solicitation-specific review criteria, if applicable.



Over 2,000 proposals were RWR in FY 2014 6 most common reasons why

- 1. Not responsive to the GPG or program announcement/solicitation (960)
 - 2. Does not meet an announced proposal deadline date and time (171)
 - 3. It is inappropriate for NSF funding (74)
 - 4. Duplicative or substantially similar to a proposal already under consideration (66)
 - 5. Not substantively revised from a proposal that was previously reviewed and declined (37)

6. Duplicates another proposal that was already awarded (24)

Types of Reviews

- Ad Hoc
 - Proposals are sent out for review
- Panel



- Face-to-Face sessions conducted with reviewers. Held at NSF, or virtually via assistive technologies such as WebEx or BlueJeans
- Combination
 - Some proposals may undergo supplemental ad hoc reviews before or after a panel review
- Internal
 - Reviewed by NSF Program Officers

How are Reviewers Selected?

- Three or more external reviewers per proposal are selected
- Types of Reviewers Recruited
 - Specific content expertise
 - General science or education expertise
- Sources of Reviewers
 - Former reviewers
 - Program Officer's knowledge of the research area
 - References listed in proposal
 - Recent professional society programs
 - S&E journal articles related to the proposal
 - Reviewer recommendations included in proposal



What is the Role of the Reviewer?

- Review all proposal material and consider
 - The two NSF merit review criteria and any program specific criteria
 - Adequacy of the proposed project plan- including the budget, resources, and timeline
 - Priorities of the scientific field and of the NSF program
 - Potential risks and benefits of the project
- Make independent written comments on the quality of the proposal content



What is the Role of the Review Panel?

- Discuss the merits of the proposal with the other panelists
- Write a summary based on that discussion
- Provide some indication of the relative merits of different proposals considered



Why Serve on an NSF Panel?

- Gain first-hand knowledge of the merit review process
- Learn about common problems with proposals



- Discover proposal writing strategies
- Meet colleagues and NSF Program Officers managing the programs related to your research

How Do I Become a Reviewer?

Contact the NSF Program Officer(s) of the program(s) that fit your expertise

- Introduce yourself as a strong potential reviewer based on your research experience
- Offer to send a 2-page CV with current contact information
- Stay in touch if you don't hear back right away



Conflicts of Interest (COI)

What is a COI?

How we address conflict of interest

NSF checks and avoids COIs in the review process Institutional COIs MANACING CONFLICT OF INTEDECT Personal COIs


Proposal Review and Processing



Funding Decisions Reviews are Advisory to NSF

- The merit review process provides:
 - Review of the proposal and a recommendation on funding.
 - Feedback (strengths and weaknesses) to the proposers.
- NSF Program Officers make funding recommendations guided by program goals and portfolio considerations.
- NSF Division Directors either concur or reject the Program Officers' funding recommendations.

Feedback from Merit Review

- Reviewer ratings (such as: E, V, G, F, P)
- Analysis of how well proposal addresses both review criteria: Intellectual Merit and Broader Impacts
- Proposal strengths and weaknesses
- Reasons for decline (if applicable)
- If you have any questions, contact the cognizant Program Officer.



Documentation from Merit Review

- Verbatim copies of individual reviews, excluding reviewer identities
- Panel summary or summaries (if panel review was used)
- Context statement (usually)



 Program Officer to Principal Investigator comments (formal or informal, written, email or verbal) as necessary to explain a decision

Examples of Reasons for Declines

- Not considered competitive based on merit review criteria and program office concurrence
- Flaws or issues identified by the Program Officer
- Funds were not adequate to fund all competitive proposals



Revisions and Resubmissions

- Do the reviewers and the NSF Program Officer identify significant strengths in your proposal?
- Can you address the identified weaknesses?
- Can the proposal be significantly revised?
- Are there other ways your colleagues or you think a resubmission can be strengthened?

Questions?



Contact your cognizant Program Officer!

Possible Considerations for Funding a Competitive Proposal

- Addresses all review criteria
- Likely high impact
- Broadening participation
- Educational impact
- Impact on institution/state

- Special programmatic considerations (e.g. CAREER/RUI/EPSCoR)
- Other support for PI
- "Launching" versus
 "Maintaining"
- Portfolio balance



Proposal Review and Processing



For More Information

Go to NSF's Home Page (http://www.nsf.gov)

		FUNDING	AWARDS	DISCOVERIES	NEWS	PUBLICATIONS	STATISTICS	ABOUT NSF	FASTLANE
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Award Constants Other Types of Proposals	<u>12419</u>	Contact Us Proposals and Awa	ırds	applicable ch Phase Phase Phase Non-A Merit Why Y Merit Additi Conta	napters in the GPG e I: Proposal Prep- e II: Proposal Rev e III: Award Proce Award Decisions a Review Facts You Should Volunt Review FAQs ional Resources act Us	al Preparation and sal Review and Pro	tions website	include:	
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Ask Early, Ask Often!

Contact the cognizant Program Officer







Directorate Sessions



Crosscutting & NSF-wide Opportunities



What Is meant by crosscutting?

Sponsored by >1 NSF unit....

Cuts across NSF in different ways...

Collaborative with other U.S. government agencies...



Types of Crosscutting Activities

- International
- Interdisciplinary research theme-based (e.g., Designing Materials, Hazards and Disasters)
- People-oriented (e.g., ADVANCE, CAREER, REU, Work-Life Balance)
- Infrastructure (e.g., MRI)
- Translational (ICorps, SBIR)
- Institutional, Centers (e.g., IUCRC, STC)



Find Funding for NSFwide and Crosscutting Opportunities

Go to: www.nsf.gov/funding/pgm.list.jsp?type=xcut



RAPID/ EAGER

Grants for Rapid Response Research (RAPID)

Severe Urgency

Up to \$200K/one year

Brief project description

Internal review



EArly-concept Grants for Exploratory Research (EAGER)

Potentially transformative Up to \$300K/one year

"High risk-high payoff"

Internal review

Rare but occasional external review

S-STEM

Two Program Tracks

Institutional Capacity Building (Strand 1)

Up to \$650k Up to 5 yrs

For institutions with limited experience in implementing effective curricular and co-curricular activities

> Deadlines (All Proposals): 16 May 2016 September 2016 (?)



Up to \$1M Up to 5 yrs Up to \$5M Up to 5 yrs

Seeks to leverage S-STEM funds with institutional efforts and infrastructure to increase and understand impacts

Research Coordination Networks in Undergraduate Biology Education (RCN-UBE)

- Goal: "focus on any topic likely to lead to improved participation, learning, or assessment in undergraduate biology curricula"
 - active and inquiry-based learning
 - engage faculty in professional development
 - incorporate new fields into the biology curriculum
 - improve assessment of student learning
 - improve transition from 2-year to 4 year institutions
 - incorporate authentic research experiences into undergraduate laboratory courses
- Incubator awards (\$50 K) and Full awards (up to \$500K for five years)

Current solicitation is NSF 15-527.

RCN UBE

How do they differ from "regular" grants?

- Supports projects to build communities of biology faculty ("We" instead of "I")—to accomplish more than any one person could achieve
- RCNs foster networking activities (such as conferences, workshops, student and faculty exchanges) and will not directly support...laboratory and field research.
- Incubator awards (up to \$50,000 for one year) to fund formation of new teams (up to 8 pages)
- Full awards (up to \$500K for five years) fund more mature projects (15 pages)







LSAMP

Louis Stokes Alliance for Minority Participation

Four Award Types

Alliances

Multi-institutional 5-year projects focused on undergraduate recruitment and retention. Up to \$1M per year for 5 yrs

Bridge to Baccalaureate (B2B)

Community College Led 3-year projects focused on educational preparation and transfer of community college students. Up to \$500k per year for 3 yrs

Pre-Alliance Planning Grants

18-month projects for new alliances, regional outreach, or centers.
Up to \$125k for 18 months

Bridge to Doctorate (BD)

Selective Eligibility 2-year projects focused on post-baccalaureate success. Up to \$1.075M for 2 yrs

Deadlines B2D and Planning: 14 October 2016 B2B and Alliances: 4 November 2016

ATE



Support for Undergraduates RUI, ROA for PUIs



RUIs and ROAs support research by faculty members at PUIs.

PUIs = accredited institutions that award Associate's, Bachelor's, and/or Master's degrees but have not awarded > 20 Ph.D./D.Sci. degrees in all NSF-supported fields during the combined previous two academic years.

ALL NSF directorates evaluate and fund RUIs and ROAs

They are funded within R & E program allocations

Directorate contacts found at : http://www.nsf.gov/crsspgrm/rui_roa/contacts.jsp 131

Research Experiences for Undergraduates



REU in BIO is administered through DBI; (typical programs include 10 students for 10 weeks

REU Goals:

 Initiate and conduct projects that engage a number of undergraduate students in summer research.

 Involve students who might not otherwise have the opportunity, particularly those from academic institutions where research programs are limited; applications from younger students (rising sophomores) are encouraged

RET Goals:

Enable K-12 teachers and community college faculty to engage in STEM research and then adapt knowledge into their teaching



RET Sites and Supplements
 May be included in REU proposals
 Check Directorates for specific mechanisms

Major Research Instrumentation (MRI) Goals:

National S WHERE DI	cience Foundation scoveries begin		SEARCH						
FUNDING AWARDS D	DISCOVERIES NEWS PUBLIC	CATIONS STATIST	ICS ABOUT NSF	FASTLANE					
Funding			Email 📩 🛛 Print 📘	Share 🛖					
1.4 1.4 1.1	<u>NSF-wide</u> Major Research I [∎]	nstrumenta	tion Program	n (MRI)					
	MRI ANNOUNCEMENTS								
Find Funding									
A-Z Index of Funding Opportunities	FREQUENTLY ASKED QUESTIONS POSTED								
Recent Funding Opportunities	FAQs have been added for MRI Solicitation 11-503. To view the FAQs page click here								
Incoming Due Dates	CONTACTS								
Advanced Evending Concel									
Advanced Funding Search	Name	Email	Phone	Room					
Interdisciplinary Research	Dr. Randy L. Phelps	mri@nsf.gov	(703) 292-8040						
How to Prepare Your Proposal	Additional contact information for NSF's Major Research Instrumentation Program is as follows:								
About Funding	Office of Integrative Ad	ivities							
Opticals and Awards Ornice or integrative Activities roposals and Awards Major Research Instrumentation Program roposal and Award Policies and rocedures Guide Avard Policies and Artington, VA 22230 Introduction (703) 292-8040									
Proposal Preparation and	E-Mail: mri@nsf.gov								
Grant Proposal Guide	Website: http://www.ns	f.gov/od/oia/progran	ns/mri						
Grants.gov Application Guide									
Award and Administration	PROGRAM GUIDELINES								
• Award and Administration Guide	Award and Administration Solicitation 13-517 Guide								
Award Conditions	Important Notice to Propos	ers							
Other Types of Proposals	A revised version of the NS (PAPPG), <u>NSF 13-1</u> , was iss proposals submitted, or du	F Proposal & Awar ued on October 4, e, on or after Janu	rd Policies & Proce 2012 and is effect ary 14, 2013. Plea	edures Guide ive for ise be advised					
Merit Review	that, depending on the spe	cified due date, the	e quidelines conta	ined in NSE					

13-1 may apply to proposals submitted in response to this funding

opportunity

NSF Outreach

Support acquisition of major state-of-the-art instrumentation

 Foster development of the next generation of major instrumentation

Integrate research with education

Use, advance, expand the nation's cyber-infrastructure and/or high performance computing capability

 Promote academic & private sector instrument development partnerships

Major Research Instrumentation (MRI) <u>Thematic Areas:</u>



The competition for securing research funding has never been so intense. Increase your chance of getting grants by using our tools to discover the most important factors underlying funded research in your area.

Graduate Research Fellowship Program





Goals:

- Select, recognize, and financially support <u>early in their careers</u> individuals with the demonstrated potential to be high achieving scientists and engineers
- Broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans



5 Year Award = \$138,000 \$34,000/year for 3 years + + \$12,000 Educational allowance to institution



Professional Development Opportunities: GROW: International Research GRIP: Internships

Supercomputer access: XSEDE

Career Life Balance (family leave)

RESOURCES:

Solicitation and links www.nsf.gov/grfp

NSF GRFP FastLane Website www.fastlane.nsf.gov/grfp

Application, guides, announcements GRFP Website, <u>www.nsfgrfp.org</u>

> Current & former Fellows 866-NSF-GRFP, info@nsfgrfp.org







SBIR/STTR Phase II-CC

Supplemental funding opportunity for existing SBIR/STTR awardees to partner with a community college.

Award: up to \$40,000

• 75% must be subaward to the community college

Goals:

- To increase the participation of underrepresented groups in both academic and small business research.
- Give small businesses access to faculty and students capable of contributing to the scientific research.
- Give faculty and students experience working on research projects that lead to commercial products and processes.

International - A Crosscutting Portfolio

International activities at NSF

- Span all NSF Directorates and Offices
- Globalize NSF research and education
- Strengthen partnerships with foreign counterpart funders
- Involve cooperation with other U.S. government agencies, private foundations





International - A Crosscutting Portfolio

International activities at NSF

- Span all NSF Directorates and Offices
- Globalize NSF research and education
- Strengthen partnerships with international funding agencies
- Cooperate with other U.S. government agencies, private foundations





Examples of Support for International Activities

- Partnerships for International Research and Education (PIRE)
- Partnerships for Enhanced Engagement in Research (PEER) – with USAID
- International Research Experiences for Students (IRES)
- East Asia Pacific Summer Institutes for Graduate Students (EAPSI)
- (International) Postdoctoral Research Fellowship Program
- Science Across Virtual Institutes (SAVI)
- Graduate Research Opportunities
 Worldwide (GROW)















Office of Integrative Activities (OD/OIA)



Office Priorities

- IA: Science and Technology Centers (STC)
- IA: Major Research Instrumentation (MRI)
- IA: Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE)
- EPSCoR: Research Infrastructure Improvement (RII)



Questions?


Faculty Early Career Development program "CAREER"





CAREER Awards

Solicitation 15-555

Due Dates: July 20, 2016 BIO, CISE, EHR July 21, 2016 ENG July 22, 2016 GEO, MPS, SBE

CAREER Awards

Foundation wide Supports junior faculty Research and education integration PECASE (Presidential Early Career Award for Scientists and Engineers)

eligibility



CAREER AwardsStable support for 5 years

NSF wide: 400 per year



> \$400K – CISE, EHR, MPS, SBE
> \$500K – ENG, BIO, GEO/PLR

CAREER eligible investigators must:



Hold PhD (by proposal deadline)

Be employed in a tenure-track (or equivalent) position at an eligible institution as an Assistant Professor (until Oct 1st following deadline)

An eligible institution must be:

An academic institution in the U.S., its territories or possessions, and the Commonwealth of Puerto Rico that award degrees in fields supported by NSF.



An eligible institution may also be:



Non-profit, non-degree-granting (e.g. a museum, observatory or lab) if the eligibility requirements of the PI are satisfied.

NSF encourages proposals from different institutional types, including minority serving and undergraduate institutions



CAREER eligible investigators may NOT:

- Receive tenure before Oct 1st following proposal deadline
- Have previously received a CAREER award
- Have had more than two CAREER proposals reviewed
- Be an untenured associate professor

CAREER varies across NSF

- Number of submitted CAREER proposals
- Review and Funding methods
- Other Proposals with which CAREERs compete



NSF CAREER Coordinating Committee Sets NSF-wide goals

CAREER Proposals

Contact program manager liaison* and ask about:

- Expectations for scope of research and education
- Assessment of 2-page departmental letter

* see

 Funding rate trend for regular proposals in the program of interest

http://www.nsf.gov/crssprgm/career/contacts.jsp4

Are CAREER awards right for you?

Yes, if:

Your proposed research is innovative, ambitious and within NSF's the purview of research and education supported

You have support from your department/ organization, mentors.

You are at the right stage of your career.

CAREER Personnel and Budgets

YES

Consultants, subawards, unpaid collaborators Co-PI, senior personnel

NO

Academic year buyouts for teaching intensive institutions

CAREER Departmental 2 Page Letter

- Statement of PI CAREER program eligibility
- Support for PI's s proposed research and education activities
- Description of how the PIs career goals and responsibilities mesh with that of the organization and department
- Commitment to support professional development and mentoring of the PI
- NOT a letter of recommendation or endorsement of the PI or the research project

CAREER Awards Urban Myths

"You cannot apply because you have another NSF award..."

"It is an entry program, so you must first apply to CAREER..."

"I need to see a successful proposal to write a successful proposal..."

"You have no chance, if you are not from a research intensive institution..." "CAREER proposals are more portable than other NSF funding." "The education component does not matter.

"I read on the web that to succeed, I have to...."



Traits of a Successful CAREER Proposal



Matches disciplinary program expectations

Includes an appropriate scope of activities for a 5-year plan, not one's whole life!

Goes outside the education box of regular research proposals in the field

Strikes a balance between doable research activities and more risky pursuits

PECASE:

Presidential Early Career Awards for Science and Engineering April 18, 2014



CAREER Awards Resources:

- Program Solicitation NSF 15-555
- Frequently Asked Questions NSF 15-057
- CAREER Directorate/Division Contacts
 - http://www.nsf.gov/crssprgm/career/con tacts.jsp
- Links to recent CAREER and PECASE awards

Questions?



Break



Directorate Sessions



Thank you for Attending!



Please Complete Your Evaluation!