NSF GRANTS CONFERENCE

Fall 2021

Directorate for Social, Behavioral & Economic Sciences

Rebecca Ferrell, PhD
SBE/Behavioral & Cognitive Sciences Division

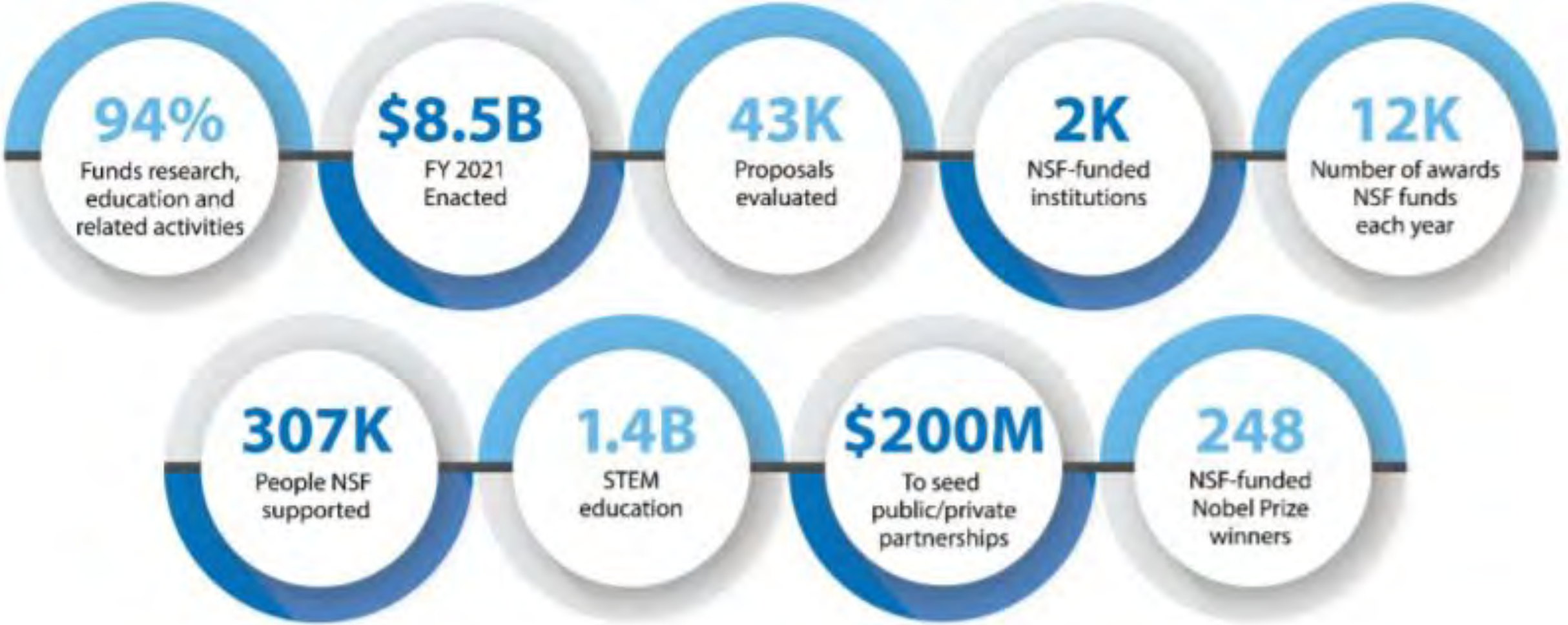
Presentation Outline

- NSF Agency Background
- SBE Directorate and Research Opportunities
- Submission Procedures and Additional Tips

National Science Foundation (NSF)

- Independent federal agency created in 1950
- NSF funds fundamental science
- NSF Mission
  - To promote the progress of science;
  - To advance the national health, prosperity, and welfare;
  - To secure the national defense

NSF BY THE NUMBERS

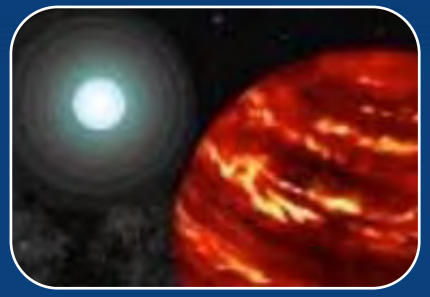


https://nsf.gov/news/factsheets/Factsheet_By%20the%20Numbers_05_21_V02.pdf

NSF Funds All Fields of Science & Engineering

Biological Sciences

Engineering



Mathematical & Physical Sciences

Computer & Information Science & Engineering

Geosciences (including Polar Programs)

Integrative Activities

Education & Human Resources

Social, Behavioral & Economic Sciences (SBE)

International Science and Engineering

Social, behavioral and economic (SBE) sciences advance scientific knowledge about people and society. This knowledge furthers NSF's mission to advance U.S. health, prosperity, welfare, and defense — it is critical for the country's well-being.

SBE sciences explore human behavior and social organizations. They look at how economic, political, environmental, social, and cultural forces affect the lives of people from birth to old age — and how people in turn shape those forces.

Your Life. Our Work. SBE.

Directorate for Social, Behavioral and Economic Sciences

Arthur "Skip" Lupia

Assistant Director

Kellina Craig-Henderson

Deputy Assistant Director

Behavioral and Cognitive Sciences

Marc Sebrechts
Division Director

- Archaeology and Archaeometry
- Biological Anthropology
- Cognitive Neuroscience
- Cultural Anthropology
- Developmental Sciences
- Human-Environment and Geographical Sciences
- Human Networks and Data Science
- Linguistics & DLI
- Perception, Action and Cognition
- Science of Learning and Augmented Intelligence
- Social Psychology

Social and Economic Sciences

Daniel Goroff
Division Director

- Accountable Institutions and Behavior
- Economics
- Decision, Risk and Management Sciences
- Law and Science
- Methodology, Measurement and Statistics
- Science and Technology Studies
- Science of Organizations
- Secure & Trustworthy Cyberspace
- Security and Preparedness
- Sociology

National Center for Science and Engineering Statistics

Emilda Rivers
Division Director

- Statistical information about science and engineering in the U.S. and the world
  - The nation's investment in R&D
  - Education and workforce info of scientists and engineers
- Developing indicators of the nation's competitiveness and innovation capacity

Office of Multidisciplinary Activities

- Research Experiences for Undergraduates Sites
- SBE Postdoctoral Research Fellowships
- Science of Science : Discovery, Communication and Impact
- Ethical and Responsible Research
- Build & Broaden 2.0

https://www.nsf.gov/funding/programs.jsp?org=SBE

Build and Broaden 2.0

The Build and Broaden 2.0 solicitation (NSF 21-542) is a funding opportunity within the National Science Foundation's Directorate for Social, Behavioral and Economic Sciences (SBE).

Build and Broaden 2.0 supports fundamental research in the SBE sciences by scholars at minority-serving institutions (MSIs). Proposals are invited from:

- Single principal investigators (PIs) based at MSIs,
- Multiple co-investigators from one or more MSIs,
- Principal Investigators not affiliated with MSIs, but who collaborate with PIs, co-PIs, or senior personnel from MSIs.
    - In this case, proposals must describe — as a primary goal of the proposed work — how the project will foster research partnerships or capacity-building with at least one MSI.

For questions regarding the Build and Broaden 2.0 solicitation, please contact sbe-buildandbroaden@nsf.gov

Some Cross-Directorate Initiatives

- **Mid-Career Advancement (MCA)**
- Ethical and Responsible Research (ER2)
- Cyberlearning for Work at the Human-Technology Frontier (Cyberlearning)
- Dynamics of Coupled Natural and Human Systems (CNH)
- Historically Black Colleges and Universities Excellence in Research (HBCU-EiR)
- Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES)
- Integrative Strategies for Understanding Neural and Cognitive Systems (NCS)
- Collaborative Research in Computational Neuroscience (CRCNS)
- Innovation Corps (I-Corps)
- Innovations at the Nexus of Food, Energy and Water Systems (INFEWS)

Funding Mechanisms

- Unsolicited competitions
- Special solicitations (e.g., Build and Broaden)
- Rapid response research (RAPID)
- Early-concept grants for exploratory research (EAGER)
- CAREER grants
- Doctoral dissertation improvement grants (check individual programs)
- Research Coordination Networks

Rapid Response Research (RAPID)

- Research when data are ephemeral
- $200,000 maximum; 1 year
- 5-page project description
- Internal review only
- Contact program officer first

Early-concept grants for exploratory research (EAGER)

- Exploratory work on untested, potentially transformative ideas
- High-risk, high-potential payoff
- $300,000 maximum; 2 years
- 8-page descriptive
- Internal review only
- Contact program officer first

Faculty Early Career Development (CAREER) Program

- Untenured faculty (or comparable)
- Single scholar award
- $400,000, 5-years minimum award
- Three proposals lifetime limit
- Highly competitive
- July deadline each year

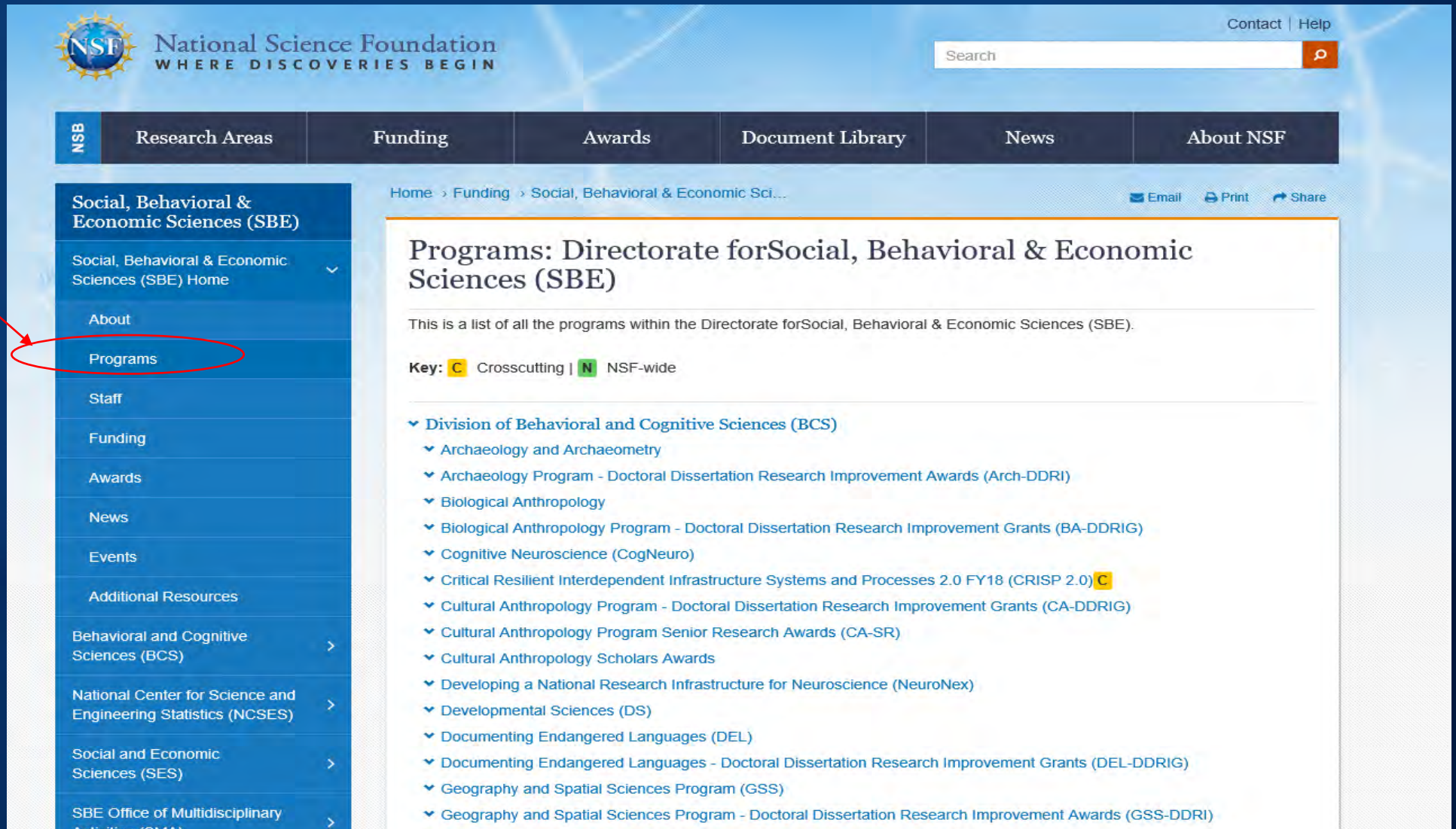
Doctoral Dissertation Research Improvement Grants (DDRIG)

- Check individual programs for availability
- Funds to support/augment doctoral research project
- Restrictions on categories of expenses
- Generally $20K direct costs (but may vary by program)

Research Coordination Networks

- http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11691
- Support groups of scholars focused on a theme
- Submit to a program
- Limited to 5-years, $500,000

Review the SBE Programs Page: https://nsf.gov/funding/programs.jsp?org=SBE



Find the Right Program (e.g., DS program webpage)

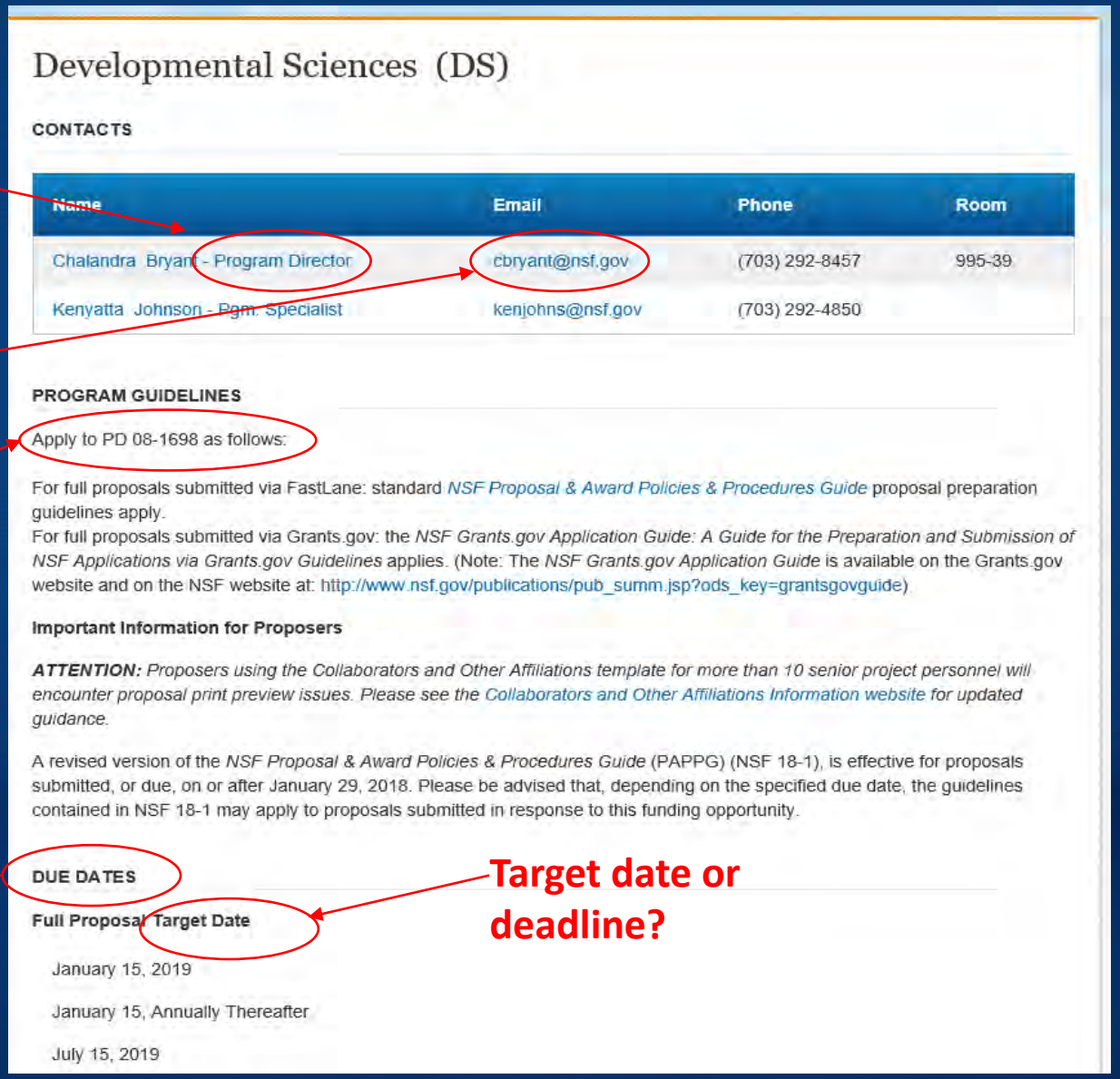
Who is the Program Director?

How do you contact the Program Director?

How do you apply? Program Description vs. Solicitation

When do you apply?

Target date or deadline?



Developmental Sciences (DS)

CONTACTS

Name	Email	Phone	Room
Chalandra Bryant - Program Director	cbryant@nsf.gov	(703) 292-8457	995-39
Kenyatta Johnson - Pgm. Specialist	kenjohns@nsf.gov	(703) 292-4850	

PROGRAM GUIDELINES

Apply to PD 08-1698 as follows:

For full proposals submitted via FastLane: standard *NSF Proposal & Award Policies & Procedures Guide* 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: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=grantsgovguide)

Important Information for Proposers

ATTENTION: *Proposers using the Collaborators and Other Affiliations template for more than 10 senior project personnel will encounter proposal print preview issues. Please see the Collaborators and Other Affiliations Information website for updated guidance.*

A revised version of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 18-1), is effective for proposals submitted, or due, on or after January 29, 2018. Please be advised that, depending on the specified due date, the guidelines contained in NSF 18-1 may apply to proposals submitted in response to this funding opportunity.

DUE DATES

Full Proposal Target Date

January 15, 2019

January 15, Annually Thereafter

July 15, 2019

Find the right program: (scrolling down….)

How do I know if my research is relevant to a particular program?

SYNOPSIS

DS supports basic research that increases our understanding of cognitive, linguistic, social, cultural, and biological processes related to human development across the lifespan. Research supported by this program will add to our knowledge of the underlying developmental processes that support social, cognitive, and behavioral functioning, thereby illuminating ways for individuals to live productive lives as members of society.

DS supports research that addresses developmental processes within the domains of cognitive, social, emotional, and motor development across the lifespan by working with any appropriate populations for the topics of interest including infants, children, adolescents, adults, and non-human animals. The program also supports research investigating factors that affect developmental change including family, peers, school, community, culture, media, physical, genetic, and epigenetic influences. Additional priorities include research that: incorporates multidisciplinary, multi-method, microgenetic, and longitudinal approaches; develops new methods, models, and theories for studying development; includes participants from a range of ethnicities, socioeconomic backgrounds, and cultures; and integrates different processes (e.g., memory, emotion, perception, cognition), levels of analysis (e.g., behavioral, social, neural), and time scales.

The budgets and durations of supported projects vary widely and are greatly influenced by the nature of the project. Investigators should focus on innovative, potentially transformative research plans and then develop a budget to support those activities, rather than starting with a budget number and working up to that value.

While there are no specific rules about budget limitations, a typical project funded through the DS program is approximately 3 years in duration with a total cost budget, including both direct and indirect costs, between $100,000 and $200,000 per year. Interested applicants are urged to explore the NSF awards database for the DS program to review examples of awards that have been made.

The DS program also accepts proposals for workshops and small conferences. These typically have total cost budgets, including direct and indirect costs, of approximately $35,000.

In addition to consulting the NSF awards database, it is often useful for interested applicants to submit (via email) a summary of no more than one page so that the Program Director can advise the investigator on the fit of the project for DS prior to preparation of a full proposal. New Investigators are encouraged to solicit assistance in the preparation of their project proposals via consultation with senior researchers in their area, pre-submission review by colleagues, and attendance at symposia and events at professional conferences geared towards educating investigators seeking federal funding.

RELATED PROGRAMS

Facilitating Research at Primarily Undergraduate Institutions:

Faculty Early Career Development Program

What Has Been Funded (Recent Awards Made Through This Program, with Abstracts)

Map of Recent Awards Made Through This Program

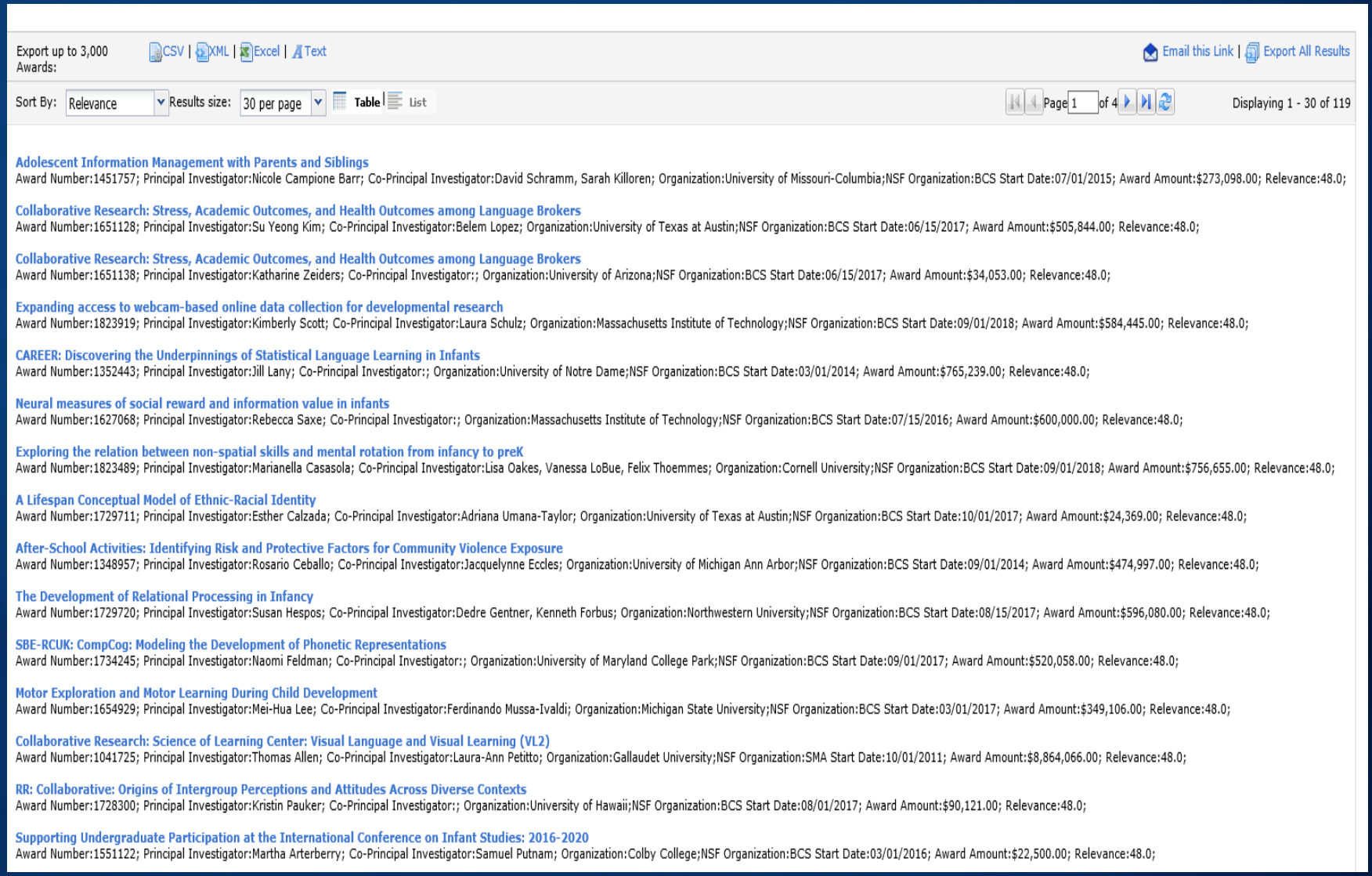
News

Click this!

Find the Right Program: Awards recently made

What has been funded through a particular program?

Click on a title to get the abstract



Export up to 3,000 Awards: CSV | XML | Excel | Text — Email this Link | Export All Results

Sort By: Relevance — Results size: 30 per page — Table | List — Page 1 of 4 — Displaying 1 - 30 of 119

Adolescent Information Management with Parents and Siblings
Award Number:1451757; Principal Investigator:Nicole Campione Barr; Co-Principal Investigator:David Schramm, Sarah Killoren; Organization:University of Missouri-Columbia;NSF Organization:BCS Start Date:07/01/2015; Award Amount:$273,098.00; Relevance:48.0;

Collaborative Research: Stress, Academic Outcomes, and Health Outcomes among Language Brokers
Award Number:1651128; Principal Investigator:Su Yeong Kim; Co-Principal Investigator:Belem Lopez; Organization:University of Texas at Austin;NSF Organization:BCS Start Date:06/15/2017; Award Amount:$505,844.00; Relevance:48.0;

Collaborative Research: Stress, Academic Outcomes, and Health Outcomes among Language Brokers
Award Number:1651138; Principal Investigator:Katharine Zeiders; Co-Principal Investigator:; Organization:University of Arizona;NSF Organization:BCS Start Date:06/15/2017; Award Amount:$34,053.00; Relevance:48.0;

Expanding access to webcam-based online data collection for developmental research
Award Number:1823919; Principal Investigator:Kimberly Scott; Co-Principal Investigator:Laura Schulz; Organization:Massachusetts Institute of Technology;NSF Organization:BCS Start Date:09/01/2018; Award Amount:$584,445.00; Relevance:48.0;

CAREER: Discovering the Underpinnings of Statistical Language Learning in Infants
Award Number:1352443; Principal Investigator:Jill Lany; Co-Principal Investigator:; Organization:University of Notre Dame;NSF Organization:BCS Start Date:03/01/2014; Award Amount:$765,239.00; Relevance:48.0;

Neural measures of social reward and information value in infants
Award Number:1627068; Principal Investigator:Rebecca Saxe; Co-Principal Investigator:; Organization:Massachusetts Institute of Technology;NSF Organization:BCS Start Date:07/15/2016; Award Amount:$600,000.00; Relevance:48.0;

Exploring the relation between non-spatial skills and mental rotation from infancy to preK
Award Number:1823489; Principal Investigator:Marianella Casasola; Co-Principal Investigator:Lisa Oakes, Vanessa LoBue, Felix Thoemmes; Organization:Cornell University;NSF Organization:BCS Start Date:09/01/2018; Award Amount:$756,655.00; Relevance:48.0;

A Lifespan Conceptual Model of Ethnic-Racial Identity
Award Number:1729711; Principal Investigator:Esther Calzada; Co-Principal Investigator:Adriana Umana-Taylor; Organization:University of Texas at Austin;NSF Organization:BCS Start Date:10/01/2017; Award Amount:$24,369.00; Relevance:48.0;

After-School Activities: Identifying Risk and Protective Factors for Community Violence Exposure
Award Number:1348957; Principal Investigator:Rosario Ceballo; Co-Principal Investigator:Jacquelynne Eccles; Organization:University of Michigan Ann Arbor;NSF Organization:BCS Start Date:09/01/2014; Award Amount:$474,997.00; Relevance:48.0;

The Development of Relational Processing in Infancy
Award Number:1729720; Principal Investigator:Susan Hespos; Co-Principal Investigator:Dedre Gentner, Kenneth Forbus; Organization:Northwestern University;NSF Organization:BCS Start Date:08/15/2017; Award Amount:$596,080.00; Relevance:48.0;

SBE-RCUK: CompCog: Modeling the Development of Phonetic Representations
Award Number:1734245; Principal Investigator:Naomi Feldman; Co-Principal Investigator:; Organization:University of Maryland College Park;NSF Organization:BCS Start Date:09/01/2017; Award Amount:$520,058.00; Relevance:48.0;

Motor Exploration and Motor Learning During Child Development
Award Number:1654929; Principal Investigator:Mei-Hua Lee; Co-Principal Investigator:Ferdinando Mussa-Ivaldi; Organization:Michigan State University;NSF Organization:BCS Start Date:03/01/2017; Award Amount:$349,106.00; Relevance:48.0;

Collaborative Research: Science of Learning Center: Visual Language and Visual Learning (VL2)
Award Number:1041725; Principal Investigator:Thomas Allen; Co-Principal Investigator:Laura-Ann Petitto; Organization:Gallaudet University;NSF Organization:SMA Start Date:10/01/2011; Award Amount:$8,864,066.00; Relevance:48.0;

RR: Collaborative: Origins of Intergroup Perceptions and Attitudes Across Diverse Contexts
Award Number:1728300; Principal Investigator:Kristin Pauker; Co-Principal Investigator:; Organization:University of Hawaii;NSF Organization:BCS Start Date:08/01/2017; Award Amount:$90,121.00; Relevance:48.0;

Supporting Undergraduate Participation at the International Conference on Infant Studies: 2016-2020
Award Number:1551122; Principal Investigator:Martha Arterberry; Co-Principal Investigator:Samuel Putnam; Organization:Colby College;NSF Organization:BCS Start Date:03/01/2016; Award Amount:$22,500.00; Relevance:48.0;

Find the Right Program: Abstracts of Awards Recently Made

You can review the abstracts of awards made through a particular program.

Program Manager:	Chalandra Bryant BCS Division Of Behavioral and Cognitive Sci SBE Direct For Social, Behav & Economic Scie
Start Date:	September 1, 2018
End Date:	August 31, 2021 (Estimated)
Awarded Amount to Date:	$756,655.00
Investigator(s):	Marianella Casasola mc272@cornell.edu (Principal Investigator) Lisa Oakes (Co-Principal Investigator) Vanessa LoBue (Co-Principal Investigator) Felix Thoemmes (Co-Principal Investigator)
Sponsor:	Cornell University 373 Pine Tree Road Ithaca, NY 14850-2820 (607)255-5014
NSF Program(s):	DS - Developmental Sciences
Program Reference Code(s):	1698
Program Element Code(s):	1698

ABSTRACT

Mental rotation, the ability to mentally manipulate a visual representation of an object and recognize its appearance from a different orientation, shows stability from infancy through preschool. This ability predicts mathematical achievement in kindergarten and beyond as well as entry into the Science, Technology, Engineering, and Mathematics (STEM) fields. The present work focuses on identifying how non-spatial processes contribute to mental rotation abilities. Findings will help identify ideal time points for intervention, advance understanding of the factors that contribute to mental rotation, and address how individual differences in mental rotation during infancy predict later abilities. This work will involve the creation and refinement of measures that can be used to trace the development of mental rotation from infancy into preschool; thereby, not only contributing new tools to the field, but also yielding insights that can inform current theoretical conceptions of mental rotation and its relation to non-spatial processes.

The critical research question is as follows: What are the non-spatial processes that contribute to mental rotation abilities and their development? Associations between mental rotation, object features, processing bias, and motor experience will be examined using a cross-sequential design with overlapping age cohorts. The investigators will recruit an infant cohort at 8 months, a toddler cohort at 20 months, and a preschool cohort at 3 years. Each cohort will be assessed at three time points -- every six months for infants (i.e., 8, 14, and 20 months), every 8 months for toddlers (i.e., 20, 28, and 36 months), and every year for preschoolers (3, 4, and 5 years). When examined at a specific age, the sample will provide a snapshot into the association between mental rotation and non-spatial skills (i.e., object features, processing bias, and motor experience). The longitudinal design will allow the investigators to follow participants across infancy, toddlerhood, or the preschool years. This approach provides an opportunity to understand how non-spatial skills, such as more precocious motor skills during infancy, may shape mental rotation over time. Such findings are central to bolstering understanding of the possible mechanisms by which particular types of

Note:

- Program Manager
- Duration
- Awarded amount
- Co-funded?
- Topic area

Before you apply… READ!!!

SBE Postdoctoral Research Fellowships (SPRF)

PROGRAM SOLICITATION
NSF 17-588

REPLACES DOCUMENT(S):
NSF 16-590

National Science Foundation
Directorate for Social, Behavioral & Economic Sciences
SBE Office of Multidisciplinary Activities

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):
November 01, 2017
October 09, 2018
Second Tuesday in October, Annually Thereafter

IMPORTANT INFORMATION AND REVISION NOTES

The FY 2018 solicitation underwent minor revisions to clarify the requirements of the solicitation and decrease burden on applicants.

- Eligibility information has been revised. Specification that the doctoral degree be obtained in the SBE sciences and justification for remaining at one's doctoral-granting institution were added.
- The sponsoring scientist must be listed as a Co-PI on the proposal's Cover Sheet.
- Award tenure start dates were amended to include the 15th of the month.
- The requirement for two reference letters on the Fellowship candidate has been removed.
- Guidance for registering as an individual in FastLane and completing the Cover Sheet, Project Summary, Project Description, Budget Sheet, Budget Justification, Current and Pending Support, the Postdoctoral Mentoring Plan, and the new Collaborations and Other Affiliations information template were added.

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 18-1), which is effective for proposals submitted, or due, on or after January 29, 2018.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:
SBE Postdoctoral Research Fellowships (SPRF)

Synopsis of Program:
The Directorate for Social, Behavioral and Economic Sciences (SBE) offers Postdoctoral Research Fellowships to encourage independence early in the Fellow's career through supporting his or her research and training goals. The research and training plan of each Fellowship must address important scientific questions within the scope of the SBE Directorate and the specific guidelines in this solicitation. The SPRF program offers two tracks: (I) Full Research in the SBE Sciences (SPRF-FR) and (II) Broadening Participation in the SBE Sciences (SPRF-BP). See the full text of the solicitation for a detailed description of these tracks.

Cognizant Program Officer(s):
Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact.

- Josie S. Welkom - Acting Program Officer, telephone: (703) 292-7376, email: jwelkom@nsf.gov

THE NATIONAL SCIENCE FOUNDATION

PROPOSAL & AWARD POLICIES AND PROCEDURES GUIDE

Effective January 29, 2018
NSF 18-1
OMB Control Number 3145-0058

Next Steps

After you have narrowed down to programs that match your area of research and you have read the program page and (solicitation):

Reach out to the Program Director by EMAILING a 1-page summary of your planned research project (IM and BI). Get feedback about project fit with program goals

Email ALL relevant programs in a SINGLE email.

Request a phone meeting if the program is a good fit

- Get in touch EARLY (well before the deadline)
- Follow-up if you have not heard back within 1- week
- Ask about other relevant programs and initiatives

Starting a Grant Submission: Your University Submits the Grant Proposal, Not You!

- Start your budget and figure out the direct costs on the activities that you have planned
- Email your Sponsored Research Office
  - Get a Fastlane ID and log in and start on shorter, but required documents
  - Bring your budget draft to make sure that all necessary costs are included in calculations
  - Find out what your campus requires for routing timelines and internal approvals are needed. Many campuses require grants to be signed off before the actual grant deadline. Plan for this time.
- Be nice to your SRO

Proposal Structure 1

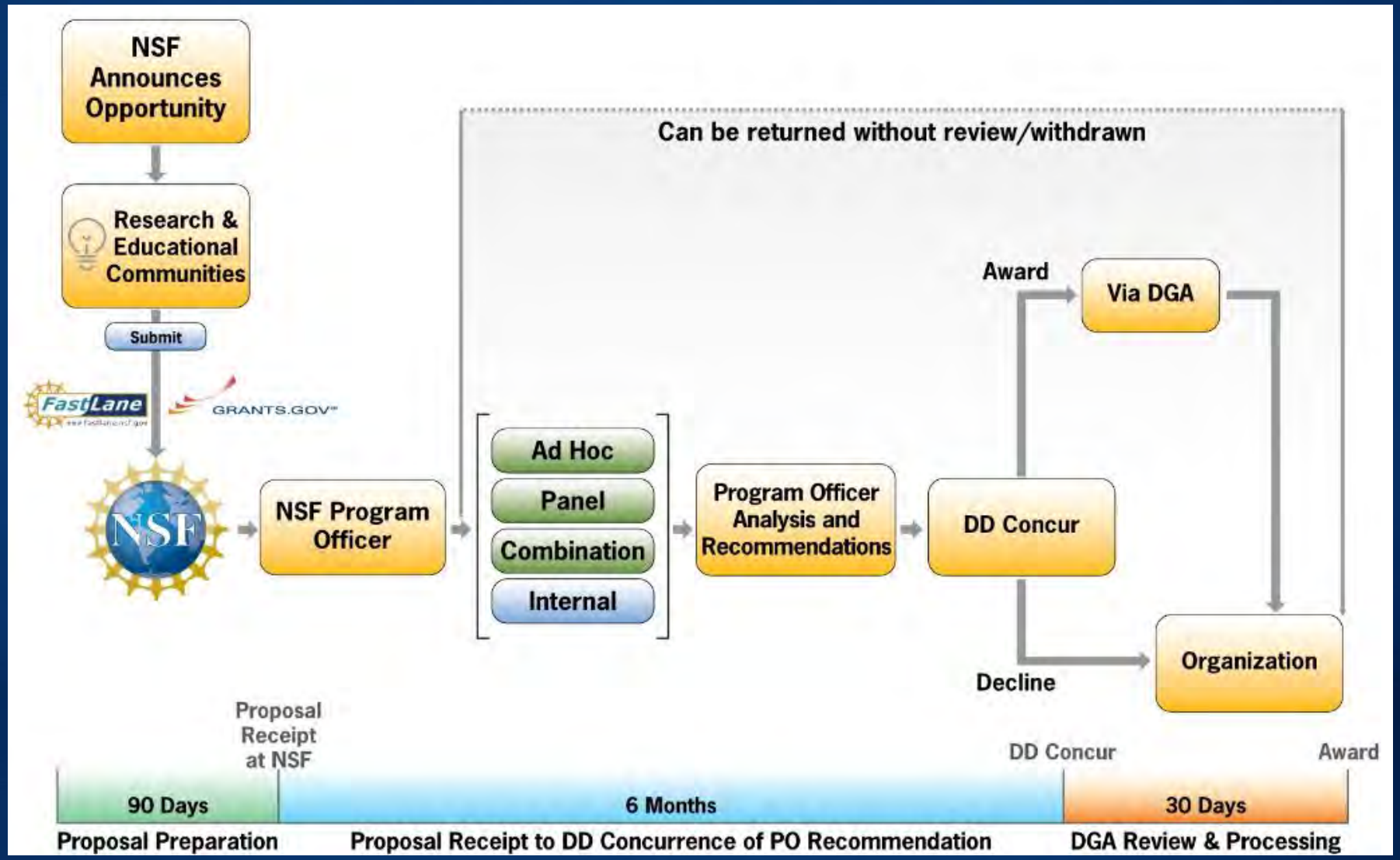
- Summary (1 page; overview, intellectual merit, broader impacts)
- Description (15 pages)
- References (no limit, but….)
- Biographical sketches (form)
- Budget
- Budget justification (3 pages)
- COI Matrix

Proposal Structure 2

- Current and pending support
- Data Management Plan
- Post-Doc Mentoring Plan
- Reviewing Suggestions (optional)

Standard Submission Process

Research.gov!



* There are some exceptions to submission procedures (e.g., individual awards such as postdoctoral fellowships)

NSF Merit Review Criteria

- Intellectual Merit:
  - Potential for advancing knowledge in/across fields
  - Qualifications of the investigators
  - Creativity and originality
  - Organization of the ideas/experiments
  - Access to resources
  - Potentially transformative research?
- Broader Impact:
  - Promoting teaching, training, and education
  - Enhancement of infrastructure for research and education
  - Community resources and outreach
  - Participation of underrepresented groups
  - Benefits to society

- https://www.nsf.gov/pubs/2021/nsf21059/nsf21059.jsp

NSF Merit Review Criteria

Try to think like a reviewer might, and think of someone not completely familiar with *your* work – are you covering everything in **Intellectual Merit**?

What Applicants want to convey

- Present a NEW idea
- Explain the expected results and alternative plans
- What you will do, risk mitigation
- Demonstrate your qualifications
  - Preliminary Data
  - Publications

What Reviewers look for

- Advancing the field: is it a big or little step in science?
- Will the negative results be important too?
- Can the applicants do the project?

NSF Merit Review Criteria

Try to think like a reviewer might, and think of someone not completely familiar with *your* work – are you covering everything in **Broader Impacts**?

What Applicants want to convey

- Present a clear, integrated plan.
- Document a history of outreach/impact.
- Show who you will impact and how.
- Describe how you will know it works.

What Reviewers look for

- Connected to the research?
- Can it be executed?
- Targeting an appropriate goal/group?
- Will it have an impact and *how will the PI know*?

What Makes a Proposal Competitive?

- Potential for high impact
- New, original ideas
- Focused, feasible project plan
- Articulated knowledge of subject area, published relevant work
- Experience in essential methods or approaches, and/or collaborator expertise
- Sound scientific rationale
- Realistic amount of work; sufficient detail; critical approach (knows the pitfalls)

Common Pitfalls to Avoid

- Overlooking key aspects of the program announcement and requirements
- Lacking specificity about methods and/ or predictions
- Underdeveloped or vague data analysis plan
- Disconnect between framing/ motivation and proposed activity
- Failing to establish feasibility
- Not tailoring your proposal to the appropriate audience (disciplinary vs. multidisciplinary panel)

If Your Proposal is Declined…What now?

- Develop a thick skin
- Take time to digest the reviews and then get back up and resubmit
  - Persistence can pay off!
- Carefully consider how you will address all weaknesses (you don't get extra space) or whether you need to reformulate the project
- Schedule a time to talk to the program director (after you have had time to digest the reviews) to discuss the appropriateness and plans for resubmission

Common Myths

- NSF only funds scholars at elite institutions
- NSF only funds “famous” academics
- Once declined, always declined
- Advisory committees make funding decisions

Additional Resources

- www.nsf.gov is your main source of information on all things NSF.
- Program officers
- Sponsored research offices
- Funded researchers
- Peers