

Social, Behavioral & Economic Sciences Postdoctoral Research Fellowship Program (SPRF)



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August 6, 2018

National Science Foundation (NSF)

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



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



International Science
and Engineering



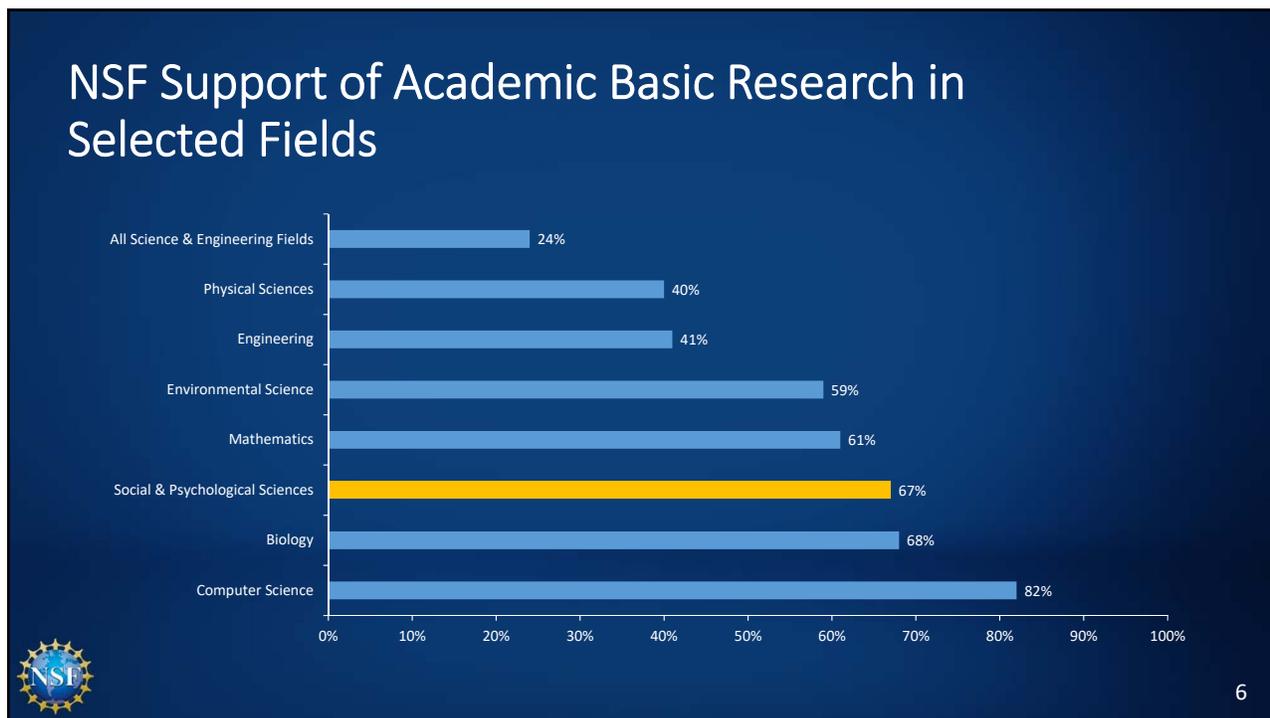
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- SBE's mission is to promote the understanding of people and their lives by supporting research that reveals basic facets of human behavior, social organizations, and institutions
- SBE also aims to provide mission-critical statistical information about science and engineering (S&E) in the U.S. and the world through the National Center for Science and Engineering Statistics (NCSES)

SBE Mission

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SPRF Program Information



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SPRF Program Goals

- The goals of the SBE Postdoctoral Research Fellowship (SPRF) are to:
 - Promote fundamental research in the SBE sciences
 - Enhance the participation of underrepresented groups
 - Provide an opportunity for independence and advanced training under the direction of a sponsoring scientist
- The SPRF program seeks to encourage independence early in the Fellow's career in support of his or her research and training goals



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SPRF Program Logistics

- **Individual Award** - Applications are submitted directly by and awards are made directly to the Fellowship candidate
 - The Fellowship candidate serves as his or her own Authorized Organizational Representative (AOR)
- **Host Institution** - Fellowship candidates identify a sponsoring scientist and a host institution
 - The Fellowship candidate does not have to be affiliated with the host institution at the time of submission
 - Includes U.S. academic institutions (colleges and universities) and non-profit U.S. organizations (independent museums, observatories, research labs, professional societies)
 - Sponsoring Scientist must be affiliated with the Host Institution



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SPRF Program Tracks

Track 1:

Fundamental Research (FR)

- Aims to support research that builds fundamental knowledge of human behavior, interaction, social and economic systems, and organizations and institutions

Track 2:

Broadening Participation (BP)

- Aims to increase the diversity of researchers who participate in NSF programs and thereby, increase the participation of underrepresented SBE scientists in the United States

Applicants do **not have to be a member of an underrepresented group to apply to the BP-track*



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SPRF Award Budget

- \$138,000 for 2-years
 - \$54,000/ year Stipend
 - \$15,000/ year Research and Training Allowance
 - Expenses directly related to the conduct of the proposed research and education activities
 - Expenses in support of the Fellow such as office space, general purpose supplies, etc.
 - Expenses in support of fringe benefits



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SPRF Eligibility Criteria

- Applicants...
 1. Must be a U.S. Citizen, national, or legally admitted permanent resident;
 2. Doctoral degree in the SBE sciences;
 3. Degree obtained either 36 months before or 10 months after application deadline;
 4. Not in a tenure-track faculty position



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SPRF Timeline



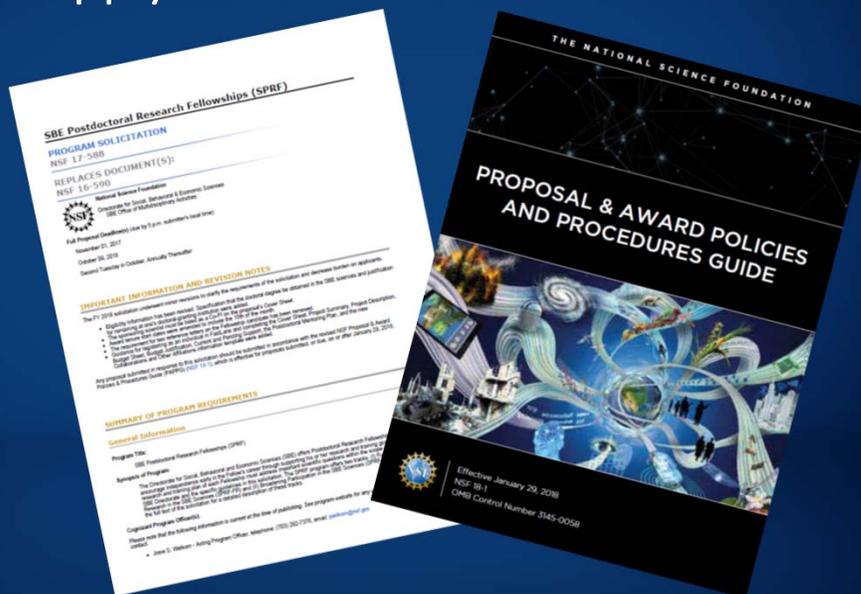
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Application Guidance & Tips



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Before you apply... READ!!!



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Think you've got a great idea?

- Review the abstracts of the awards that have been made on the SPRF program page
- Identify what is missing in the literature?
 - How could you contribute knowledge over the course of two-years?
- Are you able to sell your research idea?
 - Do others in your field agree that this is an important avenue of research?
- Are you well-prepared to conduct the research you are proposing?
 - If not, what training and mentorship would you need to be successful?
- Not sure if your topic fits?
 - Email the SPRF PO a one-pager and request feedback



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Areas of interest

- Any topic within the purview of the SBE sciences is supported
- Review SBE core programs:
 - <https://www.nsf.gov/funding/programs.jsp?org=SBE>
 - Linguistics Program Synopsis - The Linguistics Program supports basic science in the domain of human language, encompassing investigations of the grammatical properties of individual human languages, and of natural language in general. Research areas include syntax, semantics, morphology, phonetics, and phonology
 - Documenting Endangered Languages Program Synopsis – The DEL Program supports projects to develop and advance knowledge concerning endangered human languages



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Selected recent awardees

- Sinasina Sign Language: An Initial Description
- Sponsor: James Woodward
- Institution: University of Hawaii

Samantha Rarrick



- Neural Mechanisms of Probabilistic Prediction in Language Comprehension
- Sponsor: Gina Kuperberg
- Institution: Tufts University

Emily Morgan



- The consequences of early language experience and literacy for adult learning and brain structure
- Sponsor: Judith Kroll
- Institution: University of California, Riverside

Natsuki Atagi



- Identifying a common mechanism for phonetic learning and phonetic adaptation
- Sponsor: Emily Myers
- Institution: University of Connecticut

Christopher Heffner



- Interactions between word learning and visual category development in infancy
- Sponsor: Michael Frank
- Institution: Stanford University

Bria Long



- Neural and cognitive changes in aging and bilingualism: Implications for language production and executive function
- Sponsor: Judith Kroll
- Institution: University of California, Riverside

Eve Higby



- Infants' Emerging Functional Specialization in Bilingual Language Acquisition and Attentional Processes
- Sponsor: Richard Aslin
- Institution: Yale University

Maria Arredondo



- Modeling the Stages of Pronoun Acquisition
- Sponsor: Lisa Pearl
- Institution: University of California, Irvine

Hannah Forsythe



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Selecting a Sponsor & Host Institution

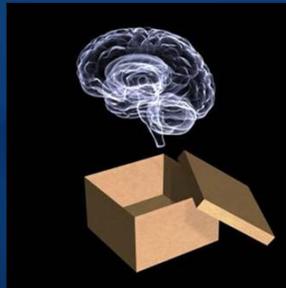
- Identify what characteristics are most important to you in a mentorship relationship
- Contact your potential mentor well-ahead of the application deadline and discuss your idea and their willingness to serve as your sponsoring scientist
 - Would your research proposal or training plan benefit from secondary mentors?
- Consider whether the host institution location gives you appropriate access to the population of interest



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NSF Review Criteria

1. **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge
2. **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes



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Sections of the SPRF Proposal

- Project Summary Don't forget to include the requested information in the Overview section
- Project Description
- References
- Biographical Sketch Fellow and Sponsoring Scientist(s)
- Budget
- Budget Justification
- Current and Pending Support The current SPRF proposal counts as "pending" support
- Facilities, Equipment, and Other Resources
- Collaborators and Other Affiliations Document
- Supplementary Documentation The DMP is required of all proposals regardless of plans to collect data
 - Data Management Plan
 - Dissertation Abstract
 - Postdoctoral Mentoring Plan



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Project Description section

- Not to exceed 13 pages
- Part I: Research Plan (10 pages)
 - Intellectual Merit
 - FR- and BP-specific question
 - Broader Impacts
- Part II: Training Plan
 - Describe plan for career development
 - Provide justification of sponsoring scientist and host institution
 - Include a timetable with yearly goals

Do you require additional training to be successful?

Will your sponsor's expertise complement your background and training?

Is the project feasible within 2 years?
Are you being overly ambitious?



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Budget and Budget Justification



- Fixed award amount - \$138k for two years
- Budget justification
 - Must detail how you plan to spend the \$30k Research and Training Allowance
 - Include international expenses (if any)
- Complete the budget table **EXACTLY** as instructed in the solicitation

The stipend and Fellowship allowance should be entered in Participant Support Costs (Section F on the FastLane budget and Field E on the Grants.gov budget). Enter the \$54,000 stipend in F.1 (FastLane) or E.2 (Grants.gov) and the \$15,000 Fellowship allowance in F.4 (FastLane) or E.5 (Grants.gov). Enter (1) as the Total Number of Participants. An annual budget must be submitted for each of up to two years of Fellowship support.



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Postdoctoral Mentoring Plan

- Not to exceed 3 pages
- Written by or from the perspective of the sponsoring scientist
- Must include the following:
 - A statement of commitment indicating that the Fellowship candidate's proposal has been read and approved by the sponsoring scientist
 - A brief description of the research projects in the host research group(s)
 - An explanation of how the sponsor(s) will determine what mentoring the Fellowship candidate needs...and how these would be translated into a specific plan...
 - A description of the role the sponsor(s) will play in the proposed research and training
 - A description of the limitations, if any, that will be placed on the Fellowship candidate regarding the research following the Fellowship.



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Submitting your SPRF Application

- Start **EARLY** – Late submissions will not be accepted under any circumstance
- Applicants must register in FastLane as an individual
 - Proposals submitted by institutions will be Returned without Review
 - Though you can submit through Grants.gov proposals that are not successfully transmitted to NSF by the due date will be Returned without Review
 - Incomplete applications or those that do not follow solicitation guidelines will be Returned without Review
- Need help with your application...
 1. Review the solicitation, PAPPG, and FAQs
 2. Ask your mentor (sponsoring scientist)
 3. Email the NSF program office



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SPRF Proposal Evaluation

- Proposals are evaluated on three dimensions:
 1. The degree to which results would enhance theories and/ or methodological approaches in the SBE sciences
 2. The strength of the proposed Fellow-Sponsoring Scientist team and host institution
 3. The promise of the proposed Fellow's investigation of driving research questions and future career development



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Merit Review Panel

- All proposals are reviewed in a multidisciplinary merit review panel (in-person and ad hoc reviews)
 - Your proposal should speak to a broad audience
- Each proposal receives three independent ratings
 - Excellent, Very Good, Good, Fair, Poor
- Proposals are discussed and ranked in panel
 - Highly Competitive, Competitive, Not Competitive



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Characteristics of a Weak Proposal

- Literature review is not comprehensive
 - Does not include relevant research
 - Does not acknowledge research that does not support hypotheses
- Missing the basics, too many assumptions
 - No power analysis
- Subsequent aims are contingent upon the prior aims
 - What is the plan B?
- Too narrow of a focus
 - Why is this important?



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Characteristics of a Strong Proposal

- Very strong intellectual merit
 - PI has made a clear case for the importance of this research
 - PI has the skills (or a plan to receive the training) to conduct the proposed research
 - The research aims logically build upon one another and are specific
- Attentive to broader impacts
 - More than dissemination
 - Creative and supported through partnerships
- No ambiguous plans – reviewers know clearly what the PI intends
- Sponsor demonstrates investment in the PI's career development



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Resubmissions

- Get back on the horse and resubmit!
- Must continue to meet eligibility criteria
- Thoughtfully consider the reviews received
 - How are you going to address the weaknesses?
 - Do you need to re-vamp your proposal or make minor tweaks?
 - Meet with your sponsoring scientist to discuss the feedback
- Discuss options for directly addressing reviews with the Program Officer



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Questions

