Welcome!!

Introduction to Writing NSF Grants
Minnesota Population Center Workshop
February 5, 2021

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Department of Family Social Science
AGENDA
1. What is NSF?
2. What is the Social, Behavioral, & Economics (SBE) Directorate?
3. If you are interested in submitting a proposal to SBE, what should you do?

AGENDA . . . CONTINUED
4. What goes in the proposal?
5. What are Broader Impacts?
6. What are the characteristics of good proposals?
7. What happens after you submit your proposal? How does it get reviewed? What is the Merit Review Process?
What is the National Science Foundation?

Independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..."

• Annual Budget $8.3 billion
SBE IS 1 OF THE 7 NSF DIRECTORATES

- Biological Sciences (BIO)
- Computer and Information Science and Engineering (CISE)
- Education and Human Resources (EHR)
- Engineering (ENG)
- Geosciences (GEO)
- Mathematical and Physical Sciences (MPS)
- Social, Behavioral and Economic Sciences (SBE)

Directorates

Divisions

Programs
THE VALUE OF SOCIAL, BEHAVIORAL AND ECONOMIC SCIENCES
SBE SUPPORTS BASIC RESEARCH TO UNDERSTAND PEOPLE AND SOCIETY

- Human behavior
- Social organizations
- Social, economic, political, cultural, & environmental forces
- Patterns of stability & change
- Individual, group, organizational
- Birth to old age

A Few Programs in the Division of Social & Economic Sciences (SES)

<table>
<thead>
<tr>
<th>Decision, Risk and Management Sciences</th>
<th>Science of Organizations</th>
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<tbody>
<tr>
<td>Economics</td>
<td>Science, Technology, and Society</td>
</tr>
<tr>
<td>Law &amp; Science</td>
<td>Security and Preparedness</td>
</tr>
<tr>
<td>Methodology, Measurement, &amp; Statistics</td>
<td>Sociology</td>
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A Few Programs in the Division of Behavioral & Cognitive Sciences (BCS)

<table>
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<tr>
<th>Archaeology and Archaeometry</th>
<th>Developmental Sciences</th>
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<tbody>
<tr>
<td>Dynamics of Integrated Socio-Environmental Systems</td>
<td>Linguistics</td>
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<tr>
<td>Biological Anthropology</td>
<td>Perception, Action, &amp; Cognition</td>
</tr>
<tr>
<td>Cognitive Neuroscience</td>
<td>Science of Learning and Augmented Intelligence</td>
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<tr>
<td>Cultural Anthropology</td>
<td>Social Psychology</td>
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Faculty Early Career Development Program

Career Awards are NSF-Wide
FACULTY EARLY CAREER DEVELOPMENT PROGRAM (CAREER)

• Untenured tenure-track (or equivalent) faculty
• Integration of research and education
• Single investigator proposal – no Co-PIs
• Minimum $400,000 (that includes indirects), 5 years
• Max three submissions (one per year)

CAREER AWARDS: PROJECT DESCRIPTION

• Description of research project
  • Preliminary supporting data
  • Specific objectives
  • Methods, procedures
  • Expected significance of results

• Description of educational activities; plans to evaluate their impact
• Description of how research & educational activities are to be integrated
• Results of prior NSF support
CAREER - Education Component

- Examples:
  1) Design innovative courses or curricula
  2) Support teacher preparation and enhancement
  3) Conduct outreach & mentoring activities to enhance scientific literacy or involve students from underrepresented groups
  4) Incorporate research activities into undergraduate courses
  5) Link education activities to industrial, international, or cross-disciplinary work

Compelling argument that the project will achieve effective integration between research and education activities.

Synergy!!!!!!
DEPARTMENTAL LETTER

A good *Departmental Letter* will include or demonstrate

- Commitment to the PI’s proposed CAREER research and education activities
- Description of how the PI’s career goals and responsibilities mesh with that of the organization and department

BUDGET: CHECK WITH PROGRAM DIRECTOR

- Programs may prefer to make awards with budget close to the anticipated *minimum* size
  
  *Most Programs: $400,000*
  
  *minimum (direct AND indirect).*
  
  *BIO minimum is different.*
LETTERS OF COLLABORATION

Letter should consist of a single-sentence statement of collaboration:

“If the proposal submitted by Dr. [name of the PI] titled [proposal title] is selected for funding by the NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description.”

Must **NOT** recommend or endorse PI or project

MERIT REVIEW

Evaluation can be done by either:

- **Ad Hoc reviewers only**

- **Panel Review only** (panelists write reviews before the panel meeting)

- **Combination of both Ad Hoc and Panel Review**
COMMENTS YOU DO NOT WANT TO SEE IN YOUR REVIEW:

→ This is a solid but not particularly original study that stomps on old ground *(incremental)*
→ Results of study will have **limited impact** in the field
→ The PI has not been very productive either during or since his/her Ph.D.
→ This proposal is **naive/overly ambitious**

MOST COMMON MISTAKES

Education:

Education component is generic and what is expected of any PI in your field

Unrealistic education activity — “this work will impact K-12 education in the state of X”

Reinventing the wheel — another blog, another website
CAREER PROPOSAL DUE DATE

Agency-wide (regardless of directorate, division, or program) → DUE at SAME time.

SBE Postdoctoral Research Fellowships (SPRF)

SBE → Social Behavioral & Economics Directorate
SPRF PROGRAM

- **Individual Award** - Awards made directly to candidate
- **Host Institution** - Candidates identify a sponsoring scientist and a host institution

### Track 1: Fundamental Research
- Builds fundamental knowledge

### Track 2: Broadening Participation
- Increase diversity of researchers

*Do not have to be a member of underrepresented group*
SELECTING A SPONSOR & HOST INSTITUTION

• Identify characteristics important to you in a mentor
• Contact your potential mentor

SBE SPRF TIMELINE

This year the due date is November 1, 2021. BUT → Check website! Always check website for due dates.

October / November
Proposals Due

December / January
Panel Meeting

February - May
Proposal Decisions
Sent

April - May
PD Requests Required
Information

May - August
Official Awards
PROGRAM DIRECTOR FOR SBE POSTDOCTORAL RESEARCH FELLOWSHIPS (SPRF)

Dr. Josie S. Welkom
jwelkom@nsf.gov

If you are interested in submitting a proposal, what should you do?
BROADER IMPACTS
NSF MERIT REVIEW PROCESS: WHAT IS IT?

WHAT IF YOUR PROPOSAL IS FUNDED?