NSF Funding in Anthropology & Related Sciences

Deborah Winslow
Cultural Anthropology Program
dwinslow@nsf.gov
Plan of this talk

I. Overview of NSF

II. Overview of funding sources

III. Proposal writing
Part I. Overview of NSF

Arlington, Virginia
Creating NSF: 1946 - 1950

- 4 years of contentious debate
- Major issues: Who owns patents? Applied or basic research? Allocations by state or merit? Social science?
- “…Mathematical, physical, medical, biological, engineering, & other sciences…”
- 1950: passed by Congress and signed by President Truman.
It didn’t take long for social science to appear at NSF.

- 1951: $225,000 NSF’s original budget
- 1952: First 28 research awards were made
- 1957: Social Science Research Program established in 4 fields:
  - Economics
  - Anthropology
  - Sociology
  - History & philosophy of science
Today, NSF (nsf.gov)....

- Annual budget of $7.5 billion
- Competitive merit review of ~ 50,000 proposals/year (funds ~11,500)
- Welcomes proposals from all qualified scientists and engineers
- Encourages women, members of minority groups, and persons with disabilities to compete fully in all NSF programs
- Supports graduate students through fellowships, dissertation improvement grants, and funding through faculty research grants.
National Science Board

Office of the Director
- Office of Diversity & Inclusion (ODI)
- Office of General Counsel (OGC)
- Office of International Science & Engineering (OISE)
- Office of Integrative Activities (OIA)
- Office of Legislative & Public Affairs (OLPA)
- Office of Diversity & Inclusion

Directorates
- Biological Sciences (BIO)
- Computer & Information Science & Engineering (CISE)
- Education & Human Resources (EHR)
- Engineering (ENG)
- Geosciences (GEO)
- Mathematical & Physical Sciences (MPS)
- **Social, Behavioral & Economic Sciences (SBE)**
“Our” directorate: SBE

Dr. Fay Lomax Cook, Assistant Director
Dr. Kellina Craig-Henderson, Deputy Assistant Director

Division of Behavioral and Cognitive Sciences (BCS)
Division of Social and Economic Sciences (SES)
SBE Office of Multidisciplinary Activities (Virtual)
National Center for Science & Engineering Statistics
Part II. Funding Sources

1. HOW money is spent ("mechanisms")

1. WHO has the money ("programs," "opportunities")
Different ways programs can spend money: “mechanisms”

- DDRIGs
- Regular/senior research grants
- Training programs (including Scholars)
- Workshops
- Research Coordination Networks (RCNs)
- Research experience supplements (REG, REU, RET)
- Fellowships
- High risk awards (EAGER, RAPID)
- CAREER awards
RAPIDs: Rapid Response Research

New Orleans, 2005

- Urgent awards to collect ephemeral data (or time-sensitive opportunity)
- Fast turnaround, in-house review
- 3-5 page proposal
- Program permission
- In CA: $15,000-$40,000 is typical (NSF: up to $200,000)
EAGER: Early Concept Grants for Exploratory Research

Jeff Snodgrass: A Biocultural Study of the Functional Genomics of Intensive Internet Use

- Innovative: high risk/high return
- Fast turnaround, in-house review
- 5-8 page proposal
- Program permission
- In CA: $15,000-$40,000 is typical (NSF: up to $300,000)
CAREER awards

- 5 year awards, $400,000 floor (in SBE)
- Career development of outstanding new teacher/scholars.
- Untenured Asst. Prof. (or equivalent), with PhD or equiv.
- Untenured at time of application and the following October 1; 3 tries
- Integrated educational component
- Deadline: July 2017 (?)
Proposal & Award Policies & Procedures Guide (PAPP Guide)

Describes mechanisms
Who has the money at NSF?

- Divisions are divided into “programs” each with its own budget & funding priorities
- Also: Directorate-level programs
- Also: Inter-Directorate programs
- Also: Short-term opportunities – Dear Colleague Letters, Special Competitions, Investment Areas
1. SBE Programs: BCS Division

- Archaeology & Archaeometry
- Biological Anthropology
- Cultural Anthropology
- Documenting Endangered Languages
- Geography & Spatial Sciences
- Linguistics
- Perception, Action, & Cognition
- Developmental & Learning Sciences
- Social Psychology
- Cognitive Neurosciences
2. SBE Programs: SES Division

- Decision, Risk, & Management Sciences
- Economics
- Law & Social Sciences
- Methodology, Measurement, & Statistics
- Political Science
- Science of Organizations
- Science, Technology, and Society
- Sociology
- Secure & Trustworthy Cyberspace
3. SBE Programs: Office of Multidisciplinary Activities

- RIDIR (Resource Implementations for Data Intensive Research in the Social Behavioral & Economic Sciences)
- SBE Post-Doctoral Fellowships
- Science of Learning
- Science of Science & Innovation Policy
Must you choose?

- Submit one proposal to multiple programs
- Choose programs on cover page
- Will go to more than one review panel
- Both fund, neither fund, one funds
- Some programs fund higher % of DDRIGs (= better odds?)
- Reviews from multiple perspectives (= better science)
- Check first: Not all programs do co-review.
A few program statistics

<table>
<thead>
<tr>
<th>Selected SBE Programs</th>
<th>Fiscal Year 2015 Budget Allocations</th>
<th>Senior Success Rates (2009-14)</th>
<th>Average Award Size (2009-14)</th>
<th>DDRIG Success Rates (2009-14)</th>
<th>Average Award Size (2009-14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeology &amp; Archaeometry</td>
<td>$7,386,940</td>
<td>28%</td>
<td>$147,291</td>
<td>37% (147/412)</td>
<td>$21,423</td>
</tr>
<tr>
<td>Biological Anthropology</td>
<td>$4,377,709</td>
<td>27%</td>
<td>$274,534</td>
<td>18% (49/275)</td>
<td>$20,291</td>
</tr>
<tr>
<td>Cultural Anthropology</td>
<td>$3,953,395</td>
<td>12%</td>
<td>$151,965</td>
<td>16% (143/901)</td>
<td>$17,959</td>
</tr>
<tr>
<td>Documenting Endangered Languages</td>
<td>$2,282,666</td>
<td>32%</td>
<td>$81,080</td>
<td>83% (19/23)</td>
<td>$11,502</td>
</tr>
<tr>
<td>Geography &amp; Spatial Sciences</td>
<td>$7,483,356</td>
<td>13%</td>
<td>$278,235</td>
<td>20% (114/565)</td>
<td>$13,592</td>
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<tr>
<td>Law &amp; Social Sciences</td>
<td>$5,609,643</td>
<td>19%</td>
<td>$240,000</td>
<td>30%</td>
<td></td>
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<tr>
<td>Linguistics</td>
<td>$6,338,149</td>
<td>29%</td>
<td>$283,953</td>
<td>42% (72/172)</td>
<td>$12,369</td>
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</tbody>
</table>
Outside SBE: lots of other anthropology-relevant programs!

- Arctic Social Sciences
- Infrastructure Mgmt. & Extreme Events (IMEE)
- Ecology & Evolution of Infectious Diseases (EEID)
- Dynamics of Coupled Natural & Human Systems (CNH)
- Innovations at the Nexus of Food, Energy, & Water Systems (INFEWS)
Ecology & Evolution of Infectious Diseases (EEID)

Fellowships
(U.S. citizens or permanent resident aliens)

- **GRFP**: Early stages of graduate study. 3 years of support ($32,000/yr. plus $12,000 to institution).

- **East Asia & Pacific Summer Institutes (EAPSI)**: grad student research experience in Australia, New Zealand, China, Japan, Korea, Singapore, or Taiwan. $5000, travel, & living expenses for 8 weeks.

- **SBE Post Doctoral Research Fellowships (SPRF)**: Within 3 years of degree.
III. Proposals
Basics I

- PIs register in FastLane (SR/PO)
- Access on-line proposal submission modules
- Multiple parts:
  - Cover page
  - Project summary
  - Project description
  - References cited
  - Biographical sketch
  - Budget & budget justification
  - Current & Pending support
  - Facilities & other resources
  - Supplementary documents: Data Management Plan, Advisor letter template, Collaborators/affiliations.

- You give research office access.
- Research office adds indirect costs & submits.
Basics II

- NSF reviews proposal (4-6 months)
  - Compliance check
  - In-house reviews (sometimes)
  - Ad hoc reviews (usually)
  - Advisory panels (usually)
  - Program officer recommendation
  - Division Director recommendation
  - Division of Grants & Agreements checks.
  - Award letter is issued.
  - Money goes to institution.
  - You contact SR/PO about accessing funds.
DDRIG Requirements

- Every program that funds dissertation research has a “solicitation.”
  - Specific requirements.
  - General advice.
- Read the solicitation.
- Also consult: NSF-wide Grant Proposal Guide.
- If they conflict? Go with solicitation.
- Cultural Anthropology: $20,000, 10 pages, two “target dates” a year (8/15, 1/15), 2 tries
Budget

- Budget: ask for what you need to make a success of the research (DDRIG: up to $20,000 in direct costs; seniors: no limits, but typical is $100,000/project year).

- DDRIGs: explain all you need, what you request from NSF, what you will do to make up the rest.
Data Management Plan

- Supplementary document. 2 pages.
- Describe data.
- Protection during research.
- Access by other researchers: when, how?
- Long-term archiving.
- Not an IRB plan but mention how you will protect privacy.
Official NSF review criteria

Intellectual Merit:
- Importance
- Qualifications
- Originality
- Transformative?
- Conception & organization
- Access to resources

Broader Impacts:
- Training
- Mentoring
- Diversity
- Infrastructure
- Dissemination/
  Public awareness
- Societal Benefits
Advice

- Clear, interesting research question.
- Connected to larger science question.
- Clear about needed data: how will you gather it, how will you analyze it, how will this answer the question?
- Operationalize methods.
- Convince reader of feasibility.
- Be prepared to resubmit (16% success rate).
“Larger science question” = ?

- Rebecca Bird: “A co-evolutionary approach to a complex adaptive system”
- Question: do humans always devastate their environments?
- Case: indigenous burning in Australia.
Common problems

- Research question(s) buried.
- Assumes conclusions (not research).
- Lacks data analysis plan.
- Jargon – not ordinary English.
- Unimportant: why should we care?
- You lack skills.
- Methods listed, not operationalized (including archival research).
- Access unclear. (Letters?)
- Disorganized, unclear, not proofread.
Avoid:

1. **Jargon**
   - Vague, trendy words: interrogate, put into conversation with, unpack, attend to, engage with, deconstruct.
   - Use active verbs: analyze, count, listen, observe, collect, explain, test

2. **Hackneyed & excessive citations**
   - Studying up (Nader), method whatever (Bernard), friction (Tsing), etc.
   - Engage references, don’t just list.
Virtues in a proposal

- Starts off with clear research problem.
- Ties project clearly to that problem.
- Not overly focused on that single case.
- Reader can picture researcher in field.
- Has a research design.
- Does not assume conclusions.
- Initial intuitions are put at risk.
- Proposal tacks back to the question with data analysis plan.
<table>
<thead>
<tr>
<th>Award Number</th>
<th>Title</th>
<th>NSF Organization</th>
<th>Start Date</th>
<th>Principal Investigator</th>
<th>Co-Principal Investigator</th>
<th>State</th>
<th>Organization</th>
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<tbody>
<tr>
<td>1504957</td>
<td>An Anthropological Exploration of Totalitarianism</td>
<td>CULTURAL ANTHROPOLOGY</td>
<td>07/01/2014</td>
<td>Ryang, Sonia</td>
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<td>TX</td>
<td>William H. Rice University</td>
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<td>1261682</td>
<td>The medieval Black Death: analysis of the demographic, health, and social consequences of a historic emerging disease</td>
<td>CULTURAL ANTHROPOLOGY , Biological Anthropology , EXP PROG TO STIM COMP RES</td>
<td>06/01/2013</td>
<td>DeWitt, Sharon</td>
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<td>SC</td>
<td>University of South Carolina at Columbia</td>
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<td>1157368</td>
<td>Managed Migration and the Value of Labor</td>
<td>CULTURAL ANTHROPOLOGY</td>
<td>06/01/2012</td>
<td>Griffith, David</td>
<td>Preibisch, Jenny; Juarez, Elizabeth; Contreras, Jose</td>
<td>NC</td>
<td>East Carolina University</td>
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<tr>
<td>1159813</td>
<td>CAREER: Social Closeness, Helping, and Neglect: Examining the Roots of Fear in Rural Bangladesh</td>
<td>CULTURAL ANTHROPOLOGY , SOCIAL PSYCHOLOGY , CULTURAL ANTHROPOLOGY , DECISION RISK &amp; MANAGEMENT SCI</td>
<td>05/01/2012</td>
<td>Hruschka, Daniel</td>
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<td>AZ</td>
<td>Arizona State University</td>
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<td>1625355</td>
<td>Workshop: Enhancing robust and generalizable experimental behavioral science</td>
<td>DEVELOPING LEARNING SCIENCES/ENG , LINGUISTICS , PERCEPTION , ACTION &amp; COGNITION , SOCIAL PSYCHOLOGY , Cognit</td>
<td>02/15/2016</td>
<td>Hruschka, Daniel</td>
<td>Medlin, Douglas</td>
<td>AZ</td>
<td>Arizona State University</td>
</tr>
</tbody>
</table>
Need help?
Contact Program Officers

Web sites have:
E-mail addresses & phone numbers.
Encourage students
to make direct contact.
Don’t hesitate to ask for help.