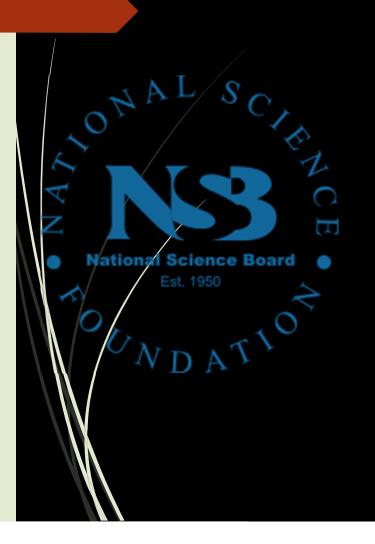


# Opportunities for Anthropologists at NSF

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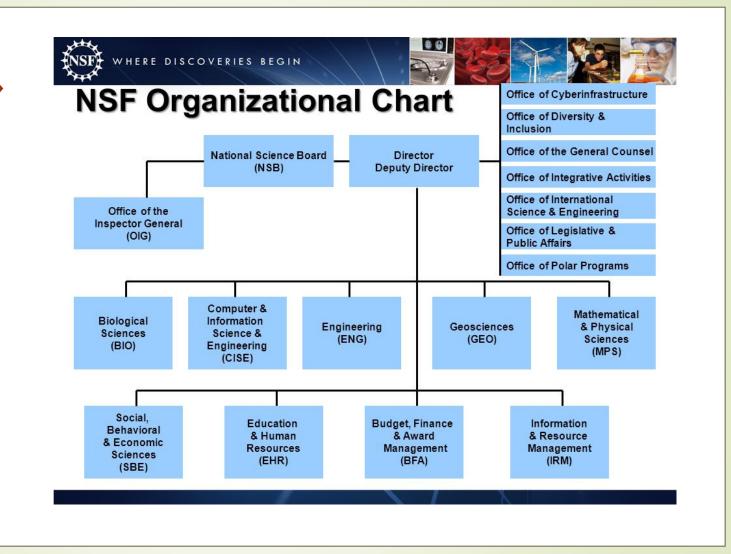
Program Director, Cultural Anthropology (SBE/BCS)

NSF Human Subjects Research Officer



### I. NSF's History and Mission

- 4 years of contentious debate between 1946-1950 up until 1950 NSF Act. Major issues of the day involved researcher accountability, whether to focus on basic or applied or by merit, whether allocations should be on merit or by allocations to individual states, who would own the patents, etc.
- NSF (NSF Act of 1950): "to promote the progress of science; [and] advance the national health, prosperity, and welfare by supporting research and education in all fields of science an engineering."
- "... mathematical, physical, medical, biological, engineering, & other sciences ..."
- 1957: Social Science Research Program established in 4 fields:
  - Economics
  - Anthropology
  - Sociology
  - History & philosophy of science
- 1978: Cultural Anthropology focus (and associate program officer position) created
- 1986: separate Cultural Anthropology, Archaeology & Physical (later Biological) Anthropology programs established
- 1992: separate SBE directorate established (previously in BIO)



# Directorates Are Divided into Divisions, and Divisions Are Divided into Programs

Social, Behavioral & Economic Sciences (SBE)

## Behavioral & Cognitive Sciences (BCS)

- Archaeology & Archaeometry
- Biological Anthropology
- Cultural Anthropology
- Developmental Science
- Human Networks and Data Science
- Linguistics (includes Dynamics Language Infrastructure)
- Geography & Spatial Sciences
- Perception, Action & Cognition
- Science of Learning & Augmented Intelligence
- Social Psychology

## Social & Economic Sciences (SES)

- Decision, Risk & Management Sciences
- Economics
- · Law & Science
- Methodology, Measurement & Statistics
- Security & Preparedness
- Accountable Institutions & Behavior
- Science of Organizations
- Science & Technology Studies
- Ethical & Responsible Research
- Sociology

#### National Center for Science and Engineering Statistics (NCSES)

Activities (SMA)

**SBE Multidisciplinary** 

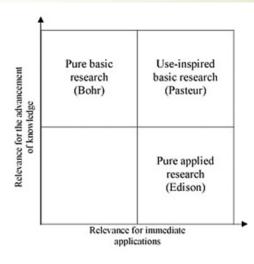
- Science of Science: Discovery, Communication & Impact
- Postdoctoral Research Fellowships
- Research Experience for Undergraduates Sites (REU Sites)

Other anthropologyrelevant programs!

- Human Networks and Data Science (HNDS)
- Science of Science: Discovery, Communication & Impact
- Arctic Social Sciences Program (ASSP)
- Humans, Disasters & the Built Environment (HBDE) (formerly, "Infrastructure Management & Extreme Events")
- Ecology & Evolution of Infectious Diseases (EEID)
- Dynamics of Integrated Socio-Environmental Systems (DISES) [formerly Dynamics of Coupled Natural & Human Systems (CNH)]
- Coastlines and People (CoPe)
- Disrupting Illicit Supply Networks (D-ISN)

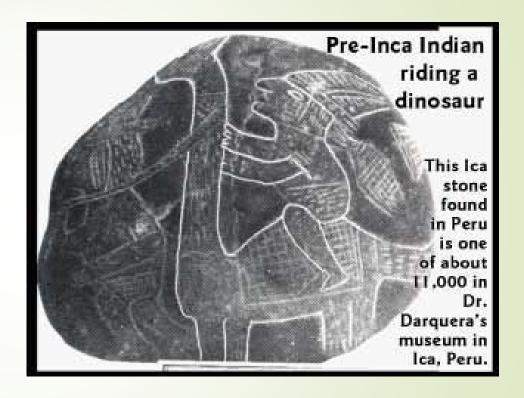
## II. Am I doing "basic science"?

- Broader theoretical framework / "generalizability"
- Empirically vs. philosophicallydriven questions
- Do you already know the answers to the questions you have posed?
- Are you gathering data and analyzing it in a systematic way?



# Some Common Myths

- NSF is only interested in quantitative approaches
- Qualitative and quantitative approaches are mutually exclusive
- NSF proposal must have hypotheses



III. What do good and bad proposals look like?

- The NSF merit review criteria (as a guide for any proposal):
  - Does the research have the potential to advance knowledge beyond what other researchers have already established as true? (Intellectual Merit) Why should scientificallyminded experts more broadly in a field care about the outcomes?
  - Do the conclusions mean anything in the real world? (Broader Impacts) What is the benefits of the research to society? Why should taxpayer funds be expended on this endeavor?

# Proposal's Elements

- Statement of the research problem; research questions or hypotheses that can be tested/falsified (i.e. the propositions you are making are put at risk)
- Research Significance:
  - Contributions to the field; explanation of intellectual merit
  - Generalizability: contribution to advancing theory beyond the site and context of the project.
  - Broader Impacts of the project
- Research Design
  - Methods of data collection
  - Plans for data analysis
  - Research Schedule
- Additional separate documents: e.g. Data Management Plan, Postdoctoral Mentoring Plan, "Single-Copy Documents" (Mandatory: "Collaborators and Other Affiliations"; Optional: "List of Suggested reviewers")

# Making a Case for Intellectual Merit

- Think prospectively about contribution to theory and what you hope to advance; not retrospectively about what tradition you want to preserve (e.g. call it "Intellectual Merit" or "Research Significance" rather than "Literature Review").
- Introduce alternatives to theoretical claims and explain how the data will test them. (Alternative hypotheses if you are using a hypo-deductive approach.)
- A "gap" is not a rationale for a contribution (some gaps exist for a reason). Analogously, a correlation is not the same thing as causation.
- Focus on the research, not the scholarly products in discussing the objectives. Do not confuse narrative/literary strategies for research aims. For example, saying "x" has been neglected in favor of "y" (e.g. studies of the "good life" for "dark anthropology"; or "more than human" for human-centric work) is not a rationale for research. In fact, these tend to close off lines of inquiry, and actually contribute the field being less inductive; at very least the inductive methods preferred by many ethnographers are ill-suited to substantiate those claims.

# Bad Habits to Avoid

- Project framed as a confirmation of assumptions (e.g. "research will show that") rather than as test of hypotheses or open-ended exploration of research questions.
- Poor discussion of the intellectual merit and review of the literature
- Empty methodological categories (e.g. "thick description", "deep hanging out", "participant observation", "human/non-human interaction"; "grounded theory") in place of an explicit description of what the researcher intends to do.
- Jargon (ban from your vocabulary where possible: "interrogate", "put x into conversation with y", "speaks to", "follow the anthropological turn to", "unpack", "complicate", "scalar", "deconstruct", "emergent", "rhizomatic", "imaginaries", "interface", etc.)
- Hackneyed phrases/shorthand that mean absolutely nothing / some examples:
  - "Studying up" (Nader)
  - "I have a method" (Bernard, without a clear reference, e.g. page numbers)
  - "Multi-sited research" (Marcus)
  - Neoliberalism (Harvey, sometimes others)
  - Governmentality, biopolitics (Foucault)
  - Friction (Tsing)
  - Resistance (Scott)
  - Assemblage (Ong and Collier)
  - STS/ANT/"Networks" (Latour)

### Some Good Habits

- Be curious rather than convicted. The genre of a proposal is different from a research article: think prospectively about what you hope to find; not retrospectively about what's influencing what you want to write about. You shouldn't have all the answers yet if you're still proposing to conduct research.
- Read/Discuss work outside your geographic area in order to make a case for generalizability.
- Be explicit. Use methods that describe what you do, not how you think about what you do. And don't confuse a conceptual apparatus (i.e. a way of thinking about a problem; a literary strategy) for a method (what you will be doing in terms of the collection and analysis of data).
- Use methods that are appropriate, even innovative to getting at research questions; e.g.
  - How does one study "embodiment"? Would methods from psychological and linguistic anthropology (e.g. does Hollan, Levy, person-centered interviewing help)?
  - And "networks"; would SNA (social network analysis) help?
- Use the active voice; eschew the passive voice. Be explicit and detailed.
- Make sure the methods and analysis will be able to answer the research questions. The plans for data analysis should be able to answer the research questions.
- Use data analytic strategies that enhance reliability and validity: e.g. having field assistants also code data and establish a measure of code reliability (in basic text analysis, there is a simple tool to measure interrater reliability called a Kappa test).

# Making a Case for Broader Impacts

- "Broader Impacts" became a specific review criterion in 1997 but had been considered as an important element of advancing science for decades earlier. It's always been about asking
- What sorts of activities are producing tangible and specific societal outcomes?
- Should focus not just on "communication" but on engagement.
- Every DDRIG proposal has the automatic broader impact of contributing to STEM education.
- Other compelling broader impacts:
  - Engaging a wider audience: creating strategies for improving the public's understanding of anthropological science and the scientific method (e.g. K-12 engagement or a museum exhibit; articles in non-scholarly publications).
  - Forging pathways for the dissemination of research findings and data in a way that improves society (e.g. sharing of findings and data with organizations that could improve the delivery of health care, or public aid, etc.).
  - Broadening the participation of groups that are historically underrepresented in STEM. (This also could be through engagement with underrepresented scholars, communities, institutions such as HBCUs, HSIs, and tribal colleges, etc.)

### Data Management Plan

- Supplementary document; 2 page limit. It is not an IRB plan. And it
  is not a description of your data analysis plan. It's a document
  describing how you will manage the data.
- AAA web portal (funded by NSF) with dedicated guidance (broken down by subfield): <a href="https://www.americananthro.org/">https://www.americananthro.org/</a>
   →Learn and Teach → Methods & Ethics
- Types of Data: describe data (fieldnotes, interviews, photos) and metadata.
- Security of Data: What protection during research; participant confidentiality; Code of Ethics; etc.
- Archiving and Sharing:
  - When and how share data with others? Need an embargo period?
  - Find a long-term archiving and storage facility (e.g. QDR at Syracuse; ICPSR at Michigan; Dataverse at Harvard)
  - Plan to register site of data with AAA Data Wiki Registry: https://anthroregistry.fandom.com/wiki/Registry\_of\_Anthropological\_Data\_Wiki
- FAQ: Certificates of Confidentiality? Guidance coming in 2021.

# IV. Types of proposals (mechanisms)

#### Faculty Opportunities

- Regular/senior research grants
- CAREER (Early CAREER Development) awards
- Mid-Career Advancement awards
- High risk awards (EAGER, RAPID)
- Training programs (including Scholars)
- Workshops
- Research Coordination Networks (RCNs)

#### Interest Areas

- DCLs (Dear Colleague Letters)
- NSF 10 Big Ideas

#### Student Opportunities (\*direct submission by student)

- Doctoral Dissertation Research Improvement grants (DDRIG)\*
- Graduate Research Fellowship Program (GRFP)\*
- SBE Postdoctoral Research Fellowships (SPRF)\*
- REU Sites
- INTERN
- Research Experience for Undergraduate/Graduate (REU/REG)

Cultural
Anthropology
Faculty/"Senior"
Regular Grants

- Up to 3 years of support
- Seldom more than \$110,000 per year (inclusive of indirect costs)
- Aim to support 15-20% of submission
- Contribution to anthropological science; theorytesting, empirically-driven work

## CAREER (Faculty Early Career Development Program)

- 5 year awards, \$400,000 floor (in SBE)
- Career development of outstanding new teacher/scholars
- Untenured Assistant Professor (or equivalent), with PhD or equivalent
- Untenured at time of the submission deadline; 3 attempts
- Integrated educational component
- Deadline: usually Fourth Monday in July
- https://www.nsf.gov/pubs/2020/nsf20525/nsf20525. htm

## Mid-Career Advancement Awards (MCA)

- 5 year awards, \$400,000 floor (in SBE)
- Career development of mid-career scientists through the development of new skills and partnerships.
- Partnerships and training outside the primary subdiscipline or discipline are encouraged.
- Associate Professor for at least three years by the proposal submission date.
- Three sections: (a) past research; (b) proposed research advancement and training plan; and (c) long-term career plans.
- Proposal and the Departmental Letter must provide a compelling argument about how the MCA would help to advance research program and academic career in a way not likely without such support.
- Deadline: February 1, 2021 (first Monday in February thereafter)
- NSF 21-516: https://www.nsf.gov/pubs/2021/nsf21516/nsf21516.htm

## 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)

### RAPIDs: Rapid Response Research

Kate Browne, 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)

# Dear Colleague Letters