NSF Funding Opportunities

Kelly Joyce, Ph.D.
Program Director
Science, Technology and Society Program

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Program Director
Law and Social Sciences Program
NSF in a Nutshell

- Independent Agency
- Supports basic research
- Uses grant mechanism
- Low overhead; highly automated
- Discipline-based structure
- Cross-disciplinary mechanisms
- Use of Rotators/IPAs
- Accountable to Taxpayers
- National Science Board
National Science Foundation

Inspector General

National Science Board

Director
Deputy Director

Staff Offices

Biological Sciences

Computer, Information Science & Engineering

Engineering

Geosciences

Mathematical & Physical Sciences

Social, Behavioral & Economic Sciences

Education & Human Resources

Budget, Finance & Award Management

Information Resource Management
SES, one of three divisions that constitute SBE
Each NSF Program has its own webpage
Sociology Program

Patricia White, Program Officer (Permanent)
Regina Werum, Program Officer (Rotator)

• Regular Research
  Full Proposal Target Date: January 15 and August 15, Annually

• Dissertation Research
  February 15 and October 15, annually
Science, Technology, and Society Program

Fred Kronz, Program Director (permanent)
Kelly Joyce, Program Director (rotator)
Mike Gorman, Program Director (rotator)

Deadlines for all proposals:
February 1 and August 1, annually

STS Policy: These dates are deadlines. Extensions are unusual and only given in extraordinary circumstances.
Law & Social Sciences Program

- Target Dates: January 15th & August 15th
- Supports qualitative and quantitative work across a range of disciplines
  - Examples include: anthropology, economics, history, political science, sociology
- Funds regular, dissertation improvement, workshop, CAREER, RAPID, EAGER, & RCN.
Political Science Program

• Target Dates: January 15\textsuperscript{th} & August 15\textsuperscript{th}
• Supports qualitative and quantitative work across multiple subfields, including
  – American politics, international relations, comparative politics, political behavior, political economy, political institutions
• Funds regular, dissertation improvement, workshop, CAREER, RAPID, & EAGER proposals.
Popular Modes of Support in the SES Programs

There are many modes of support, including:

- Dissertation Research Improvement Grants
- Faculty Early Career Development Awards
- Standard Research Grants
  - Regular
  - Collaborative
- Workshop Awards
- Research Experience for Undergraduates
- RAPID
- EAGER
- Research Collaborative Networks

Division of Social and Economic Sciences
STS projects examine questions that arise in the interactions of science (broadly construed to include engineering and technology) and society. It has four component areas:

- Ethics and Values in Science (EVS)
- History and Philosophy of Science (HPS)
- Social Studies of Science (SSS)
- Studies of Policy in Science (SPS)

The components overlap, but are distinguished by the different scientific and scholarly orientations they take to the subject and by different focuses within each subject.

NSF 08-553 (Program Solicitation)
Science, Technology and Society Program

STS has eight modes of support

- Dissertation Research Improvement Grants
- Post-doctoral Fellowships
- Professional Development Fellowships
- Scholars Awards
- Standard Research Grants (Collaborative)
- Small Grants for Training and Research
- Conference and Workshop Awards
- Other Grant Opportunities Associated with STS—e.g., societal nanocenters

The first seven are characterized more fully in the one-page handout.
CAREER: Faculty Early Career Development Program

- Recognizes and supports the early career-development activities of those educator-scholars who are most likely to become the academic leaders of the 21st century.

- Awardees are selected on the basis of creative career-development plans that effectively integrate research and education in the context of the mission of their institution.

NSF 08-557 (Program Solicitation)
CAREER: Faculty Early Career Development Program

• Untenured faculty (or comparable) in a tenure track line
• Single scholar award
• $400,000, 5-years minimum award
• Three proposals lifetime limit
• Check CAREER website for deadline information
• “Walk on Water” expectation
The EESE program spans across all seven directorates.

Proposals focus on improving ethics education in all science and engineering fields supported by the Foundation.

FY11 focuses on improving ethics education for graduate students and on ethical issues in research particularly in interdisciplinary, inter-institutional, or international contexts.

EESE invites proposals for research projects, education projects, and combinations of the two.
EESE (continued)

• Maximum award usually $300,000 for 1-3 years
• Proposals are due in early March (see current solicitation for exact date)
• Two ways social scientists, historians and philosophers of science might be involved in EESE proposals:
  ➢ As PIs on an interdisciplinary team: experts who provide context, content, and analysis of ethics education
  ➢ For ethics education projects in your own graduate programs (all NSF funded areas eligible)

EESE Contact: Kelly Joyce <kjoyce@nsf.gov>
Ethics in Science and Engineering Online Resource

- Case studies, best practices, and ethics research for all the fields supported by NSF
- One $5 million, 5 year Award (#1045412)
- PI Team University of Illinois, Urbana-Champaign
- Content to be posted by January 2011
Science of Science and Innovation Policy (SciSIP)

The primary goals of SciSIP are to:

• Promote the development of usable knowledge and theories for establishing SciSIP as a new science

• Improve and expand science metrics, datasets and analytical tools

• Coordinate efforts among federal agencies to develop a roadmap for the long-term development of science

• Broaden participation in the STEM workforce

NSF 08-586 (Program Solicitation)

Directorate for Social, Behavioral, and Economic Sciences
Where to Start?

- Look at the Program Solicitation:
  http://www.nsf.gov/

- NSF Award Search:
  www.nsf.gov/awardsearch/

- NSF Grant Proposal Guide:
Putting the Proposal Together

- Find the program that best matches your project
- Write clearly (for an educated, general audience)
- Attend directly to NSF review criteria
- Research questions and methods clearly described
- Be creative and thoughtful
Two Funding Criteria

- Intellectual merit
- Broader impacts
• How important is the proposed activity to advancing knowledge and understanding in its own field or across different fields?
• How well qualified is the proposer (individual or team) to conduct the project?
• To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts?
• How well conceived and organized is the proposed activity?
• Is there sufficient access to resources?
Broader Impacts

• Promotes teaching, training and learning

• Broadens the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)

• Enhances the infrastructure for research and education, such as facilities, instrumentation, networks, partnerships

• Disseminates results broadly to enhance scientific and technological understanding

• Benefits society
Budget Tips

• Amounts
  – Reasonable for work - Realistic
  – Well Justified - Need established
  – In-line with program guidelines

• Eligible costs
  – Personnel
  – Equipment
  – Travel
  – Other Direct Costs, Subawards
  – Facilities & Administrative Costs
Budget Justification Document

• In addition to a budget, PIs submit a budget justification document.
• This document should explain what each $$ amount will be used for. For example, which conferences will be attended, what the research assistant will do, what research tasks will done in the summer if summer money is requested, etc.
• Sources for each budget estimate (e.g. airfare, lodging, transportation) should be given.
Data Management Plan

• All proposals must describe plans for data management and sharing of the products of research, or assert the absence of the need for such plans.

• FastLane will not permit submission of a proposal that is missing a Data Management Plan.
Postdoctoral Mentoring Plans

• Each proposal that requests funding to support postdoctoral researchers must include, as a supplementary document, a description of the mentoring activities that will be provided for such individuals.

• If required, FastLane will not permit submission of a proposal that is missing a Postdoctoral Researcher Mentoring Plan.
NSF Sources of Reviewers

- Program Officer’s knowledge
- References listed in the proposal
- Google
- Community of Science and other databases
- Reviewer’s recommendations
- Principal Investigator’s suggestions
When asked, please review!

Unless you feel you are not qualified, or have a COI.

If you cannot review, please suggest someone else.

Please also consider serving on a panel.
Funding Decisions

- Advisory Panel makes recommendations
- Program Officer makes recommendations
- Reviewers’ Comments and Panel Summaries given to PI
- Informal and formal notification
- Scope of work and budget discussions
Myths about NSF

- Only funds scholars at elite graduate institutions
- Only funds “famous” academics
- Once declined, you are likely always to be declined
- Only funds “normal science”
- Advisory committees make funding decisions
Reasons for Declinations

• “Trust-me” proposal
• Not feasible
  – Expertise gaps
  – Insufficient funding
  – Too ambitious
• Incremental contribution
• Bad luck
It is useful to submit, even if declined...

- Revise and resubmit
- Discover other funding sources
- Forces thinking
- Builds STS communities and promotes good scholarship
- Receive reviews from experts
Final Advice

• Learn to love rejection (or at least don’t take it personally)
• Team up
• E-mail or call Program Officer with specific questions
• Encourage dissertation improvement grant proposals
Any Questions?