



**Funding from the Directorate for
Social, Behavioral and Economic Sciences**

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Program in Decision, Risk
and Management Sciences**

**Division of Social and Economic Sciences
Directorate for Social, Behavioral, and Economic
Sciences
National Science Foundation**

Pittsburgh 2016

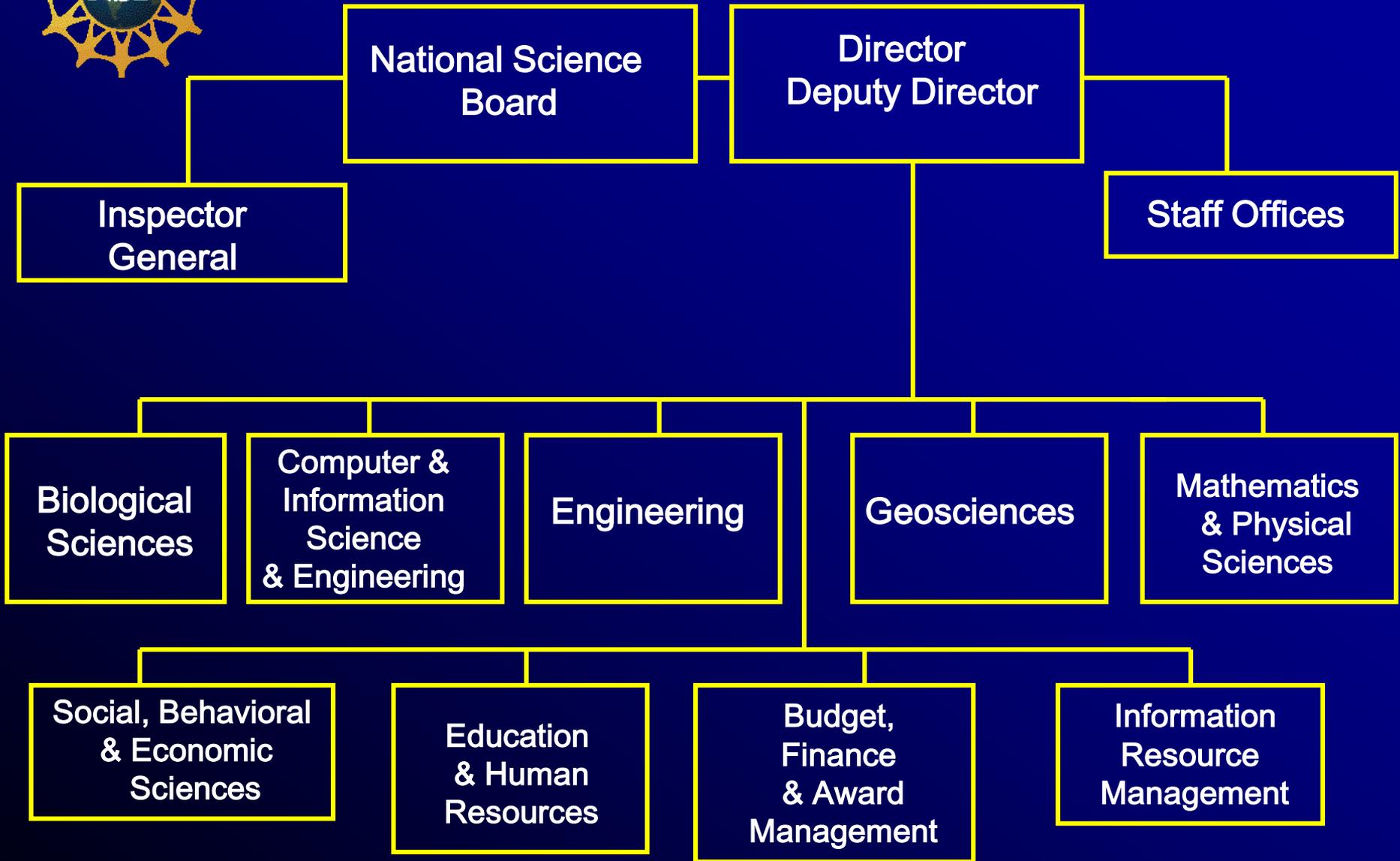


Outline

- Social Science Research Opportunities
- Submission Procedures
- Separating Awards from Declinations



National Science Foundation





Office of the Director

**Directorate for Social,
Behavioral & Economic
Sciences**

**Social and Economic
Sciences**

**Behavioral and Cognitive
Sciences**

Science Resources Statistics



Why Do You Want NSF Funding?

- Funds curiosity-driven research
- Pays full overhead (no match)
- Provides summer salary support
- Uses the grant mechanism



Opportunities

- Unsolicited competitions
- Special solicitations (e.g., CRISP)
- Rapid response research (RAPID)
- Early-concept grants for exploratory research (EAGER)
- CAREER grants
- Dear Colleague Letter
- Doctoral dissertation improvement grants
- Research Coordination Networks



Where to Start?

- www.nsf.gov
- Check awards by program, keyword, etc. (www.nsf.gov/awardsearch/)
- Read solicitation carefully (if not unsolicited competition)
- Download *Grant Proposal Guide*
(http://www.nsf.gov/publications/pub_summary.jsp?ods_key=gpg)

Social and Economic Sciences (SES)

FY 2016 budget: approximately \$100 million

- Decision, Risk, & Management Sciences
- Economics (Big Dog)
- Science of Organizations
- Law and Social Science
- Methodology, Measurement & Statistics
- Political Science
- Science, Technology and Society
- Sociology





SES Target Dates

January 15 & August 15

Law and Social Science

Political Science

Sociology

January 16 & August 16

Methods, Measures, and Statistics

January 18 & August 18

Decision, Risk, & Management Sciences

Economics

February 1 & August 1

Science and Society

February 2 & September 3

Science of Organizations

Behavioral and Cognitive Sciences (BCS)

FY 2016 budget: \$100 million

- Archaeology & Archaeometry
- Cultural Anthropology
- Cognitive Neuroscience
- Developmental & Learning Sciences
- Geography & Regional Science
- Linguistics
- Perception, Action, & Cognition
- Biological Anthropology
- Social Psychology





BCS Target Dates

January 14 & July 14

Cognitive Neuroscience

January 15 & July 15

Developmental & Learning
Sciences

Linguistics

Social Psychology

January 15 & August 15

Cultural Anthropology

Geography & Regional
Science

January 20 & August 20

Biological Anthropology

February 1 & August 1

Perception, Cognition and
Action

July 1 & December 1

Archaeology



Doctoral Dissertation Improvement Awards

- Archaeology
- Cultural Anthropology
- Decision, Risk, & Management Science
- Economics
- Geography & Regional Science
- Law and Social Science
- Linguistics
- Biological Anthropology
- Political Science
- Science and Society
- Sociology





Faculty Early Career Development (CAREER) Program

- Untenured faculty (or comparable)
- Single scholar award
- \$400,000, 5-years minimum award
- Three proposals lifetime limit
- July 1 deadline
- "Walk on Water" expectation



Rapid Response Research (RAPID)

- Research when data are ephemeral
- \$200,000 maximum; 1 year
- 5-page project description
- Internal review only
- Contact program officer first



Early-concept grants for exploratory research (EAGER)

- Exploratory work on untested, potentially transformative ideas
- High-risk, high-potential payoff
- \$300,000 maximum; 2 years
- 8-page descriptive
- Internal review only
- Contact program officer first



Dear Colleague Letter

Example: Stimulating Research Related to the Science of Broadening Participation

- <http://www.nsf.gov/pubs/2014/nsf14038/nsf14038.jsp>
- Submit to relevant SBE program
- Front office to pay half of award

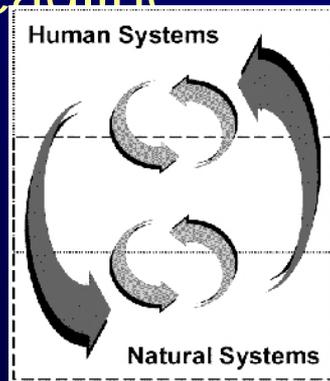
Research Coordination Networks

- http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11691
- Support groups of scholars focused on a theme
- Submit to a program
- Limited to 5-years, \$500,000



Special Program: Dynamics of Coupled Natural and Human Systems (CNH)

- Funds quantitative, interdisciplinary analyses of relevant human and natural system processes and complex interactions at diverse scales
- First permanent inter-directorate program (BIO, GEO, SBE)
- November 15, 2016 deadline





Innovations at the Nexus of Food, Energy, and Water

- New program to replace Water Sustainability and Climate
- FY2017 is the second year
- Probably late winter, 2017 deadline
- <http://www.nsf.gov/pubs/2016/nsf16524/nsf16524.htm>
- Disciplines from three directorates required
- Systems framework required
- NIFA of USDA involved
- Big future

Critical Resilient Interdependent Infrastructure Systems and Processes

- Integration of engineering, computer science, and social science
- Three PIs
- February 8, 2017 deadline; \$22,900,000
- https://www.nsf.gov/pubs/2016/nsf16618/nsf16618.htm?WT.mc_ev=click
- Big Future



NRT

National Science Foundation Research Traineeship Program

- The new IGERT
- http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf15542
- December 9, 2016 letters of intent
- \$3M for 5 years in for interdisciplinary graduate education



NSF's Future?

- FY2017 NSF's Continuing Resolution runs out December 7, 2016
- The eternal conflict: disciplinary v. inter-disciplinary priorities
- Threats to social science and geoscience

Proposal Structure 1

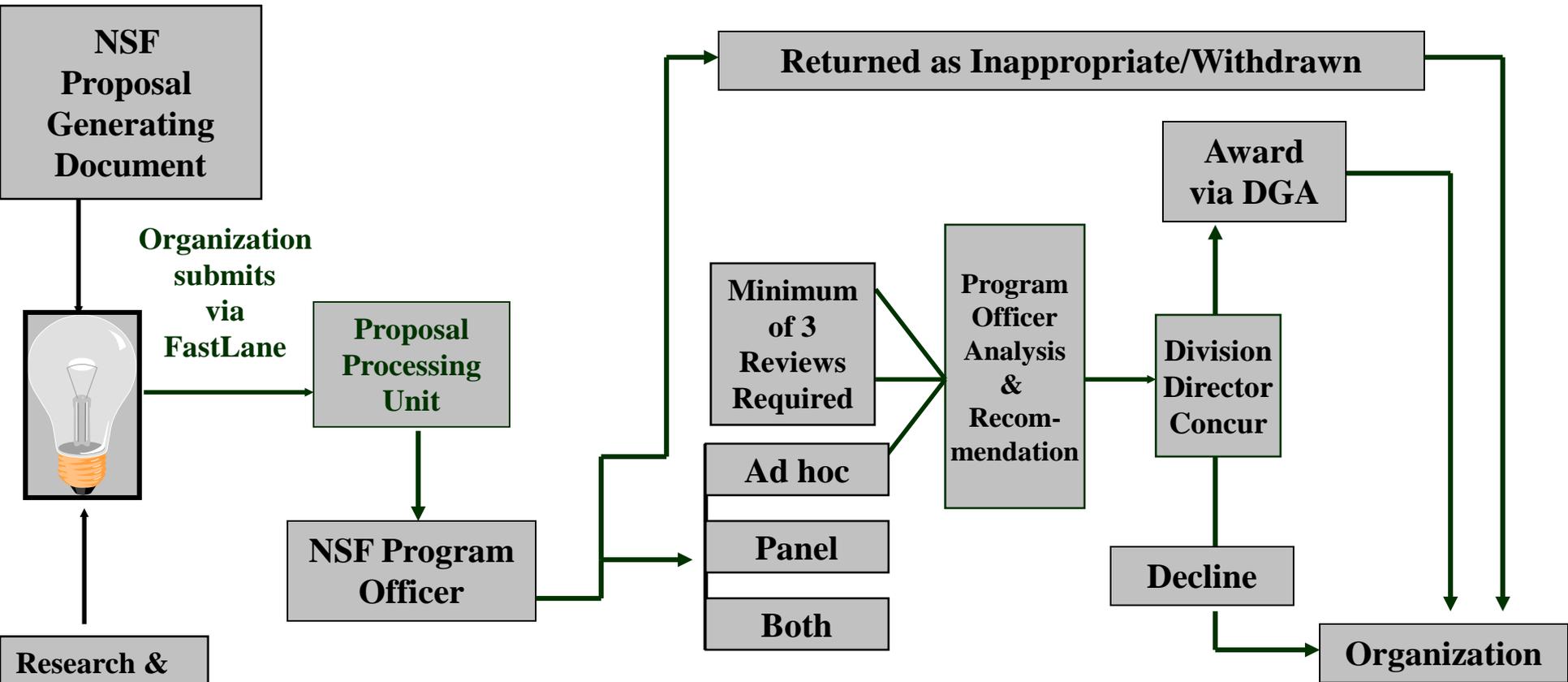
- Summary (1 page; overview, intellectual merit, broader impacts)
- Description (15 pages)
- References (no limit, but....)
- Biographical sketches (2 pages each)
- Budget
- Budget justification (3 pages)
- COI Matrix

Proposal Structure 2

- Current and pending support (twice)
- Data Management Plan
- Post-Doc Mentoring Plan
- Reviewing Suggestions (optional)



Proposal Process



Proposal received by NSF

Div. Dir. Concur

Award

4 months

30 days

DGA Review & Processing of Award

Proposal Preparation Time

Review of Proposal

P.O. Recommend

DGA Review & Processing of Award



NSF **Sources** of Reviewers

- Program Officer's knowledge
- References listed in the proposal
- Google
- Community of Science and other databases
- Reviewer's recommendations
- Investigator's suggestions



Human Subjects

- No award for a project involving human subjects can be made without prior Institutional Review Board (IRB) approval of the research activity.
- IRB approval is not needed at the time of proposal submission.



Funding Decisions

- Program Officer decision
- Feedback to PI
- Informal and formal notification
- Scope of work and budget discussions



Two Funding Criteria

- Intellectual merit
- Broader impacts



Intellectual Merit?

- NSF funds basic research
- NSF funds basic research
- Intellectual merit means increasing knowledge through developing and examining basic theories or methods



Broader Impacts

- Definition changed 2 or so years ago
- New definition is essentially the utility of the new knowledge for society
- Weak intellectual merit implies weak broader impacts as significant new knowledge is unlikely to emerge
- Remnants of old definition remain (education, outreach, infrastructure, diversity) in some places



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



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

How to Put Together an Interdisciplinary Team

- Commit for the long haul
 - Be wary if untenured
 - Expect a long development period
- Find a wise and strong leader
 - Proposals need coherence
 - Leaders need to listen and then decide
- Meet for intellectual as well as task-related purposes



NSF vs. NIH

- NSF tends to be smaller
- NSF is more open to risky, exploratory, paradigm-challenging work
- NSF stresses basic research
- NSF has no scoring system, percentile system
- NSF program officers make funding decisions
- NSF uses "revision encouragement" loosely



Advice

- Learn to love rejection
- Team up
- E-mail or call Program Officer with specific questions
- Encourage dissertation improvement grant proposals (check program first)



Useful to submit even if declined

- Revise and resubmit
- Discover other funding sources
- Forces thinking
- Build relationships
- Receive reviews from experts



QUESTIONS??

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