Disclaimer: This presentation is not meant to be a comprehensive description of ALL of the SBE programs; the intention is to provide examples of some of those programs and invite you to explore NSF for more information.

NSF in a Nutshell

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 ≈ $6.9 billion – funds approximately 20 percent of all federally supported basic research conducted by America’s colleges and universities  
- Most of the funds go to peer reviewed grants to individuals or small groups of investigators -- currently about 10,000 new awards per year, with an average duration of three years  
- NSF also provides funding for research centers, instrumentation, and facilities
SBE in a Nutshell

- Assistant Director: Myron Gutmann
- Deputy Assistant Director: Judith Sunley
- Annual budget of $255 million
- Funds approximately 56% of federally funded basic research in SBE fields in academic institutions
- Most of the funds go to peer-reviewed grants to individuals and small groups – approximately 4800 proposals and 1200 awards in a typical year, including dissertation improvement grants
- Also provides funding to major surveys
- Manages the NSF-wide Science of Learning Centers (SLC) program
- SBE Advisory Committee made up of external researchers
- Programs reviewed every three years by an external Committee of Visitors

SBE Office of the Assistant Director
Myron Gutmann (AD), Judith Sunley (DAD)

Coordinating SBE's participation in NSF-wide and crosscutting activities, including:
- Cyber-enabled Discovery and Innovation (CDI)
- Climate Research Investment (CRI)
- Dynamics of Coupled Natural and Human Systems (CNH)
- Collaborative Research in Computational Neuroscience (CRCNS)
- Human and social dimensions of nanoscale technology
- Cyberinfrastructure programs
- Workforce development activities including: ADVANCE, GK-12, IGERT, SBE connection with AGEP, etc.

Developing activities for FY11 include:
- Science, Engineering and Education for Sustainability (SEES)
- Cyberlearning Transforming Education (CTE)
Information on these programs and initiatives can be found under “Featured Programs” on SBE home page.

Other Funding Opportunities
- Unsolicited competitions – NSF does not require that proposals be submitted in response to a particular solicitation, but useful to talk to a program officer first
- Special solicitations / Dear Colleague Letters
- Rapid response research (RAPID)
- Early-concept Grants for Exploratory Research (EAGER)
- Faculty Early Career Development program (CAREER)
- Doctoral dissertation improvement grants – check program solicitation to see if that program offers DDIGs

NSF SBE: Who We Are

Division of Behavioral and Cognitive Sciences (BCS)
supports research to develop and advance scientific knowledge about humans spanning areas of inquiry including brain and behavior, language and culture, origins and evolution, and geography and the environment.
(Division Director: Mark Weiss; FY10 Estimate: $94.58M)

Division of Social and Economic Sciences (SES)
seeks to enhance our understanding of human, social, and organizational behavior by building social science infrastructure and by developing disciplinary and interdisciplinary research projects that advance knowledge in the social and economic sciences.
(Division Director (acting): Frank Scoli; FY10 Estimate: $99.05M)
NSF SBE: Who We Are

Division of Science Resources Statistics (SRS)
- Serves as the nation's primary source of data and analysis on the science and engineering enterprise
- Designs, supports, and directs about 11 periodic surveys as well as a variety of other data collections and research projects; each year SRS produces about 30 publications
- Publications include congressionally mandated
  - Science and Engineering Indicators
  - Women, Minorities, and Persons with Disabilities in Science and Engineering
- Division Director: Lynda Carlson
- FY10 estimate: $34.62M

NSF SBE: Who We Are

Office of Multidisciplinary Activities
operates programs that cut across SBE and connect to other parts of NSF (FY10 estimate: $27.00M)
- Research Experiences for Undergraduates Sites
- Minority Postdoctoral Research Fellowships
- Science of Science and Innovation Policy
- Science of Learning Centers
- Seed funding for interdisciplinary activities

BCS Programs
- Archaeology & Archæometry
- Cognitive Neuroscience
- Cultural Anthropology
- Developmental & Learning Sciences
- Documenting Endangered Languages
- Geography & Spatial Sciences
- Linguistics
- Perception, Action, & Cognition
- Physical Anthropology
- HOMINID
- Social Psychology

SBE welcomes research in emerging fields that cross traditional disciplinary boundaries.
SES Programs

- Decision, Risk, & Management Sciences
- Economics
- Innovation and Organizational Sciences
- Law and Social Science
- Methodology, Measurement & Statistics
- Political Science
- Science, Technology and Society
- Sociology

SBE welcomes research in emerging fields that cross traditional disciplinary boundaries.

Science of Science & Innovation Policy

- Supports research designed to advance the scientific basis of science and innovation policy
- Develops, improves and expands models, analytical tools, data and metrics that can be applied in the science policy decision making process
- Contributes to interagency efforts to develop a new area of social science research.

Program Officer: Julia Lane

Science of Learning Centers

- Currently have 6 large-scale, long-term centers that create infrastructure needed to advance Science of Learning research
- Program is very broadly conceived, includes learning in humans, animals, and machines
- Now accepting proposals for (funding very limited):
  - Workshops and supplements
  - Early-concept Grants for Exploratory Research (EAGER)
  - Rapid Response Grants (RAPID)

Program Officers: Soo-Siang Lim, Joan Straumanis
Rapid Response Research (RAPID)

- Research to collect, analyze ephemeral, time sensitive data
- $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
- Eight page project description
- Internal review only
- Contact program officer first

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
- Administered by individual disciplinary programs
SBE – Increasing Knowledge of People and Society

A Few SBE Programs – for Example!

Science, Technology and Society

Ethics and Values in Science, Engineering and Technology (EVS)
History and Philosophy of Science, Engineering and Technology (HPS)
Social Studies of Science, Engineering and Technology (SSS)
Studies of Policy, Science, Engineering and Technology (SPS)
The components overlap, but are distinguished by the different scientific and scholarly orientations they take to the subject matter, as well as by different focuses within the subject area.

Program Officers: Fred Kronz, Kelly Joyce, Michael Gorman

Archaeology and Archeometry

Archaeological research that contributes to an anthropological understanding of the past
Anthropologically significant archaeometric research

Program Officer: John Yellen

Perception, Action and Cognition

The program encompasses a wide range of theoretical perspectives, such as symbolic computation, connectionism, ecological, nonlinear dynamics, and complex systems, and a variety of methodologies including both experimental studies and modeling.

Program Officer: Betty Tuller
Cognitive Neuroscience

• Supports highly innovative and interdisciplinary proposals
• Proposals should aim to advance a rigorous understanding of how the human brain supports:
  • thought
  • perception
  • affect
  • action
  • social processes
  • and other aspects of cognition and behavior, including how such processes develop and change in the brain and through evolutionary time.

Program Officer: Lynne Bernstein

Geography and Spatial Sciences

• Scientific research in geography and the spatial sciences that advances theory and basic understanding and that addresses the challenges facing society
• Integration of geographers and spatial scientists in interdisciplinary research
• Education and training of geographers and spatial scientists in order to enhance the capabilities of current and future generations of researchers
• Development and use of scientific methods and tools for geographic research

Program Officer: T. Baerwald

Linguistics

• Supports scientific research of all types that focus on human language as an object of investigation
  • the syntactic, semantic, phonetic, and phonological properties of individual languages and of language in general
  • the psychological processes involved in the use of language
  • the development of linguistic capacities in children
  • social and cultural factors in language use, variation, and change
  • the acoustics of speech and the physiological and psychological processes involved in the production and perception of speech
  • the biological bases of language in the brain

Program Officer: Joan Maling
Myths about NSF

- Only funds scholars at elite Ph.D. granting institutions
- Only funds “famous” academics
- Once declined, you are likely always to be declined
- Only funds “normal science”
- Advisory committees make funding decisions

NSF vs. NIH

- NSF grants tend to be smaller
- NSF is more open to risky, exploratory, paradigm-challenging work
- NSF stresses basic research
- NSF has no scoring system or percentile system – peer reviews are considered in a holistic fashion
- NSF maintains strict confidentiality of reviewer names
- NSF program officers make funding recommendations
- NSF uses “revision encouragement” loosely

An Appeal to Sponsored Research Officers

On questions regarding submission procedures, FastLane, budget issues, allowable budget items, deadlines, format for letters of collaboration, reporting issues, calculating percent efforts (for faculty salaries), what can go into “materials and supplies”, how to estimate travel costs, etc., encourage (can you force them?) the PIs to ask you BEFORE calling or emailing the NSF Program Director.

CAN you MAKE the PIs read the solicitation (yes, the entire thing) and search the NSF GPG to find out basic NSF policies/regulations?
THANKS!

? Questions ?

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