



NSF SUPPORT OF THE SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES (SBE)

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Program Director

Cross-Directorate Activities, SBE

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.



Office of the Director

**Other
Directorates
and Offices**

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

**Social and
Economic
Sciences**

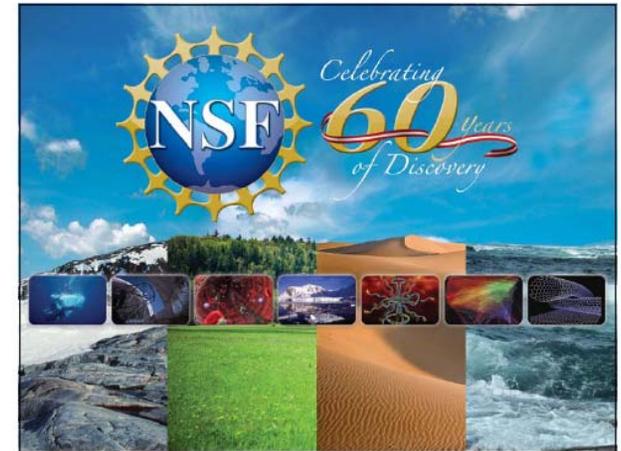
**Behavioral and
Cognitive
Sciences**

**Science
Resources
Statistics**

**Office of
Multidisciplinary
Activities**

**Science of
Learning Centers**

**Science of
Science and
Innovation Policy**
**Cross-Directorate
Activities**





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 \approx \$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



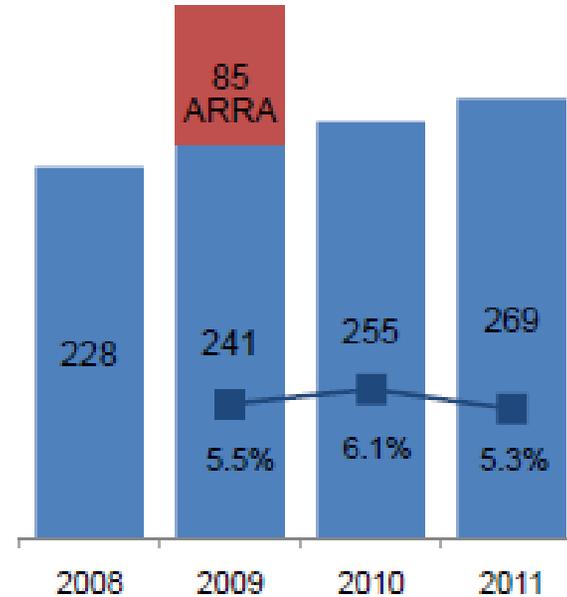
SBE in a Nutshell

- Assistant Director: Myron Gutmann
- Annual budget of \$255 million
- Funds approximately 58% 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 Budget Overview

- FY SBE 2011 Request is **\$268.79 Million**
- Increase of **5.3%** Over FY 2010





SBE Office of the Assistant Director

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

A screenshot of the NSF Directorate for Social, Behavioral & Economic Sciences (SBE) website. The browser is Microsoft Internet Explorer. The URL is http://www.nsf.gov/dir/index.jsp?org=SBE. The page features a navigation menu with links like HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area includes a search box, a navigation bar for SBE Home, Funding, Awards, Discoveries, News, and About SBE, and a large banner with the text "Increasing knowledge of people and society". Below the banner are sections for "SBE Organizations" (listing Behavioral and Cognitive Sciences (BCS), Social and Economic Sciences (SES), and Science Resources Statistics (SRS)), "About SBE" (with links to Staff Directory and Search), "General Information About SBE" (with links to Career Opportunities, Advisory Committee, and Budget Excerpt), and "Proposals and Awards". A "Special Announcements" section contains a news item about the University of Michigan historian and a report titled "Social, Behavioral and Economic Research in the Federal Context". A "Featured Programs" sidebar on the right lists various initiatives like Cross-Directorate Activities, Human and Social Dynamics, SBE Doctoral Dissertation Research, etc. A red arrow points from the text above to the "Featured Programs" sidebar, which is circled in red. The Windows taskbar at the bottom shows the start button, several open applications, and the system clock at 4:38 PM.



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 Scioli; 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 & Archaeometry
- 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.



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)



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
- “Walk on Water” expectation

There are entire sessions devoted to
CAREER program in this meeting!



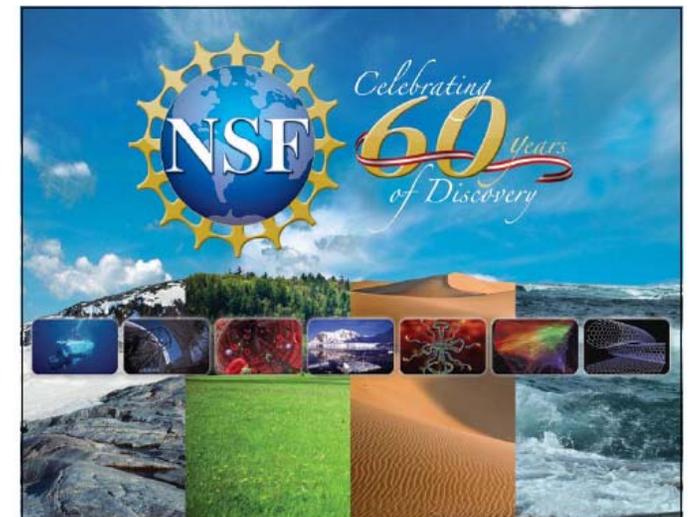
Allocation by Division

Division	FY2008 Actual	FY 2009 Omnibus Actual	FY 2009 ARRA Actual	FY2010 Estimate	FY2011 Request
BCS	87.3	88.1	43.1	94.6	99.2
SES	93.4	94.8	41.1	99.0	104.1
SRS	28.7	38.7		34.6	36.7
OMA	18.5	18.9	0.7	27.0	28.7
Total	227.9	240.5	84.9	255.2	268.7



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

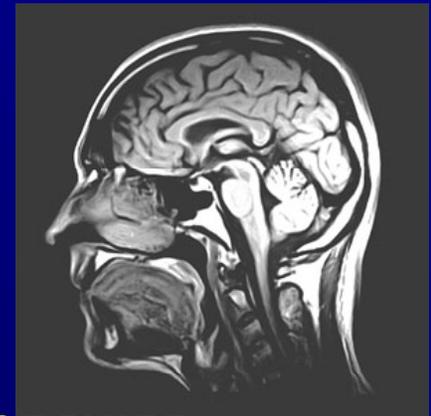
The program encompasses a wide range of theoretical perspectives, such as symbolic computation, connectionism, ecological, nonlinear dynamics, and complex systems, and a variety of methodologies including both experimental studies and modeling.

Program Officers: Betty Tuller and Vincent Brown



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 Officers: T. Baerwald, S. Friendschuh, E. Kalipeni



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 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



American Recovery and Reinvestment Act of 2009

- Research directorates had ~\$2.0 billion for research grants; SBE had ~\$85 million
- No ARRA money remains; one-time opportunity
- Funded meritorious proposals from fall 2008 and spring 2009
- All were funded as standard awards
- Additional reporting requirements
- Impact on 2010 yet to be seen:
 - Many programs have more proposals
 - Many of the "borderline" proposals will not be back for funding until 2011 or 2012



THANKS!

? Questions ?

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