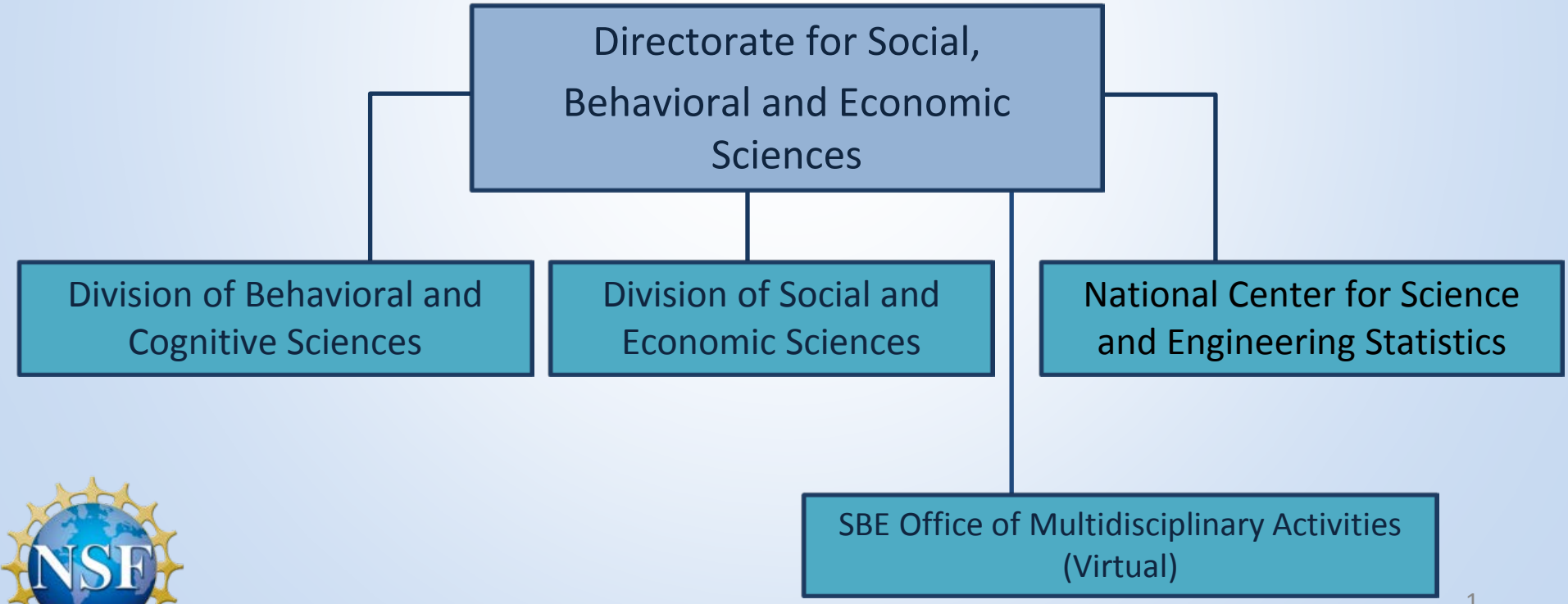
Social, Behavioral and Economic Sciences at NSF

Joanne Tornow

Acting Assistant Director



Why study human behavior and social organizations?

Energy

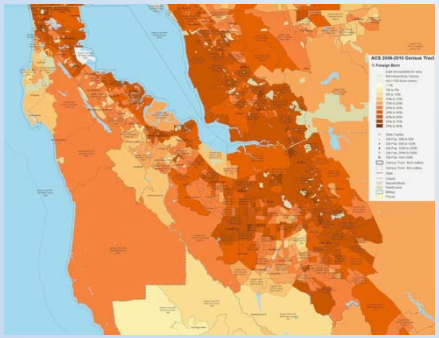
Energy studies need social science

A broader pool of expertise is needed to understand how human behaviour affects energy demand and the uptake of technologies, says **Benjamin K. Sovacool**.

Inequalities

Risk Communications

Migration



Political Conflict

Methodologies

Administrative Records

Functional Near Infrared Spectroscopy

fMRI

Surveys

Biospecimens

Biological Anthropology
Cognitive Neuroscience
Linguistics
Social Psychology

How does the human brain produce cognition and behavior?

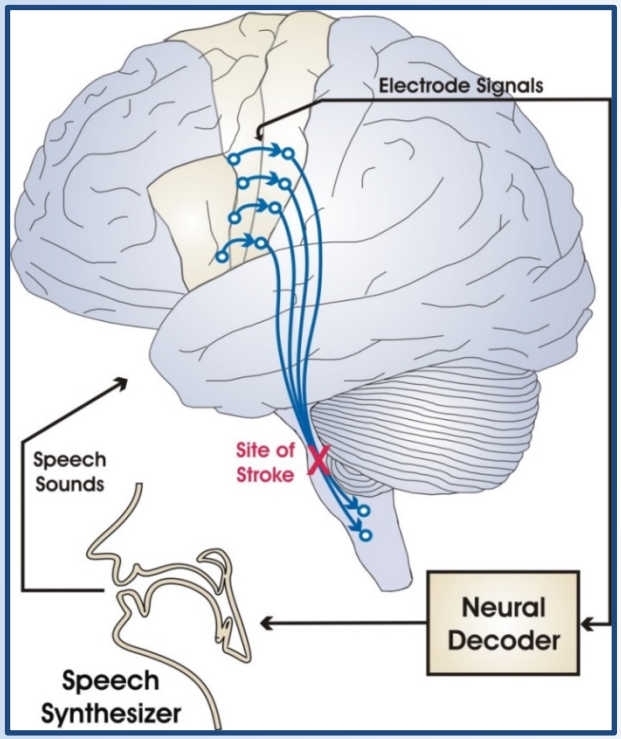
Perception, Action and Cognition
Science of Learning Centers
Decision, Risk and Management Sciences
Developmental and Learning Sciences
Documenting Endangered Languages

Brain, cognition and behavior: Fundamental insights

Effect of social environment on cognitive function

Learning
Decision-making

Brain, cognition and behavior: Real world impact



Helping paralyzed people communicate

Understanding nonverbal communication across cultures

Economics
Sociology
Political Science
Archaeology and Archaeometry
Cultural Anthropology

How, when and why do we cooperate or compete? When does conflict arise?

Social Psychology
Law and Social Sciences
Decision, Risk and Management Sciences
Science, Technology and Society
Science of Science and Innovation Policy

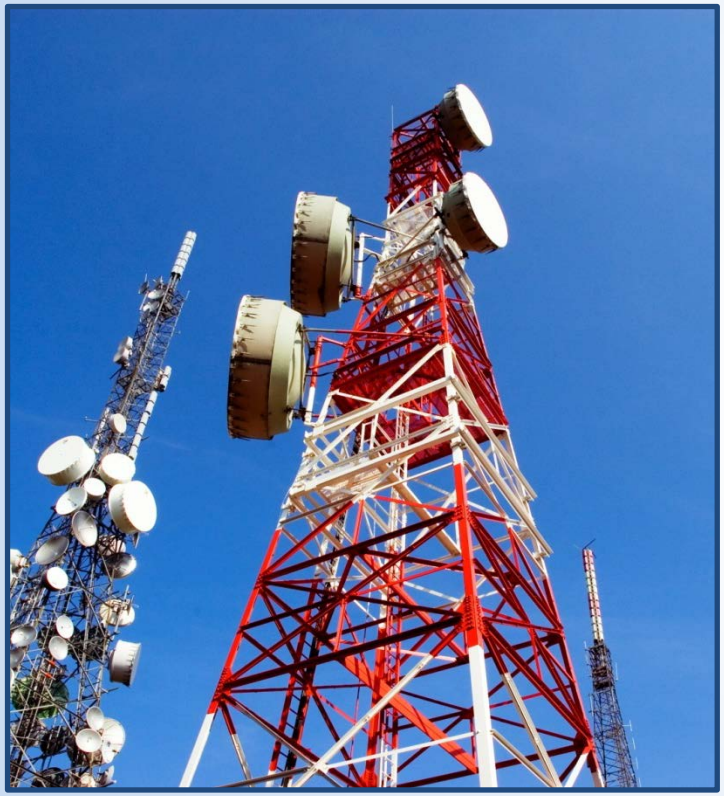
Cooperation, competition, conflict: Fundamental insights

Causes of war, conditions of peace

How markets work

Diplomacy and foreign policy
US and world economies
Allocation of resources

Cooperation, competition and conflict: Real world impact



Auctioning the airwaves

2009 Nobel Prize

Economic governance of common resources

Cognitive Neuroscience
Biological Anthropology
Geography and Spatial Sciences
Dynamics of Coupled Natural and Human Systems
Science, Technology, and Society

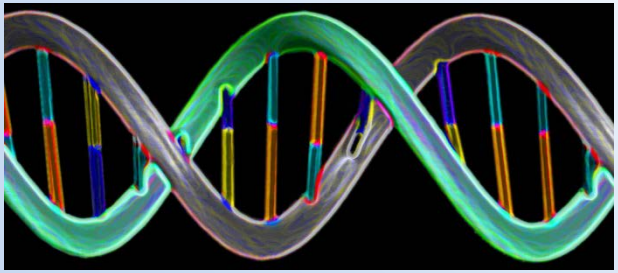
Human behavior in context: time and space

Archaeology and Archaeometry
Cultural Anthropology
Documenting Endangered Languages
Political Science
Sociology
Methodology, Measurement, and Statistics
Science of Science Innovation and Policy

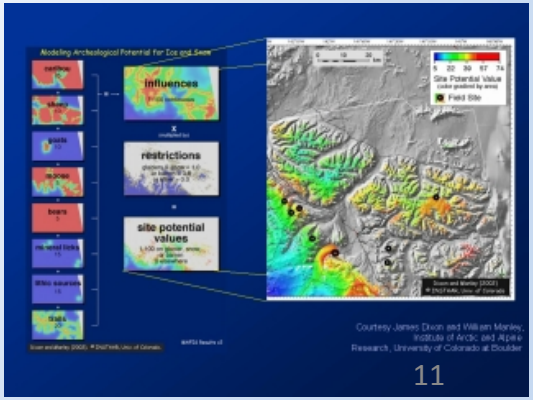
Time and space: Fundamental insights

Human origins

Geographic information systems



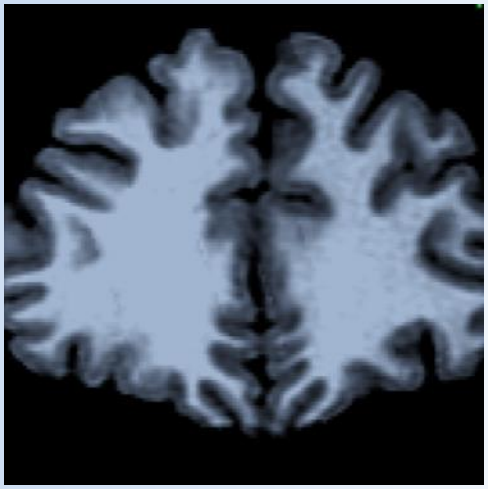
Evolutionary genetics and health
Planning and land use
Disaster response

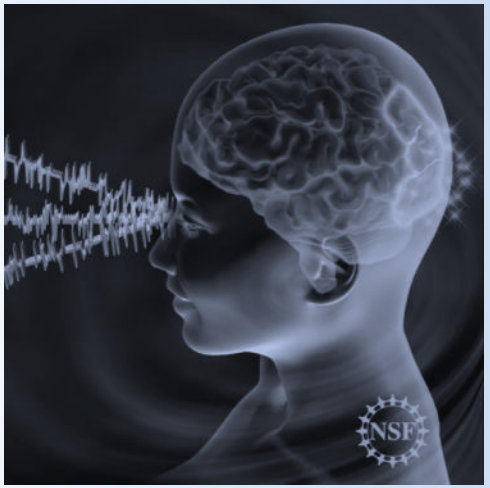


Time and space: Real world impact

Real time, hand-held mapping

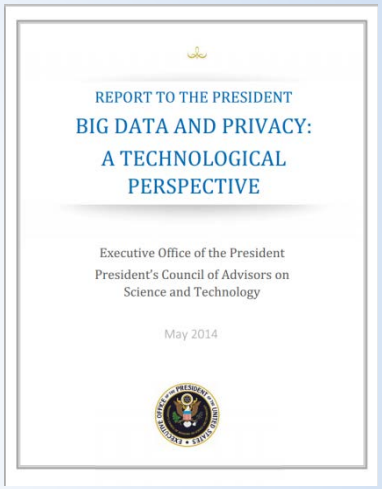
NSF Priorities:
Cognitive Science and Neuroscience





BRAIN Initiative: "accelerate the invention of new technologies…will open new doors to understanding how brain function is linked to human behavior and learning…"

NSF Priorities:
Secure and Trustworthy Cyberspace



Privacy: a social-psychological construct
Text-mining and language technologies
Market-based incentives to enhance cybersecurity

NSF Priorities:
Big Data

GSS General Social Survey

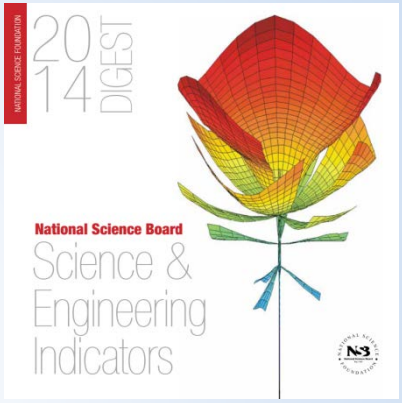
ANES
American National Election Studies

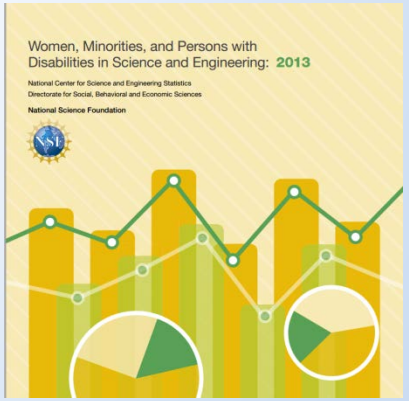
PSID A national study of socioeconomics and health over lifetimes and across generations

Access to Data
Social media
SBE Surveys

National Center for Science and Engineering Statistics

- Nation's primary source of data and analysis on the science and engineering enterprise
- Congressionally-mandated publications:
  - Science and Engineering Indicators
  - Women, Minorities and Persons with Disabilities in Science and Engineering

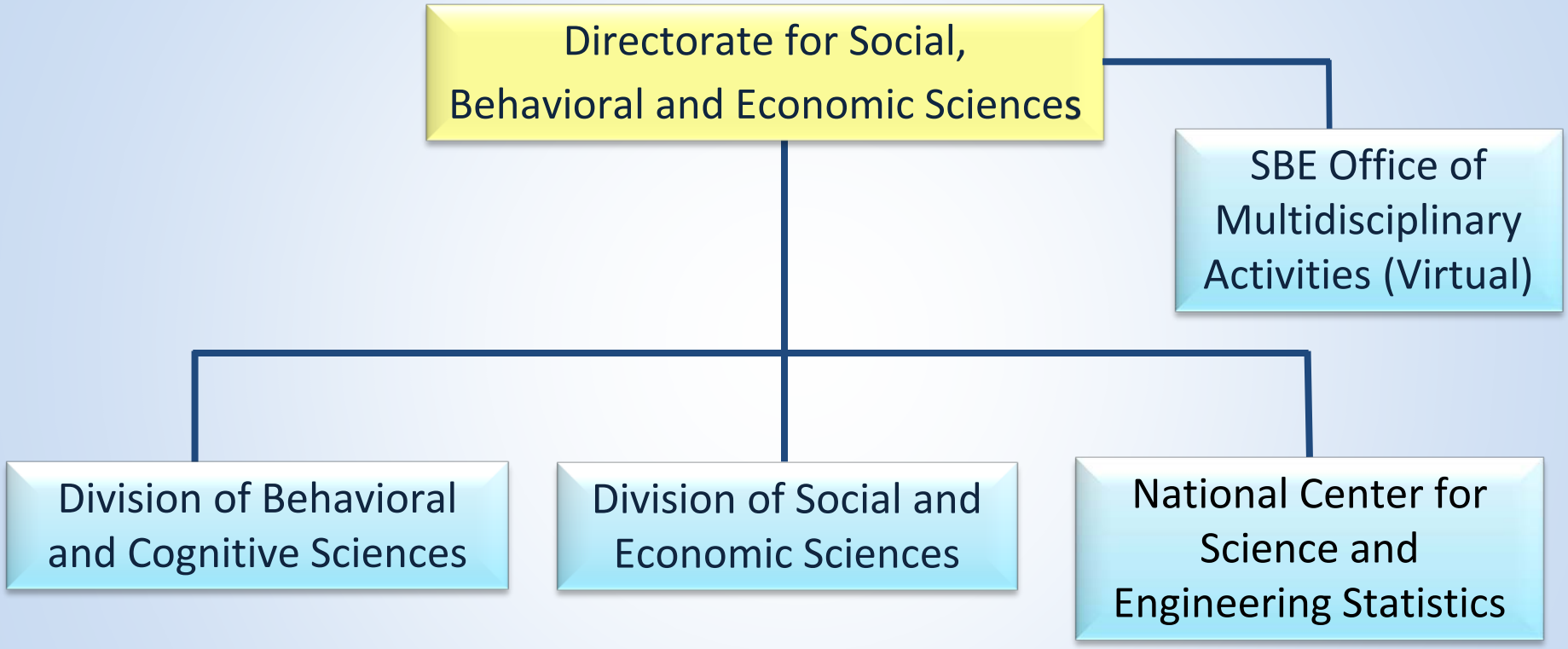




Thank you!

Back up Slides

NSF SBE OVERVIEW



BEHAVIORAL AND COGNITIVE SCIENCES DIVISON (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.

BCS Standing Programs

- Cognitive Neuroscience
- Perception, Action and Cognition
- Developmental and Learning Sciences
- Social Psychology
- Geography and Spatial Sciences
- Archaeology and Archaeometry
- Biological Anthropology
- Cultural Anthropology
- Linguistics
- Documenting Endangered Languages

SOCIAL AND ECONOMIC SCIENCES DIVISION (SES)

…seeks to enhance our understanding of human, social and organizational behavior by building social science infrastructure, and by developing social disciplinary and interdisciplinary research projects that advance knowledge in the social and economic sciences.

SES Standing Programs

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

SBE Office of Multidisciplinary Activities

- Coordinating SBE's crosscutting activities, including:
  - Interdisciplinary Behavioral and Social Science Research (IBSS)
  - SBE Postdoctoral Research Fellowships (SPRF)
  - SBE Research Experiences for Undergraduate Sites (SBE REU Sites)
  - Science of Learning Centers (SLC)
  - Science of Science and Innovation Policy (SciSIP)