

Social, behavioral and economic (SBE) sciences advance scientific knowledge about people and society. This knowledge furthers NSF's mission to advance U.S. health, prosperity, welfare, and defense — it is critical for the country's well-being.

SBE sciences explore human behavior and social organizations. They look at how economic, political, environmental, social, and cultural forces affect the lives of people from birth to old age — and how people in turn shape those forces.



Your Life. Our Work. SBE.

Directorate for Social, Behavioral and Economic Sciences



Arthur "Skip" Lupia

Assistant Director



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Deputy Assistant Director

Behavioral and Cognitive Sciences



Marc Sebrechts **Division Director**

- Archaeology and **Archaeometry**
- **Biological Anthropology**
- **Cultural Anthropology**
- Geography and Spatial Sciences
- **Cognitive Neuroscience**
- **Developmental Sciences**
- Linguistics
- Perception, Action and Cognition
- Science of Learning and **Augmented Intelligence**
- Social Psychology
- **Human Networks and Data Science**

Social and Economic Sciences



Daniel Moroff **Division Director**



- **Economics**
- Accountable Institutions and **Behavior**
- **Security and Preparedness**
- Sociology
- Decision, Risk and **Management Sciences**
- Law and Science
- Methodology, Measurement and Statistics
- **Science of Organizations**
- **Science and Technology Studies**
- Secure & Trustworthy Cyberspace
- **Ethical and Responsible** Research

National Center for Science and Engineering Statistics



Emilda Rivers Division Director

- Statistical information about science and engineering in the U.S. and the world
- o The nation's investment in R&D
- o Education and workforce info of scientists and engineers
- Developing indicators of the nation's competitiveness and innovation capacity

Office of Multidisciplinary Activities

- Research Experiences for Undergraduates Sites
- SBE Postdoctoral **Research Fellowships**
- Science of Science: Discovery, Communication and **Impact**



Behavioral and Cognitive Sciences (BCS) Division

- Supports research to develop and advance scientific knowledge on:
 - Human cognition
 - Language
 - Social behavior
 - Culture
 - Interactions between human societies and the physical environment



Marc Sebrechts
BCS Division Director



Archaeology and Archaeometry

- Funds research that furthers anthropologically relevant archaeological knowledge.
- While within the broad range of "archaeology" the focus is on projects judged to be significant from an anthropological perspective.
- Program sets no priorities based on time period, geographic region or specific research topic.
- The Program administers "senior" archaeology, archaeometry, doctoral dissertation and "high risk" competitions.

Program Director: John Yellen (jyellen@nsf.gov)



Biological Anthropology

- Supports basic research in areas related to human evolution and contemporary human biological variation.
- Research areas supported include, but are not limited to:
 - human genetic variation
 - human and nonhuman primate ecology and adaptability
 - human osteology and bone biology
 - human and nonhuman primate paleontology
 - functional anatomy
 - primate socioecology

Program Director: Rebecca Ferrell (rferrell@nsf.gov)



Cognitive Neuroscience

- Funds highly innovative proposals that use brain-based measurements in order to advance our understanding of the neural systems that mediate cognitive processes.
- Human cognitive science encompasses a wide range of topics, including attention, learning, memory, decisionmaking, language, social cognition, and emotions.
- Proposals will be considered that investigate a particular cognitive process using human brain data.

Program Director: Kurt Thoroughman (kthoroug@nsf.gov)



Cultural Anthropology

- Supports fundamental, systematic anthropological research and training to increase understanding of the causes, consequences, and complexities of human social and cultural variability
- The overarching research goals should be to produce empirically grounded findings that will be generalizable beyond particular case studies and contribute to building a more robust anthropological science of human society and culture.

Program Directors: Jeffrey Mantz (imantz@nsf.gov) & Siobhan Mattison (smattiso@nsf.gov)



Developmental Sciences (DS)

- Supports basic research that increases our understanding of cognitive, linguistic, social, emotional, cultural, motor, and biological processes related to human development across the lifespan.
- Supports work with any appropriate population for the topics of interest, including infants, children, adolescents, adults, and non-human animals
- The program also supports research investigating factors that affect developmental change including family, peers, school, community, culture, media, physical, genetic, and epigenetic influences.

Program Director: Peter Vishton (pvishton@nsf.gov)



Perception, Action & Cognition (PAC)

- Funds theoretically motivated research aimed at understanding a wide array of basic perceptual, motor, and cognitive processes and their interactions
- The program welcomes perspectives such as individual differences, symbolic and neural-inspired computation, ecological approaches, genetics and epigenetics, nonlinear dynamics and complex systems, experimentation, and modeling

Program Directors: Betty Tuller (btuller@nsf.gov) & Larry Gottlob (lgottlob@nsf.gov)



Social Psychology

- Supports research and research infrastructure to advance basic knowledge in social psychology
 - Social Cognition
 - Attitudes
 - Social Influence
 - Stereotypes
 - Group Dynamics
 - Aggression
 - Close Relationships
 - Social Neuroscience
 - Emotions
 - Social Development
 - Learning
 - Helping
 - Health
 - Personality

Program Directors: Steven Breckler (sbreckle@nsf.gov)

Michael Zarate (mizarate@nsf.gov)



Geography & Spatial Sciences (GSS)

- Supports basic science research on topics across the full spectrum of geography (human <-> physical; cartography and GIS) and spatial sciences
- Theoretically strong projects emphasizing spatial dynamics and analytics are especially welcome.
- Regular Proposals
- Doctoral Dissertation Proposals (accepted at any time).

GSS Program Directors can be reached at: Jacqueline Vadjunec (imvadjun@nsf.gov), Scott Freundschuh (sfreunds@nsf.gov), or gss-info@nsf.gov



Linguistics

Supports basic scientific research in human languages, including grammatical properties of human languages, and of natural language generally, as well as interdisciplinary research to address such questions

- The psychological/computational/acoustic/physiological processes in the production, perception, and comprehension of language.
- Role of human neurobiology in shaping the various grammatical properties of language.
- How language develops in children.
- Social and cultural factors underlie language variation and change

Documenting Endangered Languages: NSF/NEH partnership

- to develop and advance knowledge concerning endangered human langu
- data management and archiving

Program Directors:

Joan Maling (imaling@nsf.gov), Tyler Kendall (tkendall@nsf.gov)
& Karen Rice (kerice@nsf.gov)



Science of Learning and Augmented Intelligence

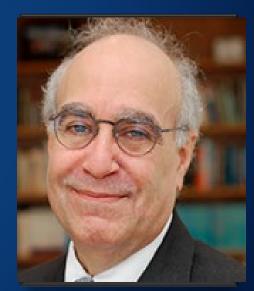
- Aims to develop basic theoretical insights and fundamental knowledge about learning principles, processes and constraints
- Support research addressing learning in a wide range of domains at one or more levels of analysis including: molecular/cellular mechanisms; brain systems; cognitive affective, and behavioral processes; and social/cultural influences.
- Supports a variety of methods including: experiments, field studies, surveys, secondary-data analyses, and modeling.

Program Director: Soo-Siang Lim (slim@nsf.gov)



Social and Economic Sciences (SES) Division

 Seeks to enhance our understanding of human, social and organizational behavior by supporting disciplinary and interdisciplinary research that advances knowledge in the social and economic sciences, and by building social science infrastructure



Daniel Moroff
SES Division Director



Economics

- Supports theoretical and empirical research that improves understanding of institutions and processes of economics
- Emphasizes and fund *rigorous* research in economics
- Only Federal government program with broad mandate to maintain and strengthen basic economic science.
- *Transformative/innovative* are two operative words
- Funds research in all sub-fields of economics
- Strongly support inter-disciplinary research---across SBE and across the Foundation

Gyimah-Frempong (kgyimahb@nsf.gov), & Senay Agca (sagca@nsf.gov)



Decision, Risk, and Management Sciences (DRMS)

- Supports research that explores fundamental issues in judgment and decision making, risk analysis, management science, and organizational behavior
- Research must be relevant to an operational or applied context, grounded in theory, and based on empirical observation or subject to empirical validation

Program Directors:

Robert O'Connor (<u>roconnor@nsf.gov</u>) & Jeryl Mumpower (jmumpowe@nsf.gov)



Accountable Institutions and Behavior (AIB)

- Supports scientific research that advances knowledge and understanding of citizenship, government, and politics
- Substantive areas include, but are not limited to:
 - American government and politics
 - Comparative government and politics
 - Methodology
 - Other topics such as public policy and public administration

Program Directors: Janet Leighley (jleighle@nsf.gov) & Zaryab Iqbal (ziqbal@nsf.gov)



Sociology

- Supports theoretically-grounded research on systematic patterns of social relationships examining the causes and consequences of human behavior, social structure and social change, from micro to macro levels of interaction.
- Topics include, but are not limited to:
 - Stratification, labor markets, mobility, social change, environment
 - Organizations, networks, economic and workplace change
 - Crime, delinquency, social organization and social control
 - Race, ethnicity, social identity/interactions, culture, education
 - Family, gender, population, migration, immigration
 - Social movements, political processes, globalization and more

Supports research that uses the full range of social science methods.



Program Directors: Toby Parcel (tparcel@nsf.gov) & Joseph Whitmeyer (jwhitmey@nsf.gov)

Science and Technology Studies (STS)

- STS supports research that that uses historical, philosophical, and social scientific methods to investigate the intellectual, material, and social facets of the STEM disciplines, including medicine.
- It encompasses a broad spectrum of STS topics including interdisciplinary studies of ethics, equity, governance, and policy issues closely related to STEM.
- Proposed projects should provide new, important scientific insights into STEM theory or practice, or into the adoption, use, or diffusion of technology.
- It should bring to light underlying assumptions, practices, methods, values, or goals of science, engineering, or technology.

Program Directors: Frederick Kronz (<u>fkronz@nsf.gov</u>) & John Parker (joparker@nsf.gov)



Law & Science (LS)

Funds research that:

- addresses social scientific studies of law and law-like systems of rules
- advances scientific theory and understanding of the connections between law or legal processes and human behavior

Fields of study include many disciplines, and often address problems including, though not limited to:

- Crime, Violence and Punishment
- Economic Issues
- Governance
- Legal Decision Making
- Legal Mobilization and Conceptions of Justice
- Litigation and the Legal Profession



Program Directors: Mark Hurwitz (mhurwitz@nsf.gov) & Reginald Sheehan (rsheehan@nsf.gov)

Science of Organizations (SoO)

 Funds basic research that yields a scientific evidence base for improving the design and emergence, development and deployment, and management and ultimate effectiveness of organizations of all kinds

Program Director: Georgia Chao (gchao@nsf.gov)



Secure and Trustworthy Cyberspace (SaTC)

- The goals of the SaTC program are aligned with the Federal Cybersecurity Research and Development Strategic Plan (RDSP) and the National Privacy Research Strategy (NPRS) to protect and preserve the growing social and economic benefits of cyber systems while ensuring security and privacy.
 - The RDSP identified six critical areas: (1) scientific foundations; (2) risk management; (3) human aspects; (4) transitioning successful research into practice; (5) workforce development; and (6) enhancing the research infrastructure.

SBE Program Director: Sarah Kiesler (skiesler@nsf.gov)



SBE Office of Multidisciplinary Activities (SMA)

 SMA supports interdisciplinary research and training in the social, behavioral, and economic sciences including SBE's intersections with other science and engineering fields



Ethical and Responsible Research

- Supports research advancing understanding of factors that promote ethical behavior among STEM researchers, and of approaches for cultivating cultures of ethical STEM within and across science and engineering fields.
- Such factors include, but are not limited to:
 - Honor codes
 - Ethics training programs and interventions
 - Professional ethics codes & cultures within labs
 - Other research on creating and maintaining ethical STEM cultures
 - Emphasis on institutions serving under-represented groups

Program Directors: John Parker (joparker@nsf.gov) & Frederick Kronz (fkronz@nsf.gov)



Research Experiences for Undergraduates (REU)

- The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.
 - **REU Sites** independent proposals to initiate and conduct projects that engage a number of students in research.
 - REU Supplements may be included as a component of proposals for new or renewal NSF grants or cooperative agreements or may be requested for ongoing NSF-funded research projects

Program Director: Josie Welkom (jwelkom@nsf.gov)



Science of Science: Discovery, Communication, and Impact

- Supports research designed to advance the scientific basis of science and innovation policy.
- The program funds research to develop models, analytical tools, data and metrics that can be applied in the science policy decision-making process and concern the use and allocation of scarce scientific resources.

Program Director: Cassidy Sugimoto (csugimot@nsf.gov)



SBE Postdoctoral Research Fellowships (SPRF)

- The goals of the SBE Postdoctoral Research Fellowship (SPRF)are to:
 - Promote fundamental research in the SBE sciences
 - Enhance the participation of underrepresented groups
 - Provide an opportunity for independence and advanced training under the direction of a sponsoring scientist
- Two Tracks: 1) Fundamental Research
 - 2) Broadening Participation
- Applications are submitted directly by, and awards are made directly to, the Fellowship candidate and
- Fellowship candidates identify a sponsoring scientist and a host institution



National Center for Science & Engineering Statistics (NCSES)

- The National Center for Science and Engineering Statistics (NCSES) is the nation's leading provider of statistical data on the U.S. science and engineering enterprise
- The National Center for Science and Engineering Statistics (NCSES), formerly the Division of Science Resources Statistics, was established within the National Science Foundation by Section 505 of the America COMPETES Reauthorization Act of 2010



Emilda Rivers
NCSES Division Director



NCSES Core Activities

- Gather science and technology (S&T) -relevant data from other agencies and organizations
- Develop and maintain databases on Research and Development (R&D), Science and Engineering (S&E) education, the S&E workforce, and related areas
- Provide global context for U.S. data and enable comparisons and benchmarking through national and international collaborations
- Prepare and publish periodic reports for a broad clientele

