

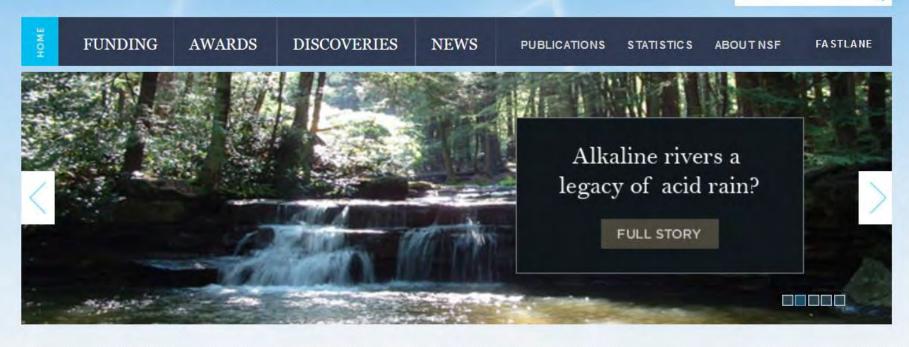
National Science Foundation Research Activities Related to Autism

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Interagency Autism Coordinating Committee January 14, 2014 National Institutes of Health



National Science Foundation WHERE DISCOVERIES BEGIN



NSF envisions a nation that capitalizes on new concepts in science and engineering and provides global leadership in advancing research and education

SEARCH



NSF Act of 1950

"to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..."

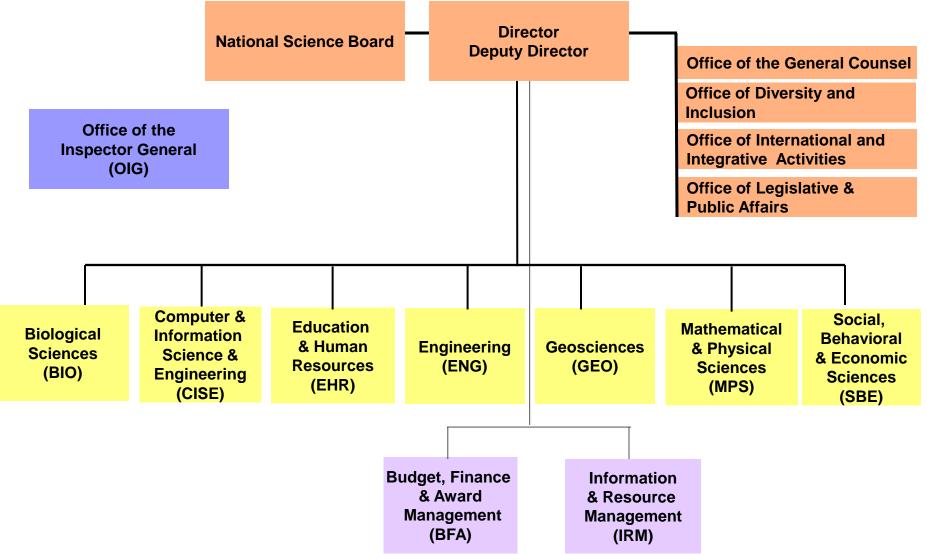




NSF Overview

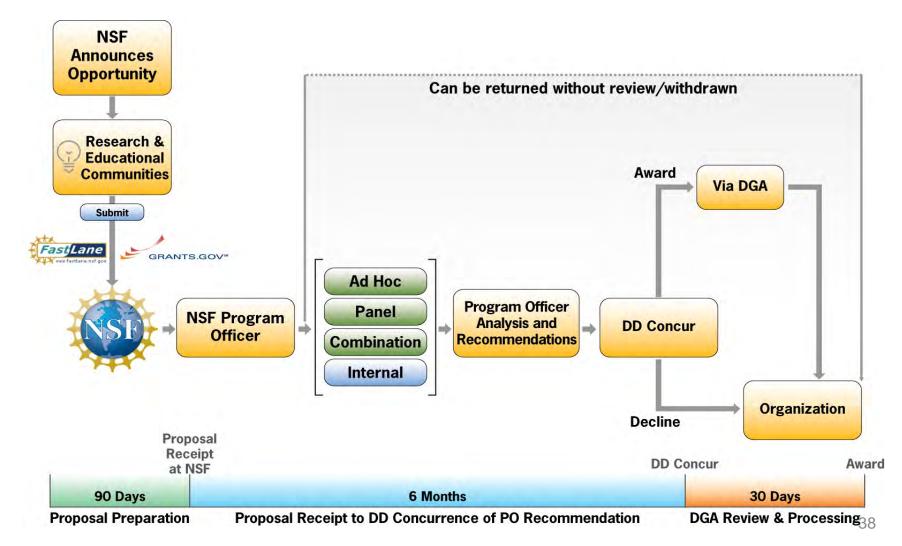
- \$7 billion annual budget (94% funding programs)
- Fund basic research across all S&E disciplines and research in STEM education
- Discipline-based structure
- Cross-disciplinary opportunities
- Use grant mechanism and merit review process
- Expert reviewers and program officers
- Grant ~10,000-11,000 awards per year
- 20% of federally supported fundamental research at US institutions of higher education







NSF Proposal & Award Process Timeline





NSF PROPOSAL STATISTICS (FY 2013)

- > 49,014 proposal actions
- ~250,000 reviews
- ~50,000 reviewers
- > 10,844 awards
- > 22.0% funding rate



NSF Awardees

- U.S. Universities and Colleges
- U.S. Nonprofit, Nonacademic
 Organizations
- U.S. For-Profit Organizations
- State/Local Educational Organizations
- Unaffiliated U.S. Scientists, Engineers, Educators, & Citizens
- NSF Rarely Supports Foreign
 Organizations or Other Federal Agencies



National Science Foundation Research Activities Related to Autism

- NSF does not have autism research programs or initiatives
- NSF is not a member agency of IACC
- NSF funds an extremely limited number of awards where autism is a component of the research



- Collaborative Research: Computational Behavioral Science: Modeling, Analysis, and Visualization of Social and Communicative Behavior
- James M. Rehg, Georgia Institute of Technology (with Boston University, Carnegie-Mellon University, MIT, University of Illinois, USC)
- Develop novel computational methods for measuring and analyzing the behavior of children and adults during face-to-face social interactions
- Computer and Information Science and Engineering: 1029579, 1029430, 1029549, 1029585, 1029035, 1029373

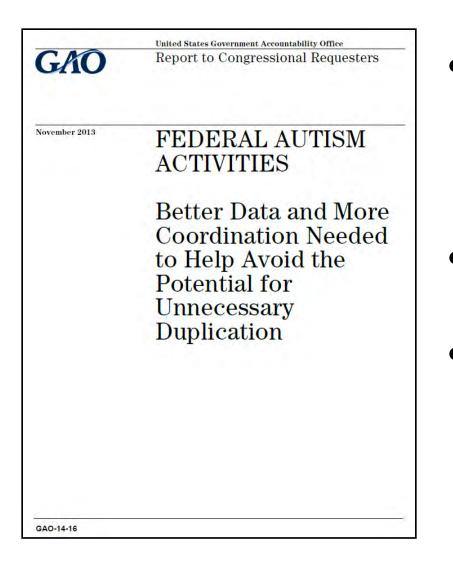


- CAREER: Typical and atypical development of brain regions for Theory of Mind
- Rebecca Saxe, Massachusetts Institute of Technology
- Compare social cognitive task performance and neural responses in typically developing children, children diagnosed with Autism, and children who experienced delayed exposure to language (e.g., deaf children of non-signing parents)
- Social, Behavioral & Economic Sciences: 0955818



- Predictors of Success in Postsecondary STEM Education and Employment for Students with Autism
- Jose Blackorby, Xin Wei, Jennifer Yu at SRI International; Paul Shattuck, Drexel University
- Study an evidence base of factors associated with the postsecondary education and initial employment experiences of young adults with autism in STEM fields.
- Education & Human Resources: 1130088





- GAO identified NSF funded 29 research projects related to autism in 2008-2012
- NSF funded ~55,000 projects 2008-2012
- NSF provides award
 information for the
 IACC's portfolio analysis
 system