93% funds research, education and related activities

$8.1B FY 2019 Enacted

50,000 proposals evaluated

2,000 NSF-funded institutions

11,000 awards funded

359,000 people NSF supported

$1.2B STEM education

$100M to seed public/private partnerships

236 NSF-funded Nobel Prize winners

Numbers shown are based on FY 2018 activities.
NSF’s 10 Big Ideas

RESEARCH IDEAS

Harnessing the Data Revolution

The Future of Work at the Human-Technology Frontier

Windows on the Universe: The Era of Multi-messenger Astrophysics

Navigating the New Arctic

The Quantum Leap: Leading the Next Quantum Revolution

Understanding the Rules of Life: Predicting Phenotype

The Future of Work at the Human-Technology Frontier

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NSF’s 10 Big Ideas

ENABLING IDEAS

Mid-scale Facilities: Bridging the Infrastructure Gap

NSF 2026: Generating New Big Ideas

Growing Convergence Research

NSF INCLUDES: Enhancing STEM through Diversity and Inclusion
Pushing the Boundaries of Knowledge

Windows on the Universe: The Era of Multi-messenger Astrophysics

Understanding the Rules of Life: Predicting Phenotype

The Quantum Leap: Leading the Next Quantum Revolution
Seizing New Opportunities

Harnessing the Data Revolution

Navigating the New Arctic

The Future of Work at the Human-Technology Frontier
Identifying and Closing Gaps

NSF INCLUDES

Mid-scale Research Infrastructure

Growing Convergence Research

NSF 2026
How did NSF identify the Big Ideas?

- Bottom-up, Science-driven approach to generating ideas
- Narrow ideas based on appropriateness to NSF’s mission
- Assess readiness for significant advances
- Prioritize interdisciplinary, convergent research
International Pillars for NSF Engagement

Promoting the development of a globally engaged workforce

Facilitating and supporting mutually beneficial international partnership

Providing opportunities for U.S. leadership to shape the global science and engineering agenda
Japan Collaboration in Many Big Ideas

- **Windows on the Universe**
  - Event Horizon Telescope discovery

- **Harnessing the Data Revolution**
  - NSF-JST collaboration on Smart and Connected Communities

- **Quantum Leap**
  - NSF staff fact-finding mission to Japan in 2018
  - Follow up workshop in Feb 2020
JOINT COMMITTEE
on the
RESEARCH ENVIRONMENT
America Leading the World in Science & Technology

OSTP R&D: Priority Cross-cutting Actions
- Skilled Workforce
- Research Environment
- Leverage Data
- Multisector Partnerships
- Transformative Research

Need for Change

Factors Impacting S&T Leadership
- Integrity
- Security
- Safe & Inclusive Research Environments
- Administrative Workload

Joint Committee on the Research Environment (JCORE)

Committee on Science
Committee on S&T Enterprise
National Science and Technology Council (NsTC)
New NSTC Committee: JCORE

Factors Impacting S&T Leadership
- Integrity
- Security
- Safe & Inclusive Research Environments
- Administrative Workload

Driving a Culture of American Research Leadership

Promoting American Values
- Industry
- Academia
- Government
- Non-profit

Factors Impacting S&T Leadership
- Integrity
- Security
- Safe & Inclusive Research Environments
- Administrative Workload