

## NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is responsible for promoting the progress of science and for science education. The President's 2023 Budget for NSF invests in combatting the climate crisis, strengthening U.S. leadership in emerging technologies, boosting research and development, and advancing equity.

The Budget requests \$10.5 billion in discretionary funding for NSF, a \$2 billion or 24-percent increase from the 2021 enacted level.

## The President's 2023 Budget:

- **Spurs Climate Research and Development.** The Budget provides \$1.6 billion for research and development, an increase of more than \$500 million above the 2021 enacted level, to better understand and prepare for the adverse impacts of climate change. This robust investment would support research in atmospheric composition, water and carbon cycles, modeling climate systems, renewable energy technologies, materials sciences, plant genomics, climate resilience technologies for communities heavily affected by climate change, and social, behavioral, and economic research on human responses to climate change.
- Strengthens U.S. Leadership in Emerging Technologies. The Budget provides \$880 million for the Directorate for Technology, Innovation, and Partnerships within NSF to help translate research into practical applications. The Directorate will work with programs across the Agency and with other Federal and non-Federal entities to expedite technology development in emerging areas that are crucial for U.S. technological leadership, including trustworthy artificial intelligence, high performance computing, disaster response and resilience, quantum information systems, robotics, advanced communications technologies, biotechnology, cybersecurity, advanced energy technologies, and materials science. The Budget provides an additional \$10 million to build and strengthen the national cybersecurity workforce pipeline through education, K-12 programs, and funding to universities and colleges. These investments would help improve U.S. competitiveness in emerging technologies.
- Advances Racial Equity in Science and Engineering. The Budget provides \$393 million, an increase of \$172 million or 78 percent above the 2021 enacted level, for programs to increase the participation of historically underrepresented communities in science and engineering fields. Funding would support: curriculum design; research on successful recruitment and retention methods; development of outreach or mentorship programs; fellowships; and building science and engineering research and education capacity at Historically Black Colleges

- and Universities and other Minority-Serving Institutions. These investments would help ensure the U.S. science and technology workforce reflects the Nation as a whole.
- Fosters Scientific and Technological Advances. The Budget provides \$2 billion for research infrastructure at NSF, an increase of \$65 million above the 2021 enacted level. Funding would support the construction and procurement of research facilities and instrumentation across the Nation to enable scientific and technological advances. The Budget also supports major NSF research facilities, including long-term upgrades of NSF's major Antarctic infrastructure, construction of the Vera C. Rubin Observatory to support astronomy research, and upgrades to the Large Hadron Collider, the world's largest particle accelerator.