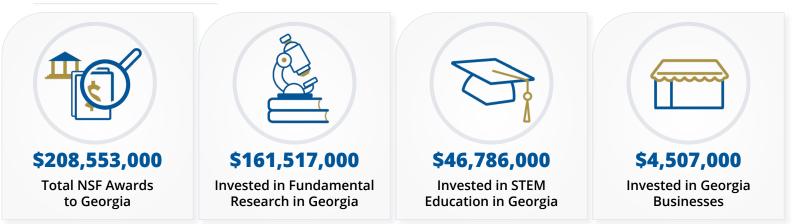


GEORGIA

FY 2023 Fast Facts



• Top NSF-funded Academic Institutions for FY 2023

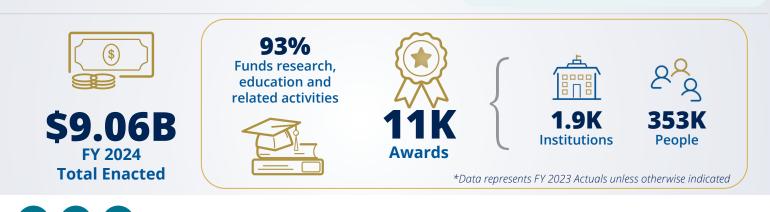


• NSF By The Numbers

The U. S. National Science Foundation (NSF) is an <u>\$9.06 billion</u> independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.



NSF has funded the work of **261** Nobel Prize winners over 75 years.





Expanding the Frontiers of Science

Climate change is projected to alter the yields of many crops. It is therefore important to understand the potential for technological change, farmer adaptation and agricultural policy to mitigate the effect of climate change on agricultural economies, food security, international trade, rural societies and ecological health. Through the NSF funding, a project at **Emory University** engages stakeholders in diverse agricultural systems to investigate the social and environmental factors that drive agricultural futures. This project co-produces knowledge with stakeholders to understand how historical conditions have affected the evolution of contemporary agricultural systems, draws on stakeholder knowledge to develop scenarios of probable socio-environmental system futures and identifies transition pathways to move towards desirable future conditions. The project culminates in a convergence event convening stakeholders from each agricultural region to envision relevant strategies to catalyze more desirable agricultural futures.

STEM Education and Broadening Participation

The NSF Historically Black Colleges and Universities Undergraduate Program (HBCU-UP), through Targeted Infusion Projects, supports the development, implementation and study of evidence-based, innovative models to prepare HBCU undergraduate students for science, technology, engineering and mathematics graduate programs and/or careers. For example, an award to **Morehouse College** is being used to establish a data science course sequence focusing on deep learning for students majoring in physical and social sciences. The project goals are to (1) establish a three-course data science sequence focusing on emergent modeling techniques in deep learning, a method of artificial intelligence and (2) create a collaborative in-house training opportunity to bring together the academic knowledge gained in the classroom and apply it to practical real-world applications. The data science course sequence is composed of a two-semester course for junior or senior students and a one-term collaborative in-house hands-on training opportunity. In the two-semester course, students learn the fundamental principles of machine learning and deep neural networks. The one-semester term project course pairs students with collaborative partners to work on real-world data science problems.



Regional Innovation Engines

NSF Regional Innovation Engines (NSF Engines) Development Awards help organizations create connections and develop their local innovation ecosystem within two years to prepare a strong proposal for becoming a future NSF Engine. In Georgia, a Development Award spanning several counties in Georgia and South Carolina is focused on cybersecurity, cyber-physical systems, edge computing and internet-connected devices. The confirmed partners include **Augusta University**, Army Cyber Command, Savannah River National Laboratory, as well as other academic, for-profit and government organizations, which are pursuing use-inspired research, workforce development and the transition to practice of research and technologies in these fields.

NCSES

According to the <u>NSF National Center for Science and</u> <u>Engineering Statistics (NCSES)</u>, which is housed in NSF, Georgia ranks 5th in the nation for academic research space. Visit Georgia's science and engineering state profile to learn more!

- **35.48**^{*} of **Georgia's** higher education degrees are concentrated in S&E fields.
 - **5.11**[%] of **Georgia's** <u>workforce is employed in S&E</u> <u>occupations.</u>
 - **6.85**[%] of **Georgia's** total employment is attributable to knowledge and technology intensive industries.

Learn More

CHIPS & SCIENCE – The CHIPS and Science Act's investments in the U.S. National Science Foundation will help the United States remain a global leader in innovation. Implementation of this legislation will be key to ensuring that ideas, talent and prosperity are unleashed across all corners of the nation. For more information, please visit the NSF CHIPS and Science website.

RESEARCH SECURITY – NSF is committed to safeguarding the integrity and security of science and engineering while also keeping fundamental research open and collaborative. NSF seeks to address an age of new threats and challenges through close work with our partners in academia, law enforcement, intelligence and other federal agencies. By fostering transparency, disclosure and other practices that reflect the values of research integrity, NSF is helping to lead the way in ensuring taxpayer-funded research remains secure. To learn more, please visit the NSF Research Security website.

CONNECT WITH NSF – For more information on NSF's impact in your state, please contact the NSF Office of Legislative and Public Affairs at <u>congressionalteam@nsf.gov</u>.