### FY 2022 Fast Facts



# Top NSF-funded Academic Institutions for FY 2022

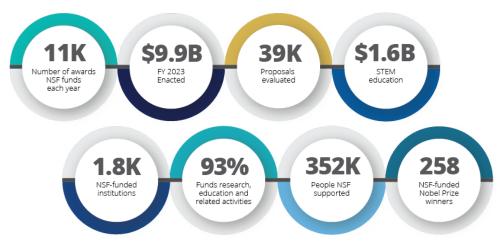
Mississippi State University \$14,707,631

University of Mississippi \$4,878,725

Jackson State University \$4,314,155

# NSF By The Numbers

The National Science Foundation (NSF) is a \$9.5 billion 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.



Data represents FY 2022 Actuals unless otherwise indicated.



### **Expanding the Frontiers of Science**

NSF's Major Research Instrumentation program is supporting the acquisition of an 800 megahertz nuclear magnetic resonance spectrometer at **Mississippi State University**. The instrument will support researchers throughout Mississippi and the Southeastern U.S., enabling new research avenues in biomolecular interactions, organometallic chemistry and polymeric materials. This project will support a diverse community of researchers at all levels, from undergraduate students to faculty at nearby primarily undergraduate institutions and HBCUs. Students will access the new instrument firsthand through course offerings at MSU. A total of 19 investigators, 64 graduate students, 72 undergraduate students and seven postdoctoral trainees will be directly and immediately impacted by this project as well as other users, who benefit through classes and workshops offered at MSU.



### STEM Education and Broadening Participation

Targeted Infusion Projects, supported through NSF's Historically Black Colleges and Universities Undergraduate Program, aim to achieve a short-term, well-defined goal to improve the quality of undergraduate STEM education at HBCUs. A project at **Tougaloo College** seeks to improve persistence and retention in gateway science courses and increase research opportunities for first-year students. The project combines two pedagogies, adaptive learning and process oriented guided inquiry learning, that have proven to be effective at improving students' learning experiences and outcomes. The project design aids students with various knowledge levels in reaching the same competency in mastering concepts in general chemistry courses. This project also equips and engages first-year students in research through independent and course-based undergraduate research experiences. The goal of the project is to increase students' strengths in pursuing a STEM major and to improve the quality of STEM education and research at HBCUs. The approaches developed through this project will present an effective model for colleges facing the challenge of first-year STEM student attrition.



### **Regional Innovation Engines**

The NSF Engines program envisions fostering flourishing regional innovation ecosystems across the country, providing a unique opportunity to spur economic growth in regions that have not fully participated in the technology boom of the past few decades. The NSF Engines program uniquely harnesses the nation's science and technology research and development enterprise and regional-level resources. NSF Engines can catalyze robust partnerships rooted in scientific and technological innovation to positively impact the economy within a geographic region, address societal challenges, and advance national competitiveness. Find potential NSF engines in your state.



**COMPETITIVE RESEARCH** | Mississippi is one of 28 U.S. states or territories under NSF's Established Program to Stimulate Competitive Research (EPSCoR). Over **\$5,880,000** in awards have been made to Mississippi academic institutions through EPSCoR in FY 2022. For more information, visit Mississippi's EPSCoR state web page.



According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, 37% of science, engineering and health doctorates conferred in Mississippi are made in life sciences. Visit Mississippi's science and engineering state profile to learn more!

**25.72%** of **Mississippi's** higher education degrees are concentrated in S&E fields.

**2.69%** of **Mississippi's** workforce are employed in S&E occupations.

**5.46%** of **Mississippi'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 NSF's 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 NSF's Research Security website.

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