

### FY 2023 Fast Facts



## • Top NSF-funded Academic Institutions for FY 2023

George Washington University \$15,154,000

Howard University \$13,033,000

Georgetown University \$8,772,000

## • 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.

www.nsf.gov

DID YOU KNOW? NSF has funded the work of **261** Nobel Prize winners over 75 years.







# **Expanding the Frontiers of Science**

Quantum information science and engineering (QISE) is widely recognized as a key driver for realizing gamechanging scientific breakthroughs and transformative new quantum computing, sensing and communication technologies. Historically Black colleges and universities, however, often lack established faculty and laboratory infrastructure for training students in QISE. An NSF Experiential Learning for Emerging and Novel Technologies award aims to fill this critical gap by establishing an expansive QISE research and training program at **Howard University** in close partnership with Northeastern University, where quantum research and education programs are well-established. Collaborating national laboratories and industries are the National Institute of Standards and Technology, National Renewable Energy Laboratory, IBM, Quantum Design and Qnami. The scientific focus of the project is on modeling, discovery, understanding and applications of quantum bits, which are the key components of the QISE ecosystem. This effort will also provide a roadmap for other HBCUs and minority-serving institutions throughout the U.S. to propel themselves toward leadership roles in QISE.



Through NSF funding, the **Computing Research Association** is assuming management of the NSF Computer and Information Science and Engineering (CISE) Graduate Fellowship (CSGrad4US) program to increase the number and diversity of domestic graduate students pursuing research and innovation careers in CISE fields. Many undergraduate degree recipients have outstanding job opportunities in industry and at other organizations and only a small fraction of these individuals consider pursuing a computing-related doctoral degree program. The CSGrad4US Fellowship provides an opportunity and a monetary incentive for bachelor's degree holders who may be working in industry or other sectors to return to academia and pursue research-based doctoral degrees in a CISE field. CSGrad4US includes providing up to 70 selected individuals each year mentored preparation, followed by three years of fellowship support for graduate study that leads to a research-based doctoral degree in a CISE discipline at an accredited doctoral degree-granting institution of higher education having a campus located in the United States, its territories or possessions or the Commonwealth of Puerto Rico.



# **Regional Innovation Engines**

U.S. National Science Foundation 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. The program seeks regional teams rooted within industry, academia, government, nonprofits, civil society and communities of practice to catalyze and foster innovation ecosystems across the U.S. to advance critical technologies, address national and societal challenges, promote economic growth and job creation, spur sustainable regional innovation and nurture diverse talent.

To stay in the loop about future funding calls and opportunities to engage, sign up for the NSF Engines newsletter.

## NCSES

According to the NSF National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, the District of Columbia ranks 3rd in the nation for federal R&D obligations. Visit District of Columbia's science and engineering state profile to learn more!

- **41.47**<sup>%</sup> of **District of Columbia's** <u>higher education</u> <u>degrees are concentrated in S&E fields.</u>
- **11.25**° of **District of Columbia's** workforce is employed in S&E occupations.
- **6.93**<sup>•</sup> of **District of Columbia's** <u>total employment is</u> <u>attributable to knowledge and technology -</u> <u>intensive industries.</u>

### **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>.