WASHINGTON, DC FACT SHEET

FY 2020 FAST FACTS

$389,415,000
Total NSF awards to Washington, DC

$312,179,000
Invested in fundamental research in Washington, DC

$30,886,000
Invested in STEM education in Washington, DC

TOP NSF-FUNDED ACADEMIC INSTITUTIONS FOR FY 2020

$13,524,000
George Washington University

$10,758,000
Howard University

$7,963,000
Georgetown University

NSF BY THE NUMBERS

The National Science Foundation (NSF) is an $8.5 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.
NSF-FUNDED RESEARCH FIGHTING COVID-19

Congress provided NSF with funding to prevent, prepare for, and respond to COVID-19 in the CARES Act of 2020 and the American Rescue Plan Act of 2021. For more information on NSF’s COVID research, visit NSF’s award database and COVID funding reports.

COVID-19 RESEARCH SPOTLIGHT | Research in online educational environments suggests that students with fewer socioeconomic resources face a learning disadvantage. An NSF-funded research project with Digital Promise Global is seeking to understand the systemic divide in the current remote learning environment; the project seeks insight on the specific challenges to online STEM learning for low-income, underrepresented minority and rural students. This project will investigate the challenges students face with the unexpected migration of their STEM courses to online environments because of COVID-19. Results could provide insight for more equitable outcomes as higher education institutions and policymakers address the current crisis and ways to incorporate lessons learned in STEM education after the pandemic.

STEM EDUCATION

STEM WORKFORCE DEVELOPMENT | Gallaudet University’s Research Experiences for Undergraduates Site on Accessible Information and Communication Technology provides undergraduate participants with research experiences on projects that enhance accessibility to information and communication technologies, such as mobile phones or streaming videos for consumers who are deaf, hard of hearing or deaf-blind (DHHDB). The undergraduate students collaborate with DHHDB peers and mentors on research projects. The diverse teams provide students with the experience and knowledge to recognize the range and complexity of accessibility challenges in accessing information and communication technology, and to evaluate the efficacy of proposed solutions in a unique research environment. Each research project addresses unsolved accessibility challenges for DHHDB consumers in using existing information and communication technology that undergraduate researchers can easily understand, analyze and solve. DHHDB students are extremely underrepresented in academics at the graduate level, especially in STEM. The Accessible Information and Communication Technology Research Experiences for Undergraduates site creates a critically needed pipeline of these students for graduate school and encourages them to participate in undergraduate and graduate programs in accessible information and communications technology.

RESEARCH DRIVING WORKFORCE INNOVATION

FUTURE OF WORK | An NSF Major Research Instrumentation award to Georgetown University will provide support for the acquisition of a state-of-the-art magnetometer that combines extreme sensitivity with multiple measurement modes. The instrument will meet a critical need for cutting-edge magnetic characterization, particularly for a wide variety of functional magnetic and superconducting nanostructures, on the Georgetown campus and in the greater District of Columbia area. The research projects enabled by this instrument have potentially major technological impacts in low-power nanoelectronics, quantum computation, magnetic recording, magnetic semiconductors, nanophotonics, catalysis and bioinorganic chemistry, magnetic resonance imaging, and hyperthermia therapeutics.

INFRASTRUCTURE

• The Center for Nanotechnology Research and Education at the University of the District of Columbia is part of the NSF CREST, Centers of Research Excellence in Science and Technology, program to enhance the research capabilities of minority-serving institutions through centers that effectively integrate research and education. The center at UDC focuses on emerging nanotechnology areas of computer technology, advanced manufacturing and thermal energy transport.

NCSES

• According to the National Center for Science and Engineering Statistics (NCSES), which is housed in NSF, Washington, DC ranks 4th in Federal R&D obligations. Visit Washington, DC’s science and engineering state profile to learn more!

10.66% of Washington, DC’s workforce are employed in S&E occupations.

17.92% of Washington, DC’s industries offer high-level science, engineering and technology occupations.

LEARN MORE

• NSF70 – In 2020, NSF commemorated its 70th anniversary and the 75th anniversary of the publication of Science - the Endless Frontier. Watch the highlight video for NSF’s seven decades of funding the best and brightest ideas that have transformed our lives and established the U.S. as a science and technology leader.

• NSF FACT SHEETS – NSF provides fact sheets about the agency and its bold investments in basic research. These fact sheets profile NSF investments in research across all fields of science and engineering, including quantum, artificial intelligence, and advanced manufacturing, and the NSF-supported research and computing infrastructure powering the U.S. response to COVID-19.

• CONNECT WITH NSF – For more information on NSF’s impact in your state, please contact NSF’s Office of Legislative and Public Affairs at congressionalteam@nsf.gov.