



FAST FACTS

\$85,665,000

Total NSF awards to Tennessee in FY19

\$62,298,000

Amount invested in fundamental research in Tennessee in FY19

\$22,917,000

Amount invested in STEM education in Tennessee in FY19

\$2,181,000

Amount invested in Tennessean startups through NSF's small business program in FY19

TOP 3 NSF-FUNDED ACADEMIC INSTITUTIONS FOR FY19

\$31,066,000

Vanderbilt University

\$23,162,000

University of Tennessee, Knoxville

\$4,884,000

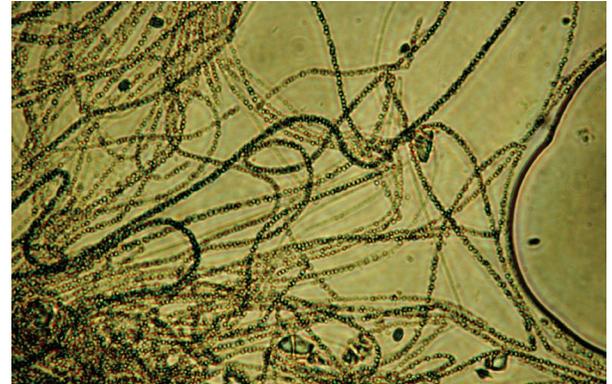
Tennessee State University

NSF & TENNESSEE

In Fiscal Year (FY) 2019, the **National Science Foundation made \$85,665,000 in awards** to Tennessee in support of fundamental research, advanced technical education, entrepreneurial training, STEM teacher training, long-term ecological monitoring, small business development, major research instrumentation and more.

DID YOU KNOW?

DISCOVERY | Mother Nature has her own forms of pest control services -- like insect-eating bats -- to keep species from overpopulating. A study by the **University of Tennessee (UT), Knoxville**, has found that these "services" are affected by market forces, like most anything else in the economy. Results of the study have implications for biodiversity conservation efforts. Researchers from UT and the University of Arizona, Tucson, studied how forces such as volatile market conditions and technological substitutes affect the value of pest control services provided by Mexican free-tailed bats on cotton production in the U.S. They found the services are impacted by the forces to the tune of millions of dollars.



Participants of the University of Tennessee's Biogeochemical Educational Experiences captured metal-oxidizing bacteria found in biofilm samples taken from a South African gold mine as part of NSF's Research Experiences for Undergraduates program. **Image Credit:** Courtesy University of Tennessee, Knoxville, and University of the Free State, South Africa's Research Experiences for Undergraduates program

STEM WORKFORCE DEVELOPMENT | **Tennessee Technical University** received a \$4,478,812 award in FY 2019 under NSF's CyberCorps®: Scholarship for Service program, which is designed to recruit and train the next generation to meet the needs of the cybersecurity mission for federal, state, local and tribal governments. The program provides scholarships at for up to three years of support for cybersecurity undergraduate and graduate education and, in return, recipients agree to work after graduation for the U.S. government, in a position related to cybersecurity. This inaugural hybrid program will ensure student participation in research and outreach activities alongside education in cybersecurity, and will offer both accelerated and traditional graduate studies paths to students from Tennessee, as well as students from underrepresented minority populations across the nation.

SUPPORTING STUDENTS | **Tennessee received \$14,908,605 from NSF in FY 2018** through the **Robert Noyce Scholarship program**, which **prepares equity-minded mathematics and science teachers to work in diverse communities of learners**. The scholarship program is being funded at 12 organizations in the state of Tennessee.

SCIENCE & ENGINEERING INDICATORS | **3.25% of the Tennessee workforce is employed in S&E occupations** and 7.10% of Tennessee business establishments are industries with high employment in science, engineering and technology (SET) occupations.⁺

ENGINEERING RESEARCH CENTER | The Center for Ultra-Wide-Area Resilient Electric Energy Transmission Networks (CURENT) is an NSF Engineering Research Center that is jointly supported by NSF and the DoE. A collaboration between academia, industry, and national laboratories, CURENT is led by the University of Tennessee, Knoxville. CURENT is developing interdisciplinary research and education programs that address the nation's electrical grid infrastructure system and provide the foundation for new industries through innovation.

⁺National Science Board, National Science Foundation. 2020. Science and Engineering Indicators 2020: The State of U.S. Science and Engineering. NSB-2020-1. Alexandria, VA. Available at <https://ncses.nsf.gov/pubs/nsb20201/>.

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