NSF & NORTH CAROLINA

In Fiscal Year (FY) 2018, the National Science Foundation made $206,368,000 in awards to North Carolina 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 | Researchers at North Carolina State University (NC State) are the lead principal investigators on a cooperative agreement for the NSF Nanosystems Engineering Research Center (NERC) for Advanced Self-Powered Systems of Integrated Sensors and Technologies (ASSIST), located at NC State. NERC ASSIST develops and employs nanotechnology-enabled energy harvesting and storage, ultra-low power electronics, and sensors to create innovative, battery-free, body-powered, and wearable health monitoring systems. NERC ASSIST received funding from NSF in 2012 for five years of research, extending through 2022. To date, the center has received $29,261,497 in NSF funding, of which NC State is scheduled to receive $18,499,997 over the life of the agreement.

STEM WORKFORCE DEVELOPMENT | Asheville-Buncombe Technical Community College received a $331,650 award in FY 2018 under NSF's Advanced Technological Education (ATE) program. With an emphasis on two-year institutions of higher education, the ATE program focuses on the education of technicians for the high-technology fields that drive the nation's economy. The project will engage students, parents/guardians, and high school teachers and staff with the purpose of accomplishing two principal goals: (1) to improve understanding and perception of technology and engineering careers, and the educational pathways involved in those careers; and (2) to increase the number and diversity of technicians available to the workforce. The ATE program was originally created by a North Carolina Member of Congress.

SUPPORTING STUDENTS | NSF’s Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program addresses the need for a high-quality STEM workforce in STEM disciplines supported by the program, and for the increased success of low-income, academically talented students with demonstrated financial need who are pursuing associate, baccalaureate or graduate degrees in STEM. In FY 2018, NSF awarded $7,208,381 to the following North Carolina schools: Appalachian State, Campbell University, Gaston College, Rowen-Cabarrus Community College and University of North Carolina Charlotte. The program is funded by H1-B visa fees, so it is not subject to the availability of appropriated funds.

SCIENCE & ENGINEERING INDICATORS | 4.82 percent of the North Carolinaan workforce is employed in S&E occupations, and 8.79 percent of North Carolinian business establishments are industries with high employment in science, engineering and technology (SET) occupations.¹

BROADENING PARTICIPATION | Broadening participation in science and engineering is a national challenge and NSF has taken a variety of approaches to broaden participation across its many programs. In FY 2018, NSF invested $975,009,000 to address this critical need. Investments range from capacity building, research centers, partnerships, and alliances to the use of co-funding or supplements to existing awards in the core research programs.