NSF & UTAH

In Fiscal Year (FY) 2018, the National Science Foundation made $69,120,000 in awards to Utah 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 | The University of Utah is creating a city-scale platform for advanced wireless research called the Platform for Open Wireless Data-driven Experimental Research (POWDER). POWDER is an end-to-end platform for research on mobile wireless networks. Researchers can use this platform to build their own wireless networks, using existing protocols or technologies (such as 4G), up-and-coming ones (such as 5G), or new ones that they invent and build from the ground up. In this environment, they can experiment with novel networks, devices and applications. The result is that Salt Lake City will be transformed into a “living lab” for research in mobile wireless networking. The ability to use this test bed by early adopter companies/startups and application developers to evaluate technologies in their pre-commercial phase will have a significant positive impact on the speed of innovation in the data networking and application domains.

STEM WORKFORCE DEVELOPMENT | With an emphasis on two-year colleges, NSF’s Advanced Technological Education (ATE) program focuses on the education of technicians for the high-technology fields that drive the nation's economy. The program involves partnerships between academic institutions and industry to promote improvement in the education of science and engineering technicians at the undergraduate and secondary school levels. Utah is experiencing a critical shortage of skilled technicians in advanced manufacturing. An NSF-funded ATE project at Bridgerland Applied Technology College will serve as a model on how applied technical colleges and secondary schools can collaborate through learning management systems to simultaneously prepare participants with high paying jobs and a pathway to college.

SUPPORTING STUDENTS | An NSF Major Research Instrumentation award to Utah Valley University supports the acquisition of an EyeLink 1000 Plus integrated eye-tracking system. The speed, accuracy and precision of this equipment is enabling the University’s Behavioral and Cognitive Neuroscience Lab to conduct cutting-edge, eye-tracking research in a number of vital areas, including distinguishing subtypes of attention-deficit/hyperactivity disorder in children and assessing how individuals with dyslexia deploy their attention while reading.

SCIENCE & ENGINEERING INDICATORS | 5.2 percent of the Utah workforce is employed in S&E occupations, and 10.8 percent of Utah business establishments are industries with high employment in science, engineering and technology (SET) occupations.+