NSF & NEBRASKA

In Fiscal Year (FY) 2018, the National Science Foundation made $34,167,000 in awards to Nebraska 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 Nebraska-Lincoln was awarded $2,000,000 by NSF for a “Statewide Implementation Study of a Researcher-Practitioner Partnership for K-8 Computer Science Education.” The project extends a successful researcher-practitioner partnership between the University of Nebraska-Lincoln and Lincoln Public Schools to other school districts in Nebraska. The primary goal is to study how school districts, with different strengths and challenges, adopt a computer science curriculum for K-8 students that will broaden participation in computing.

STEM WORKFORCE DEVELOPMENT | In FY 2018, Metropolitan Community College received a $590,577 award from 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. Industries increasingly need teams of workers who can fill multiple roles and communicate clearly with others, while performing a variety of tasks. This collaborative, flexible work environment is supported by an Intelligent Industrial Internet-of-Things (I4T), a sophisticated network of machines, systems and humans that work together to manufacture goods. The project will develop and deploy an online learning platform and curriculum to prepare skilled technicians to work effectively in I4T settings.

SUPPORTING STUDENTS | Doane University received a five-year, $1,199,774 continuing grant under NSF’s Robert Noyce Teacher Scholarship Program (Noyce) through July 2023. The Noyce program seeks to encourage talented STEM majors and professionals to become K-12 mathematics and science (including engineering and computer science) teachers. Additionally, the Noyce program encourages institutions of higher education to develop and sustain a culture where undergraduate STEM majors and STEM professionals, especially those of the highest achievement and ability who might otherwise not have considered a career in K-12 teaching, are encouraged and supported to become teachers in high-need local educational agencies. This Track 1 Robert Noyce Teacher Scholarship Program project at Doane University aims to respond to the critical need for highly effective science and mathematics teachers in Nebraska by producing 25 certified STEM teachers with the skills to teach effectively in high-need school districts, and to persist in their profession.

SCIENCE & ENGINEERING (S&E) INDICATORS | 4.32 percent of the Nebraskan workforce is employed in S&E occupations, and 6.67 percent of Nebraska’s business establishments are industries with high employment in science, engineering and technology occupations.†

CENTER | The University of Nebraska received a five-year, $20,000,000 Established Program to Stimulate Competitive Research (EPSCoR) Research Infrastructure cooperative agreement for the Center for Root and Rhizobiome Innovation (CRRI). CRRI will break new ground in understanding how plants interact with their environment via their root systems, with the goal of applying that knowledge to provide society with new technologies for more secure and resilient food systems.