Researchers awarded grant to study how to increase diversity in engineering workforce

By Christine Long : September 9th, 2016

The National Science Foundation awarded $123,859 to a team of researchers at The University of Toledo to study the factors affecting the success and career choices of underrepresented minority engineering students.

The two-year project will compare factors at UT and Alabama Agricultural and Mechanical University.

The study will focus on the attitudes and beliefs of faculty and staff, existing institutional support mechanisms, and the role of student organizations. The research will examine the effects these have on the social and academic integration of African-American students.

“The broader impact of this project is that it addresses the national need to diversify the engineering workforce,” said Dr. Lesley Berhan, the project’s principal investigator and associate professor in the Department of Mechanical, Industrial and Manufacturing Engineering. “The results will be used to identify areas where existing practices might be improved and to inform the design of programs and intervention strategies to improve the success of underrepresented engineering students not only at our home institutions, but at institutions across the country.”

Berhan will work with Dr. Revathy Kumar, professor of educational psychology, and Dr. Willie McKether, vice president for diversity and inclusion, on the project titled “Factors Affecting Underrepresented Minority Student Success and Pathways to Engineering Careers at Majority and Minority Institutions.”

According to the National Science Foundation project summary, “While inadequate college preparation is a contributing factor in the low enrollment and poor retention and graduation rates among underrepresented students in engineering programs, there is evidence that professional persistence is directly linked to identity development and social and academic interactions.”

“Once again, The University of Toledo is on the forefront of cross-cutting, long-term research that will determine our economic destiny,” Congresswoman Marcy Kaptur said. “It’s important for future generations and our economic standing to understand and develop the means to maximize opportunity for all of our citizens to contribute to their best God-given abilities. This research aims to do that.”