
News Release

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IUPUI receives \$2 million to expand state, national science and technology talent pool

FOR IMMEDIATE RELEASE

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INDIANAPOLIS -- A \$2 million grant from the National Science Foundation to Indiana University-Purdue University Indianapolis is targeted to boost the number of students graduating with bachelor's degrees in science, technology, engineering and mathematics by 10 percent.

The funding is designed to encourage more students, including those who begin their college education in a local community college, to embark on careers in science, technology, engineering and mathematics (STEM) and to provide those students with the support needed to achieve this goal. With this award, IUPUI hopes to increase STEM degrees to an additional 782 undergraduates by 2015.

Retention and persistence to graduation are particularly challenging for STEM students at urban universities such as IUPUI that enroll a diverse blend of students, including first generation college students, full- and part-time students, and older students, as well as a growing number of traditional students. Many begin their studies at a community college that may lack courses necessary to prepare for a STEM major.

"STEM students and students who initially trained in non-STEM fields but are considering a change in trajectory tend to hit roadblocks that those majoring in other disciplines may not encounter -- often lacking adequate math training or other technical competencies. And they often don't get specialized career planning support targeted to those interested in STEM fields," said Jeffery X. Watt, principal investigator on the NSF grant. Watt is associate dean for student affairs and associate professor of mathematical sciences in the School of Science at IUPUI.

"With this grant, we will be putting in place 'cradle to retirement' programs that will encourage students to choose STEM majors, support them in their studies through a variety of mechanisms including internships, co-operative education opportunities and peer mentors, and also programs that will help them find jobs when they graduate and throughout their careers," said Watt, who is a specialist in math and science education.

The five-year award provides funding in five areas: (1) specialized summer bridge programs to prepare students for the rigor of STEM courses; (2) further development and support of the associate degree in mathematics at Ivy Tech Community College and the bachelor's degree in STEM fields at IUPUI; (3) expanded learning support for STEM majors; (4) greater student services including specialized Career Days and internship opportunities; and (5) targeted career placement.

Watt directs the new Central Indiana STEM Talent Expansion Program. Co-directors are Kathleen A. Marrs, associate dean and professor of biological sciences, and Andrew D. Gavrin, chair and associate professor of physics, both in the School of Science; Charles R. Feldhaus, associate professor, and Stephen P. Hundley, associate dean for academic affairs and undergraduate programs, both in the School of Engineering and Technology at IUPUI.

The U.S. Department of Labor projects six million openings for positions requiring technical degrees by the end of this decade.

About the School of Science and the School of Engineering and Technology at IUPUI

The School of Science and the School of Engineering and Technology at IUPUI are national leaders in undergraduate science, technology, engineering and mathematics (STEM) education. More than 60 percent of IUPUI's 30,100 students are first-generation college attendees. Sixteen percent of IUPUI's student body belong to minority groups.

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