

# [The Columbia Daily Tribune](#)

## **Grant aims to integrate disciplines**

**MU gets \$2 million to give to math, science students.**

By [Janese Heavin](#)

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Hoping to close a disconnect between math and life sciences, the University of Missouri will start offering scholarships to a select group of freshmen interested in those fields.

A \$2 million grant from the National Science Foundation will allow the university to provide scholarships and stipends to 20 incoming freshmen every fall for the next five years. The Mathematics in Life Sciences Scholars will be placed in a Freshmen Interest Group that will take a one-credit seminar and conduct summer research projects. In addition to needs-based scholarships, scholars also will receive \$3,500 stipends for their summer work.

“The idea is to bring these two cultures together,” said Frank Schmidt, who helped pursue the grant. “Most people who do life sciences don’t realize how well mathematics fits in with what they’re doing.”

Dix Pettey, a math professor and principal investigator for the grant, said MU originally had hoped to start the program next fall, but the grant required it to be implemented this year. Nearly 500 incoming freshmen who fit the bill were invited to apply for the scholars program. They will be selected once the application period closes this weekend.

Students don’t have to pursue math or science degrees to participate. Journalism students interested in specializing in science or health writing, for instance, would be a welcome addition, Schmidt said.

Although math is directly used in physics and chemistry, the connection with biology is less clear, Schmidt said. That makes it tempting for students pursuing life sciences to pass on math courses beyond a required calculus class.

“An awful lot of students go into biological sciences because they like science but think mathematics is intimidating,” Schmidt said. “It’s quite possible to major in biology and go to medical school or work for the conservation department and think that math has nothing to do with a chosen career field.”

On the flip side, “a lot of students are good in math but really don’t know where to go from there,” Pettey said. “They can get here and major in math and still don’t know for sure what they’re going to do with that. This makes them aware of the opportunities in the sciences, particularly in life sciences because there’s a less obvious connection between life sciences and math.”

The program will be evaluated over five years. Pettey hopes it leads to a permanent program when the grant funds run out, even if that means fewer scholarship dollars will be offered.

It's too soon to say whether the Mathematics in Life Sciences Scholars program will ultimately lead to a new mathematics biology degree.

Truman State University in Kirksville began offering a mathematical biology minor last year, the first college in the state to do so. The decision stemmed from the success of a five-year-old interdisciplinary program that allowed upperclassmen to conduct research requiring both math and life sciences, said Jason Miller, an associate mathematics professor. It has attracted students interested in the Human Genome Project, computer science majors wanting a competitive edge and those wanting to go on to pursue bioinformatics, he said.

"There's a real convergence right now with life sciences and math for all sorts of reasons," Miller said. "We just realized at Truman that we needed to realign our academic program to support this."

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