

Goldwater scholar making the most of summer break

May 21, 2012 12:30 PM Belinda Lacoste
bal@tulane.edu

Volunteering in East Africa, writing a cookbook, designing medical equipment ? these all add up to making a difference for Angela Czesak, a biomedical engineering undergraduate student at Tulane University who received a 2012 Barry M. Goldwater Scholarship.



“Helping the world, one summer at a time” is the title of her [blog](#) and the goal of Angela Czesak, an undergraduate in biomedical engineering, who is going to Tanzania this summer. (Photo by Cheryl Gerber)

The \$7,500 scholarship is presented to outstanding students in the sciences, math and engineering.

Czesak's application for the scholarship was based on her volunteer work in Africa and research in the laboratory of Sergey Shevkoplyas, an assistant professor of [biomedical engineering](#).

"I've been to East Africa and I've seen what it's like in hospitals in rural areas," says Czesak. "Sometimes there's no water, sometimes there's no electricity and trained staff is limited."

The goal of the research Czesak will continue during her senior year is to develop a low-cost, portable system for separating blood into components. This would enable life-saving transfusions in resource-limited areas for treating maternal hemorrhage and severe childhood anemia.

But first there's summer. "I've been planning since November," says Czesak. "I knew I wanted to go back to Africa, and this is my last year as an undergraduate. So why not take advantage of Tulane's great funding opportunities and make this summer my most meaningful yet?"

Czesak received a \$4,000 Newcomb-Tulane College [Gordon Summer Fellowship](#) and a \$500 Newcomb Institute Award to support summer internships in Tanzania.

Her work with two engineering nonprofit organizations will involve designing equipment to ease the hard labor of agricultural workers, further developing existing products and assessing the needs of local villagers.

Czesak also will volunteer at a vocational training residence for victims of human trafficking.

"One of my main projects is to create a cookbook of the meals and recipes the women at Faraja learn to cook during their year-long stay at the center, and sell them next semester," Czesak says. "Their biggest need at the moment is a vehicle, so I'm aiming to raise \$7,000."

Belinda Lacoste, who received a bachelor of arts degree this May from the School of Continuing Studies, is a staff member who writes for the School of Science and Engineering.