Engineering Health in Africa

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fsimon@tulane.edu

When Bob Lathrop came from Canton, Ohio, to Tulane University he had in mind a career in biomedical engineering with a corporation. But after two months volunteering in eastern Africa this summer with Engineering World Health, Lathrop's interest is leaning toward more social ventures.

Junior biomedical engineering major Bob Lathrop tests fuses on an electrosurgery unit at Mt. Meru Hospital in Arusha, Tanzania, during a two-month volunteer assignment. (Photo from Bob Lathrop)

Engineering World Health is an organization dedicated to improving the quality of healthcare available to those living in impoverished nations. Lathrop was chosen as one of about 50 students and young professionals for the organization's Summer Institute to travel to a hospital in a developing country to work repairing broken

equipment and training staff to use equipment properly.

During the first month of training, Lathrop spent four days a week learning Swahili and common medical device problems. For the second month, Lathrop and his partner from another university were stationed at Mt. Meru Hospital in Arusha, Tanzania. The hospital has 500 beds and up to 30 doctors, but no technicians to look after equipment.

“We were able to repair a total of 57 pieces of equipment ? anything from small fixes like sphygmomanometers and emergency lights for use in case of power outage, a common problem, to a few larger items such as autoclaves, oxygen concentrators, phototherapy lights and even an electrosurgery unit,” Lathrop says.

The students also taught lab techs in a large AIDS clinic how to properly install and calibrate the software used by an ELIZA analyzer.

“I'm not sure if we got better at Swahili or the universal language of mime,” laughs Lathrop. “Every day was full of new challenges; tripping over a chicken as you carry an oxygen concentrator back up to the maternity ward, catching a grasshopper and removing it from the O.R. so the surgery can recommence, or trying to train a nurse 20 years your senior who speaks no English how to properly wash out a suction pump.”

With the help David Rice, associate professor of biomedical engineering, and other biomedical engineering students, Lathrop plans to reinvigorate the Tulane chapter of Engineering World Health.