



Jill S. Tietjen Scholarship Endowment

Jill S. Tietjen, former Director of the CU-Boulder Women in Engineering Program, has established an endowed scholarship to benefit undergraduate engineering students who participate in the Engineering for Developing Communities Program and/or the CU chapter of Engineers without Borders-USA. Hallie Bevan, a junior in environmental engineering and a member of the EWB-CU Peru project team, was the first recipient of this \$1,000 scholarship. Everyone affiliated with the EDC program would like to offer a heart-felt thanks to Jill for her generous support.

New Faculty Director of Environmental Engineering

Angie Bielefeldt has been appointed as the new Faculty Director of the Environmental Engineering Program. Her directorship is for four years, and will allow her to focus her time on solidifying the program offerings and recruiting students. Please join us in congratulating Angie.

Short Courses in Sustainable Practices

To reach out beyond our current offerings, EDC has worked with the Division of Continuing Education to start offering a series of short courses in sustainable practices through the Center for Advanced Engineering and Technology Education. The courses can be taken live in a studio at CU Boulder with streaming and download available on the last day of each course. Course content will also be available on CDs or DVDs the day following each course. The flyer can be downloaded at www.edc-cu.org/pdf/CUCEfall06.pdf. Three short courses are scheduled this fall, and additional courses will be offered in 2007. Continuing Education Units (CEUs) are available for each short course as indicated.

Summary of Latest EWB-CU Trips to Rwanda & Peru

This was a very busy summer for the EWB-CU project teams. From June 4-8, the Rwanda team participated in the International Conference on Sustainable Engineering Development in Africa: African Solutions for African Problems. They left Cameroon and traveled to Rwanda where they spent 24 days working in Muramba and Mugonero. During their trip, they installed two additional water purifiers including their innovative "Bring Your Own Water" system that utilizes a sand filter in series with UV purification to purify up to 7,000 liters of water daily. They also worked alongside the Kigali Institute of Science and Technology (KIST) to install a family scale demonstration biogas reactor. The system takes animal waste and captures the methane produced to burn for cooking needs. The system can produce enough gas to boil up to ten liters of water per day, and the effluent waste is a safer fertilizer. Installed near the hospital canteen and kitchen, the system will assist one family while demonstrating the technology to a wide audience. Funding permitting, this project may lead to a large scale reactor for the benefit of the whole hospital using human waste.



EWB-CU Rwanda team members in front of newly installed BYOW system

Dr. Richard Byyny (former Chancellor of the CU-Boulder campus), his wife Jo Byyny (a Public Health Nurse), and two CU Health Sciences Center students joined them during their visit. Dr. Byyny has been working with EDC to develop stronger ties between engineering and the CU School of Medicine.

EDC Faculty

Dr. Bernard Amadei (Amadei@colorado.edu)
Dr. Angela Bielefeldt (Angela.Bielefeldt@colorado.edu)
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EDC Staff

Ms. Robyn Sandekian, Program Coordinator (Sandekian@colorado.edu)



EWB-CU Peru team members with San León children

In early August, the EWB-CU Peru team flew to Lima and then made the 10+ hour bus trip to San León, in northern Peru. The Peru team was in country for approximately 19 days, and during that time they oversaw the initial hand and machine drilling for a well, poured 3m x 6m cement slabs to hold the two water storage tanks, staked out the well and storage tank perimeter so the community can construct a security wall around the compound, and surveyed between the well and several homes to determine head and elevation gains and losses. In addition, they conducted a water committee and community meeting to assess the project's progress and held water usage and health and sanitation workshops in the schools with the community children. The Peru project is jointly funded by Engineers without Borders-USA and Rotary International.

EDC Director Travels to the University of Kabul, Afghanistan to Help with Institutional Development

Bernard is traveling to the University of Kabul (UK) from September 1-13, 2006. While in Kabul, Bernard will work with UK faculty to help reshape the curriculum in the Department of Civil Engineering.

Upcoming Participation in International Conferences

In September, Robyn Sandekian will be participating in a series of workshops to be held in Pretoria and Johannesburg, South Africa. The meetings include the 3rd African Regional Conference on Engineering Education (ARCEE 2006) and 4th Southern African Conference on Engineering Education (SACEE 2006), plus workshops on Enhancing Engineering Education, Women in Engineering, and the Workshop on WFEQ Committee on Capacity Building..

Bernard Amadei and graduate students David Dani, Maria Uzcategui and Patricia Diaz-Ubillus will present papers at the UPADI Pan American Convention of Engineers in Atlanta, GA, September 19-22, 2006. Bernard will present an overview paper highlighting the EDC program. Student presentations will highlight the EWB-CU Peru Project (Dani) and the EDC Peru Distance Education / Internet Café Project (Uzcategui and Diaz-Ubillus).

Increased Interest in Engineering for the Developing World Design Course

While Bernard is on sabbatical this semester, Angie has agreed to incorporate a project into her section of the new Civil Engineering senior design experience course that will temporarily replace the EDC course titled Engineering for the Developing World Design Course. With minimal advertising, Angie has recruited 12 students who will work with a community in San Miguel County in the State of Sonora, Mexico, as their design project focus. Students will develop a plan to treat the wastewater in a sustainable manner. The community is particularly interested in re-use of the treated water for irrigation of local agricultural crops, particularly grapes. Students will travel to the community via a flight to Hermosillo in mid to late September to meet with community leaders and tour the area.