

BLUElab Wins 2005 Elaine Harden Award

For a student-run organization just three years old, BLUElab (Better Living Using Engineering) has already been recognized for having had an impact. This year the group earned the 2005 Elaine Harden Award, which honors engineering student societies that best exemplify leadership and service. BLUElab, formerly Engineers Without Borders, is dedicated to sustainability in both developed and developing regions of the world. Though an independent organization, it works closely with Engineers Without Borders and Engineers for a Sustainable World.

The award was well-deserved, according to Assistant Professor Steven Skerlos, BLUElab faculty sponsor and recipient of the 2004 College of Engineering Outstanding Student Group Advisor. “The programs these students are carrying out serve as models for changing the relationship between the engineer and the greater society he or she serves,” he said. “I’m glad they were recognized. For a young organization it means they’re on the right track.”

One of the group’s main ongoing projects is taking place in the Dominican Republic and involves testing novel water purification technologies, looking at how they can be manufactured locally and understanding how the involved communities use and interact with them. The project goes beyond engineering and cost concerns, considering the relationship created between the technological design and the user.

BLUElab members are also involved in designing educational programs closer to home. “They’re working to introduce sustainable design principles into all of the engineering disciplines,” said Skerlos. Case in point: a seminar series and certificate program on socially responsible engineering that included lectures by faculty from U-M as well as other universities on sustainable development, the role of the engineer in society, eco-design, engineering ethics and environmental justice.



U-M students from LS&A, School of Public Health, Medical School and CoE all participated in a week-long trip to assess and improve the health conditions in the village of Rancho al Medio in the southern Dominican Republic.

BLUElab’s education committee is also developing modules to be incorporated into introductory engineering classes to train students to see the strong connection between the decisions they make as engineers and the environment. One such module demonstrates the linkages between vehicle design-mass and aerodynamic coefficient, for example-and air pollution levels in different parts of the city of Ann Arbor. The model shows students how the levels fluctuate with design changes, current weather conditions and other factors. “The example shows how even modest changes in engineering design, and the vehicles people buy, can have a significant impact on the air we breathe on campus and in town.”

The \$500 cash stipend that accompanies the Elaine Harden Award will assist the group with its programs. Other fundraising activities include events such as the One World, One Slice pizza fundraiser and donations from a Pfizer, Inc., matching grants program, Michigan alumnus Kevin Olmstead, the College of Engineering and the University.



CoE students investigate a possible drinking water source for the community of Rancho al Medio in the Dominican Republic.

But it’s not about the prize, said Skerlos. “They would have done all of this anyway. In a time when there is a lot of societal interest in environmental and sustainable design, but not much financial support from government, the recognition of their leadership is a nice boost — it’s a reaffirmation of their passion.”