Celebrating our Achievements

The 2009 calendar year was a difficult one for almost every sector of our economy, and higher education was no different. Universities and Civil and Environmental Engineering departments braced for potential cuts to funding. Many industries core to civil engineers, such as design, construction and maintenance, have yet to experience significant recovery. While we all look expectantly to better times, it is important to recognize what exceptional things were accomplished during the past year.

Our students are at the heart of our success. Last year, graduating senior Robert House was awarded the University’s 21st Century Leader Award. This honor is given to students who exemplify the traits of academic achievement, strength of character, and service to the community. It was wonderful to see Robert among the 10 students campus-wide that received the award.

Our student groups were responsible for projects that both enriched the department and reached well beyond the confines of the campus. Last year, the student chapter of Engineers Without Borders made another trip to Kenya to continue their work constructing wells and springboxes to provide cleaner drinking water to rural villages. The American Society of Civil Engineers student chapter hosted 2009’s Concrete Canoe competition, which brought together over 200 students from universities across the region to test their design and paddling skills. Our Steel Bridge Team also competed in the regional competition and took first place in the “bridge stiffness” category. Our Student Chapter of the Institute of Transportation Engineers (ITE) was chosen as the 2009 Outstanding Student Chapter.

We also maintained our tradition of hosting outstanding lectures. 2009’s History and Heritage Lecture, organized by Assistant Professor Sanjay Arwade, was presented by MIT researcher Dr. John Ochsendorf. Dr. Ochsendorf is an expert on the mechanics and behavior of historic structures and was recently awarded the prestigious MacArthur “Genius” Grant. Dr. John Novak of Virginia Tech gave the annual Feng Lecture this year, the 21st in the series.

Interest in our department is very high; there are record numbers of undergraduates (we have more than 120 students in our introductory Civil and Environmental Engineering courses) and this year’s graduate applications already exceed 300 (and are continuing to grow). In 2009, the Department took steps to offer a one-year, coursework only masters degree program. This option maintains our high educational standards while providing greater flexibility and choice for our students. We are working hard to encourage our undergraduates to participate in a seamless BS/MS program wherein exceptional students remain for a 5th year and leave UMass with a Masters in Civil and Environmental Engineering. Graduate education is becoming increasingly important in the Civil Engineering profession and I encourage all students to consider this as graduation approaches.

We continue to excel at obtaining research grants. During 2009, we were awarded over $3.5 million to pursue topics that will have direct impact on the field of Civil and Environmental Engineering. We look forward to another year of excellence from students, faculty and staff.
Dr. Casey Brown, an Assistant Professor of CEE specializing in climate risk management, recently gave two presentations on the management of climate uncertainty. Brown spoke at a multi-federal agency workshop titled Nonstationarity, Hydrologic Frequency Analysis, and Water Management (January 13-15) in Boulder, Colorado. The goal of the workshop was to present and discuss proposed operational alternatives to the assumption of stationarity in hydrologic frequency analysis.

Brown also spoke at the World Bank's Sustainable Development Network Forum in Washington DC (January 19-20) on the subject of regional approaches to climate risk assessment in the Niger River Basin. The overall theme of the forum was Act Now, Act Together, Act Differently: Going Forward on Climate Action.

The UMASS chapter of Engineers Without Borders (EWB) held their 2nd Annual 5K Run For Water on October 3rd. The 5K road race which started at the Visitors Center and looped around the campus kicked off EWB’s fundraising efforts for the 2009-2010 school year. The group made $500, which will go toward funding their projects in western Kenya and Assis Brasil, Brazil. In both projects EWB students work with communities to help them improve the quality of the community water sources. This past summer, six EWB students traveled to the Village of Namawanga in Kenya and constructed two spring boxes. The Brazil Project team is currently working on a new spring box and hand pump design that can be constructed entirely out of materials easily available to the rubber tappers of Assis Brasil. The major fundraising event for EWB takes place in May with the annual EWB Auction Night. Auction Night attendees enjoy music, food and entertainment while bidding on items donated by area businesses and residents. To learn more about Engineers Without Borders and their projects and events please visit www.ecs.umass.edu/ewb.

Shawn P. Kelley, Ph.D., an associate with GeoDesign Inc., has been named a Governor of the American Society of Civil Engineers (ASCE), Region 1. Region 1 covers all of New England, New York, New Jersey, and Puerto Rico. Founded in 1852, ASCE represents more than 146,000 members of the civil engineering profession worldwide and is America's oldest national engineering society. Mr. Kelley, a firm shareholder who works out of GeoDesign’s Windsor, VT office, manages civil engineering projects related to geotechnical engineering. He specializes in earth retention and slope stabilization projects, deep and shallow foundation design, geotechnical instrumentation, and in-situ soil testing. Mr. Kelley also manages GeoDesign’s soil testing laboratory in the company’s Vermont office. He has served on the Board of the Directors for the Vermont Section of ASCE for several years, including a two-year term as president from 2007-
2009. Mr. Kelley also serves on the ASCE national Web Advisory Task Committee. Mr. Kelley holds a B.S., M.S., and Ph.D. in civil engineering from the University of Massachusetts Amherst.

Established in 1995, GeoDesign, with offices in Vermont, Connecticut and New York, is a privately held engineering consulting firm that completes environmental investigation and remediation projects, geotechnical projects and construction engineering services throughout the Northeast for private clients, industry, developers, contractors and municipalities.

Michael Razo, MS CEE, received the University of Massachusetts Transportation Center 2009 Outstanding Student of the Year Award. Mr. Razo was recognized by the U.S. Department of Transportation at a special ceremony held in conjunction with the Transportation Research Board 89th Annual Meeting held January 2010 in Washington, D.C.

Mr. Razo was selected based upon his accomplishments in three areas: technical merit and research, academic performance, and professionalism and leadership.

The UMass Seismic Design Team, led by CEE student Meghan Krupka, is in San Francisco for the Earthquake Engineering Research Institute's (EERI) annual Undergraduate Seismic Design Competition. Students Marco Adorno, David Fortin, and Aimee O'Brien make up the rest of the UMass team. The competition takes place February 3-6th at EERI's Annual Meeting.

The goal of the competition is to build a structure that is designed to remain stable in a simulated earthquake, and points are given for cost effectiveness and aesthetics. In addition to the tests, groups participate in an oral and poster presentation.

The UMass team is sponsored by Tighe & Bond, Vanasse Hangen Brustlin, Inc. (VHB), Woodard & Curran, Wright-Pierce, HyGround Engineering and Habitat Post & Beam.

Jodi Ozdarski, CEE Academic Assistant, received the 2009 recipient of the Dean’s Distinguished Service Award. Since arriving at UMass Amherst as a typist in 1985, she rose through the ranks to become the CEE’s academic assistant in 2001. In that capacity she supports the department’s complex efforts during the ABET reviews, maintains student files, produces the undergraduate handbook and faculty advising guide, advises graduate students, works with the graduate program directors, coordinates the department’s semiannual Career Fairs, and helps with the CEE Open House.

As one of her award recommendation letters comments, “Jodi performs all these tasks with a level of professionalism, sense of obligation, and joyful spirit that is beyond admirable.”

One telling comment sums up the scores of compliments heaped upon her in the recommendation letters: “Jodi is that rare individual who continues to grow in her job, finds every day exciting, and discovers new and welcomed ways to make the lives of others better.”

*From the College of Engineering website, 12/09
CEE Spring Career Fair
Thursday, February 25, 10:00 am - 3:00 pm
Gunness Student Center, Marcus Hall

The Civil and Environmental Engineering Department hosts a biannual career fair each October and February. All Civil and Environmental Engineering students are encouraged to attend the next CEE Career Fair on Thursday, February 25th from 10:00 am-3:00 pm in the Gunness Student Center in Marcus Hall. Companies attending the fair are filling positions for summer internships, COOP opportunities, and full-time permanent positions. The Department has hosted the Career Fair for over five years and, due to popularity, now schedules the event twice a year.

History and Heritage Lecture
Friday, March 5, 2:00 pm
Auditorium, Engineering Lab II

Haley and Aldrich Lecture
Thomas O’Rourke
Cornell University, Ithaca, NY, USA
Tuesday, March 23rd
Other details TBA

Pre-Registration Advising for Fall 2010
Wednesday, March 24th
Gunness Student Center, Marcus Hall

The Department of Civil and Environmental Engineering also support seminars in the areas of Environmental and Water Resources Engineering, Structures/Geotechnical Engineering, and Transportation Engineering. Seminars feature presentations by visiting lecturers, faculty, or graduate students. The schedule for seminars is available at the Civil & Environmental Engineering Website (www.ecs.umass.edu/cee). Seminars are free and open to the public.

Name That Bridge!

This rope bridge was a marvel of ancient Civil Engineering until its collapse in the nineteenth century. If you can identify this bridge, email appleby@ecs.umass.edu. The first person to answer correctly will receive a Civil & Environmental Engineering coffee mug!

Do you have news for our website or newsletter? Please contact appleby@ecs.umass.edu and let us know!