

**Pierce:** Offshore wind energy research and Iraqi officials visiting Texas Tech to talk science and technology top this edition of AcademiCast. I'm Rachel Pierce.

Texas Tech is participating in a \$4.1 million wind power research project funded by the US Department of Energy.

University researchers will collaborate with energy company Alstom Wind to develop sensors and control systems for offshore wind turbines. Their work will help boost energy output and lower capital spending.

The project strengthens the Energy Department's bid to accelerate deployment of offshore wind turbines.

For a second consecutive year, Texas Tech hosted a delegation of Iraqi government officials looking to redevelop the country's higher education system. The State Department's Bureau of Education and Cultural Affairs chose Texas Tech to receive the delegates because the university has long been involved in Iraq's scientific and educational programs.

Carl Phillips, a biology professor from Texas Tech's Center for Environmental Radiation Studies, said this year delegates concentrated on science, technology and engineering capacities.

***Phillips:** They are asking some questions, more questions like how do you do these things in the United States, at universities such as Texas Tech, how is science managed and how is it funded. From our point of view it's a fascinating academic opportunity to participate in a kind of national building.*

**Pierce:** The Iraqi delegates are also meeting with researchers at the Massachusetts Institute of Technology, the National Science Foundation, the State Department, and the Sandia and Los Alamos National Laboratories. They are also sitting down with members of the Science and Technology Policy Office at the White House.

Texas Tech's School of Law Advocacy Programs are featured in *preLaw* magazine's 2011 Back to School issue. The article reviews the top moot court programs in the nation and notes that two groups rank Texas Tech's team as the second-best in the US.

Texas Tech's advocacy teams in 2010 and 2011 won one international championship, three national titles, five regional championships, and five individual Best Advocate awards at national competitions.

Professor Elizabeth Loudon has a passion for the past. This integrated scholar specializes in historical preservation, and she reinforces her teaching, research and service efforts with this concentration. Provost Bob Smith talks with Professor Loudon about how she found her calling.

**Smith:** Elizabeth Loudon enrolled in Texas Tech right out of high school. She majored in elementary education. But, her educational career was put on hold when she had a family. When she returned to her studies, it was with an entirely different focus — architecture. And, when she

was taking graduate courses she found her true calling—preservation.

**Louden:** *There were professors here who inspired me—professors Jim and John White and particularly professor Willard Robinson who was a Horn professor at that time. So their passion and interest in historic buildings and historic preservation really inspired me.*

**Smith:** During her graduate studies she was asked to teach—and was subsequently offered a tenure-track position at Texas Tech. So, in a sense she came full circle to her original interest in education. Her position in the College of Architecture allows Dr. Louden to combine two very important passions in her life.

**Louden:** *Integration of what I love and what I'm passionate about in my teaching, they really can't be separated. So I'm very fortunate that in the graduate preservation studio is where I can choose a site or I can, if I'm asked to do something if it fits in my teaching goal for that course, then I can do that work.*

**Smith:** The summer of 2011 found her working on just such a project, a 1931 building in Lubbock that once served as a Federal Post Office. Her graduate student preservation team efforts helped draw attention to the building, which was listed on the 2011 Texas' Most Endangered Places list.

**Louden:** *There are a lot of people who are interested in the preservation of that building in this community. So these 10 graduate students and I studied the building, photographed it, analyzed windows and door structure, laser scanned, completed drawings and then did hypothetical proposals for adaptive reuse of the building. And now I understand that the county and the city are actually having it appraised and hopefully there will be some further activity that someone will be able to use the building and continue to have that major building for downtown Lubbock. It represents our heritage of this area, which we don't have a lot of significant architecture buildings.*

**Smith:** Professor Louden and her students have examined various buildings at historic ranches in West Texas to offer advice to ranchers on how to preserve the structures. She also has been called by small area museums to analyze buildings to determine the appropriateness for the community's planned use. Her students have also worked on buildings in downtown Fort Worth. Dr. Louden says sometimes students aren't as excited about her class because they will not work on "new" designs, but those feelings quickly change.

**Louden:** *I very rarely see someone who doesn't learn to appreciate that building or see peoples' appreciation and their own, like a small community, the passion they have for their heritage. They feel like they are really contributing and they learn to open their eyes and see what's really around them rather than passing by just an old building they think has no value. So it's a really amazing transformation to see them begin to enjoy and see potential in what is already in existence.*

**Smith:** The most visible project she's ever worked on was the Statue of Liberty. In 2000, the college acquired a laser scanner. Because of previous work with the National Park Service, architecture professor John White was asked if he would be interested in using the scanner on the monument.

**Louden:** *There were no accurate measurements of the exterior of the Statue of Liberty at that time. They had engineering drawings of the interior so we then planned our trip, got the budget,*

*got the grant from the park service and planned our trip.*

**Smith:** The team's efforts were interrupted by the tragedy on September 11, 2001, but they were able to resume work in 2008.

**Louden:** *So from that over the next two years we created about 43 sheets of architectural drawings of the whole site to the concessions building and the administration building, the whole fort, all the facets of the fort walls. They wanted every rock and every joint precisely measured and drawn and so we finished that in about 2010 and submitted that and it goes to the national park service eventually to be archived in the Library of Congress.*

**Smith:** Dr. Louden found her passion after struggling for a while at the beginning of her career. Her best advice to new faculty members is: focus!

**Louden:** *When I first started teaching I really bounced around between a lot of different things trying to find where my niche was and where I could contribute and someone finally advised me to get focused and stay focused and that was the best advice that I think I have ever had.*

**Smith:** Professor Louden shares her expertise in historical preservation with County Historical Commissions & local Heritage Societies across the South Plains. She also works on historical research for the National Register of Historic Places nominations.

We want to congratulate Professor Elizabeth Louden for her excellent work as an integrated scholar at Texas Tech. Her teaching and her passion for historical preservation provide her students with not only hands-on architectural experience but also with an insight into the emotion that people have for their history and their culture.

Thanks for listening! I'm Bob Smith.

**Pierce:** Finally, Texas Tech has been named to *G.I. Jobs Magazine's* list of Military Friendly Schools. The list honors the top 20 percent of colleges, universities and trade schools that are doing the most to embrace America's veterans as students. This is the third consecutive year that Texas Tech has made the magazine's list.

That concludes this edition of AcademiCast. Thanks for listening! I'm Rachel Pierce.