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Texas Tech University
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Butler: Sandia National Laboratory is moving its wind energy test facility to Texas Tech and the university creates a new bachelor's degree in wind energy – these stories top this edition of Academicast.

I'm Kristina Butler.

Texas Tech and Sandia National Laboratories will operate a facility that will primarily perform research and development work in turbine-to-turbine interactions and will evaluate innovative rotor technologies. The facility is expected to be operational sometime in the spring of 2012. The parties will finalize their agreement over the next few months.

John Schroeder, director of the Texas Tech Wind Science and Engineering Research Center says this partnership builds on the university's 40 year history in wind engineering.

Schroder: *It's a pleasure to work with a great partner like Sandia National lab and merge our expertise in wind science and atmospheric science with their expertise to build a great partnership for years to come that will serve society greatly as wind energy evolves and takes over a larger portion of our electrical demands in the future.*

Butler: Group NIRE is a third partner in the project and will provide direct pathways for technology transfer to industry. Group NIRE will install additional megawatt-scale wind turbines at an adjacent site for testing and collaboration.

Texas Tech University will begin offering this fall a one-of-a-kind Bachelor of Science in Wind Energy degree program. The program will provide a multidisciplinary curriculum with courses ranging from design, construction and policy to atmospheric science and research. Graduates will be prepared to fill a variety of positions in the wind energy industry, such as weather forecasting, or working as a financial analyst or government liaison.

Texas Tech's Institute of Environmental and Human Health recently received a 1-point-1 million dollar research award from the U.S. Army's Research, Development and Engineering Command to continue its work in countermeasures to chemical and biological threats. Institute director Ron Kendall says the program has received about 24 million dollars in funding since its inception in 1999.

Kendall: *It's a very unique opportunity for a university setting to play a key role in the nation's leading operation at the Edgewood Center to protect us against chemical and biological threats.*

Butler: One of the objectives of the army program is to take the technology developed for the military and make it available to civilian first responders.

Our integrated scholar has always had a passion for nature and for art. Susan Tomlinson has found a way to combine the two in an interdisciplinary studies program in the Honor's College. Provost Bob Smith talks with her about how she encourages her students to look beyond the classroom.

Smith: Professor Susan Tomlinson serves as Director & Associate Professor of Environment & the Humanities in the Texas Tech Honors College, where she specializes in interdisciplinary studies that integrate literature, history, philosophy & science.

While on the faculty at Texas Tech, Professor Tomlinson has been honored for her outstanding accomplishments, including her designation as one of 12 Integrated Scholars in 2010.

She has also been inducted into the Texas Tech Teaching Academy & has received several awards including the President's Excellence Award in Teaching & the Honors Faculty Member of the Year award.

Professor Tomlinson teaches a mixture of courses revolving around the concepts of natural resources and sustainability.

As a professor working extensively with honor students, she says one of her aspirations is to encourage students to explore beyond the classroom and taking risks when learning...

Tomlinson: *What I want is for them to be willing to explore rather than hewing directly to a line of, 'If I do this thing and that thing then I will get my A.' Instead, explore a little bit, and take some risks academically, and try things that you might fail at. I think we learn more that way, and it certainly broadens our horizons.*

Smith: From completing her bachelor's degree in studio arts to obtaining a master's & P-H-D in geology, Professor Tomlinson proclaims a life long interest in the arts & sciences. This background has served her well in leading the Honors Environment & Humanities degree program in the Honors College...

Tomlinson: *I have always had a life-long interest in the arts and in painting and drawing, and also in the sciences. So, I went to school and got an undergraduate degree in painting, in art, and got out of school and worked for a while and decided to come back and get a master's and Ph.D. in geology. So, I was still following twin passions as it were. Then this degree program came along, and at the time I was working at the Honors College, and they asked me if I'd be interested in directing it. I said I would. It really has been a lot of fun, and I've run into a lot of people like me who've had an interest in both things. And they're my age, and they say, 'I wish this degree program had been around when I was in school.'*

Smith: Within her scholarly area, Dr. Tomlinson pursues interest at the intersection of sustainability, community & connections to a place. Tomlinson says her teaching and research revolve around nature & human relations to it, & she enjoys sharing her passion through essays she has written & published on these topics.

A related work is entitled, *How to Keep a Naturalist's Handbook*, which has served as a prelude to a collection of essays, which she hopes to publish. Tomlinson says that the inspiration for most of her scholarly work is simply her local neighborhood right here in Lubbock...

Tomlinson: *My neighborhood is my inspiration. I think a lot about all of these things in relationship to my neighborhood. I think about how we connect to each other as a small community, as sort of a micro community. I think about how we teach and learn from each other in terms of issues of sustainability here in Lubbock. We have real water issues here in Lubbock, and I am interested in how we can create gardens that respect the environment we live in. Those two things lead to questions about how we connect to a place. A lot of people have a hard time connecting to Lubbock because they don't think of Lubbock as a very pretty place. And I think a lot about how people come to love a place and feel connected to a place.*

Smith: Dr. Tomlinson serves as a faculty advisor for Texas Tech Mortar Board & a mentor for the Freshman First Year Experience program. She is also involved in her neighborhood association.

Professor Tomlinson says her best advice to other faculty members on finding a balance among the components of an integrated scholar – research, teaching & service – is to try to find time for all three, but don't be so hard on yourself when things do not go according to plan...

Tomlinson: *I think that the hardest thing is to learn to cut yourself some slack when things don't go the way you plan, and I think you should try to figure out a plan for this amount of time for that thing and this amount of time for that thing. But things seldom go the way you think they're going to go. So just roll with the waves and do the best that you can.*

Smith: We would like to congratulate Professor Susan Tomlinson for her great work as an integrated scholar at Texas Tech. Her ability to serve as an effective scholar, teacher & outreach provider makes her worthy of our recognition.

Thanks for listening! I'm Bob Smith.

Butler: Thanks Dr. Smith

Fibertect[®], a decontamination technology developed by researchers at Texas Tech, is one of seven new innovations featured in the July National Guard magazine. The Georgia Guard tested Fibertect[®] and found that it cut down on the time needed to set up decontamination shower tents

and scrub affected people with water and decontamination solutions. When fashioned into a mitt, Fibertect[®] could be used to quickly wipe away contaminants.

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