

**AcademiCast Transcript**  
**Texas Tech University**  
**September 26, 2012**

Pierce: This is “AcademiCast”—Texas Tech University’s podcast series from the Office of the Provost. I’m Rachel Pierce, and I’ll be covering the top academic stories on campus. Later in the program, Provost Bob Smith will spotlight student of integrated scholarship Ximena Solis-Wever.

First, the news...

Academics from around the country recently gathered at Texas Tech for the Earth, Life and System Symposium. Speakers contributed their insights on topics of evolution and the environment. The two-day event was held in honor of the late professor Lynn Margulis, who taught at the University of Massachusetts and was a leading researcher in the study of evolution. Horn Professor Bruce Clarke, whose own scholarship focuses on literature and its interconnections with science, helped to organize the symposium. Clarke shares his thoughts about the event.

Clarke:

Pierce: The Earth, Life and System Symposium is part of the Haragan Lecture Series. To learn more about this event, please visit our website at [academicast.ttu.edu](http://academicast.ttu.edu).

In other research and academics news, the National Institutes of Health has awarded Texas Tech \$2 million to study oral vaccines. Chemical engineering professor Harvinder Gill is researching pollen grains and their potential as a means of delivering vaccines orally. Gill says this method aims to make oral vaccines more effective and painless than those administered by injection.

The university has awarded nearly \$600,000 to fund research in creative arts, humanities and social sciences fields. More than 50 TTU faculty members received rewards for their proposals. The awards are part of a second-year effort by Texas Tech to stimulate scholarship in these academic areas, which traditionally have limited access to external funding.

Along with a commitment to academics, Students of Integrated Scholarship pursue a course of lifelong study through their involvement in active learning experiences. Modes of active learning include internships, service learning, undergraduate and graduate research, and opportunities to study abroad. In this edition of “AcademiCast,” Provost Bob Smith spotlights Student of Integrated Scholarship Ximena Solis-Wever.

Smith: Ximena Solis-Wever has long been a dedicated student of integrated scholarship. She currently studies medicine at the TTU Health Sciences Center, but just a couple of years ago, Solis was busy finishing her bachelor’s degree in microbiology at Texas Tech. As an undergraduate, she placed great emphasis on excelling in her studies and engaging in active learning experiences. Beginning as a freshman, Solis spent much of her time conducting research in the laboratory of chemistry professor Dimitri Pappas.

Solis: I actually approached Dr. Pappas the first semester, and I started my training the second semester. So I got started early. I worked in the same lab for three and a half years. And getting

started early helped me get trained in my lab, and I was able to get three publications for different journals, and also since I was so well trained, I was able to have more complex projects towards the end of my career.

Smith: Additionally, Solis participated in the Honors College Undergraduate Research Fellowship Program for two years. Her experience working in the laboratory was vital when the time came to write her honors senior thesis.

Solis: The title of my thesis was “Microfluidic Investigations on Cardiomyocyte Hypoxia,” so we basically made heart attack conditions on a microscope slide. So we were able to study how the cells died and how they were affected in hopes that treatment would be better developed to help people who suffer from this condition as well.

Smith: Besides undergraduate research, Solis values her community service contributions. She has served as a volunteer at her church and at the Lubbock Heart Hospital. She has tutored high school students in math and science, and worked with an area food bank. Most importantly, she has been able to help her father in providing medical service to Guatemalans. Solis’s father is originally from Guatemala. He too studied at the TTU Health Sciences Center and now practices as a cardiologist in Lubbock. He often travels to Guatemala to volunteer his medical expertise—many times with his daughter, Ximena, alongside him.

Solis: We did kind of medical missions work in Guatemala, which is where I’m from. He does procedures for free whenever we travel over there, so I would just help him bring supplies and just, I would also observe a lot of his procedures too, so it was kind of like a double benefit, I guess, for me, because I was able also to help in the hospital and also watch the procedures as well.

Smith: Active learning experiences augmented Ximena’s undergraduate education and provided insight into her future career in medicine. As advice to other students who hope to follow the path of an Integrated Scholar, Ximena says get involved in research and service as soon as possible. That way, students can reap greater rewards from working with and serving others, as well as from cherished relationships with members of their university and civic communities.

Solis: You’re able to do more in your lab or in your service project if you get started early. So I think that’s really important. I was so thankful to have a mentor like Dr. Pappas. I got really close to my lab partners and other graduate students in the lab. And then also the Honors College was really helpful for me. It was kind of like a small home inside of Tech that really helped me achieve what I wanted to while I was there. So I think those were the main things that helped me out, and that I really, really treasure.

Smith: The contrarian but sage 17th Century Jesuit philosopher, Baltasar Gracián wrote in *The Art of Worldly Wisdom*: “So much depends on being a person of depth. The interior must be at least as impressive as the exterior. Some people's character is all façade, like houses that, due to lack of means, have the portico of a palace leading to the rooms of a cottage.” In Ximena Solis-Wever, we find—even at her relatively young age—a person of depth—achieved in part because of her integrated scholarship. Indeed, by engaging in active learning opportunities that sought to better the lives of others, Ximena has been richly compensated in wisdom and experience, which seem to have inspired her successful medical studies. After graduation from medical

school, she intends to pursue a residency in internal medicine or surgery, and then specialize in cardiology or cardiothoracic surgery. At “AcademiCast” we wish Ximena all the best as she continues to advance through a life committed to integrated scholarship!

Pierce: Thanks, Dr. Smith!

If you would like to learn more about Texas Tech’s Students of Integrated Scholarship, please visit our website at **[academicast.ttu.edu](http://academicast.ttu.edu)**

Finally, “AcademiCast” would like to recognize the Texas Tech School of Law, which opened its doors 45 years ago. When classes began in 1967, the law school had enrolled 72 students and was led by Dean Richard Amandes. Today, nearly 700 students are enrolled at the law school, with Dean Darby Dickerson at the helm.

That concludes this edition of “AcademiCast.” If you would like to learn more about the stories featured here, please visit our website at **[academicast.ttu.edu](http://academicast.ttu.edu)**. Thanks for listening, and join us again in two more weeks for the latest academic news from Texas Tech University.