

**AcademiCast Transcript**  
**Texas Tech University**  
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Irlbeck: This is AcademiCast—Texas Tech University’s podcast series from the Office of the Provost. I’m Scott Irlbeck, and I’ll be covering the top academic and research stories on campus. Later in the program, Provost Bob Smith will spotlight Integrated Scholar Guy Loneragan. First, the news...

The Office of the Vice President for Research has launched the fall edition of its magazine, Texas Tech Discoveries. This issue spotlights autism and the work of Texas Tech’s Burkhart Center for Autism Education and Research. Kristina Butler leads the production of Texas Tech Discoveries as the office’s associate director of research and academic communications.

Butler: The Burkhart Center for Autism Education and Research in the College of Education, is the premier center in West Texas for autism education, research and outreach. We wanted to showcase the ways in which the center is growing to meet the needs of families affected by autism -- through adult transition programs, community outreach services, evidence-based interventions for children and other major research initiatives. We also wanted to introduce the state-of-the-art facility that will be complete next fall. The Burkhart Center is truly on the cutting edge of autism research.

Irlbeck: The magazine also features articles on nanophotonics research, climate change, and the scholarship of Texas Tech faculty.

Butler: The purpose of Texas Tech Discoveries is to inform our readers about the ongoing research, scholarship, and creative activity taking place at the university, through multimedia and engaging content. In the fall edition, you can find profiles and videos of our distinguished researchers, students and alumni, as well as the latest research stories, news briefs, book announcements and more. As an emerging research institution, it is important for us to tell the stories of our scholars in all disciplines, from the physical and social sciences to the arts and humanities.

Irlbeck: Texas Tech Discoveries is released each spring and fall. You can read the latest edition at [texastechdiscoveries.ttu.edu](http://texastechdiscoveries.ttu.edu).

In other news, the College of Human Sciences has established Community, Family and Addiction Services as a standalone department. The college said the move ensures its ongoing success amid increasing interest by undergraduates in the community, family and addiction services major. The college also intends to expand its offerings for graduate students in the marriage and family therapy program and in the addictive disorders and recovery studies program.

Recognizing standout faculty in the Texas Tech University System, the Chancellor's Council presented its Distinguished Teaching and Research Awards. The council honored 15 faculty members for excellence in teaching and in research. Seven professors from Texas Tech were commended for their achievements, including psychology department chairman and Integrated Scholar Lee Cohen, as well as personal financial planning professor and director of the Red to Black outreach program Dorothy Durband.

Integrated Scholars dedicate themselves to a course of lifelong learning. Their emphasis on teaching, research and service helps to promote scholarly engagement. And in doing so, Integrated Scholars advance Texas Tech's role in educating, serving and inspiring others to pursue a path of lifelong learning. In this edition of AcademiCast, Provost Bob Smith spotlights Integrated Scholar Guy Loneragan.

Smith: As a veterinarian and epidemiologist in the Department of Animal and Food Sciences in the College of Agricultural Sciences and Natural Resources, Professor Guy Loneragan studies ways of ensuring food safety in the beginning of the farm-to-plate continuum. His interests in epidemiology and food safety began early in life. Growing up, Loneragan helped his father—a veterinarian—in his medical work and in managing their family's ranch in Australia.

Loneragan: I really enjoyed working with him during the surgeries he would do, as well as working with the cattle. So that really influenced me to go and pursue a veterinary science degree at the University of Sydney in Australia. I then went to Colorado State, and I quickly learned that I liked population medicine. So looking at numbers, instead of looking at an individual, of why this cow is sick versus that cow, trying to understand why disease occurs more commonly in one group of cows, relative to another group of cows. So that really got me interested in population medicine and ultimately led to an interest in population medicine and public health. And so my interest really is understanding the farm-to-plate continuum and how we can do things along the way to help improve the safety of our products, so that people suffer less from foodborne illness.

Smith: Professor Loneragan's teaching and research at Texas Tech are focused on efforts to mitigate pathogenic *E. coli* and *Salmonella* species, along with antibiotic resistance. He works with several graduate students and in the process of their learning trains them in epidemiological methods and analyses.

Loneragan: We've all heard of *E. coli*, and there are some strains that can cause quite a severe disease in people. And what we're trying to better understand is how we can raise and harvest cattle in a manner that makes it less likely that *E. coli* contaminates beef. The other areas we work on are *Salmonella*, which is a similar type of thing to *E. coli*. And we're working on the very complex issue of antibiotic resistance, and this is a very contentious issue. What we're trying to do is better understand what drives

antibiotic resistance, and can we understand the risks associated with it, as well as some of the benefits associated with our existing practices.

Smith: In addition to his teaching and research, Loneragan and his colleagues in the College of Agricultural Sciences and Natural Resources have research partners throughout the US, as well as in Mexico, Honduras, El Salvador, Argentina, France, and Australia. Loneragan's work has caused him to serve on food safety committees of beef producers, along with work supported by pharmaceutical companies. Additionally, opportunities arise for him to interact with such organizations as the National Cattlemen's Beef Association and the Texas Cattle Feeders Association, as well as with industry stakeholders and legislators.

Loneragan: I work with people like Dr. Mindy Brashears, Dr. Kendra Nightingale, Dr. Mark Miller, and so forth. Collectively, we have projects in many parts of the world, so we do work with a variety of people all around the world because food safety is an issue that faces everyone regardless of developed or how large or how small your country is. Food safety is important.

Smith: Loneragan has achieved much as a professor of epidemiology and believes that he would not have been as successful if he hadn't felt inspired in his efforts. Thus, he advises less experienced faculty colleagues to not only look for what inspires them but also remember to be patient, persevering and open to challenges.

Loneragan: I grew up around animals, around a cattle ranch in an agricultural family, and I really enjoy working with people who are producers in agriculture. And I gain a lot of experience, and a lot of motivation and inspiration from them because they're really trying hard to do a good job to provide a safe, wholesome food, and I want to help them.

Smith: Quincy Jones (1933- ), the renowned composer, arranger and musician, noted: "Imagine what a harmonious world it could be if every single person, both young and old, shared a little of what he is good at doing." Through his work in academia—through his outstanding teaching, research and service—Professor Guy Loneragan has had the opportunity to make a direct impact on the lives of students, his colleagues and societal partners committed to food safety. These efforts have earned him a place in the TTU annals of Integrated Scholars. And, Professor Loneragan's continued work in epidemiology ensures that Texas Tech's reach extends around the world. Thanks for listening! I'm Bob Smith.

Irlbeck: Thanks, Dr. Smith! 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). Join us again next week as we spotlight the top academic and research news from Texas Tech University, as well as profile Integrated Scholar Audra Morse.