

AcademiCast Transcript
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Irlbeck: Pacific Ocean whales under study in West Texas.

Hello everyone, I'm Scott Irlbeck, and this is *AcademiCast*, brought to you by Texas Tech University.

Texas Tech whale researcher Dr. Celine Godard-Codding says she and others have found evidence of exposure to contaminants in Pacific Ocean-dwelling sperm whales. The biomarkers for the contaminants, including polycyclic aromatic hydrocarbons, or PAHs, and organic pollutants, such as the pesticide DDT, were higher in whales near the Galapagos Island's marine reserve compared to whales located in waters around more industrialized regions. The findings were surprising to the researchers, but Dr. Godard-Codding says they do not prove the animals came in contact with manmade contamination or industrial waste, but rather exposure to a compound, either manmade or naturally produced.

Godard-Codding: *We don't know for sure if it was higher levels of the biomarker actually indicating higher levels of contaminants in those whales going into the food chain. It tells us we should pay attention to further study to ascertain if that is the case or not.*

The study was published in *Environmental Health Perspectives*, a peer-reviewed journal.

Irlbeck: A Texas Tech researcher will receive an honorary fellowship from the world's largest textile and fiber association. Dr. Seshadri Ramkumar, manager of the Nonwovens and Advanced Materials Lab at Texas Tech's Institute of Environmental and Human Health (TTIEHH), will be given the award by The Textile Association in India January 28th. Since 1946, only 57 people have been honored with the fellowship. Dr. Ramkumar and his team have been recognized in developing the Fibertect® cotton wipe, a decontamination wipe used by the military. The technology has also been used to absorb and clean up oil slicks along the Gulf Coast.

We continue with our integrated scholar features. Dr. Anisa Zvonkovic is one of those Texas Tech scholars who's honored for her work in teaching, research and service. Provost Bob Smith has more with Dr. Zvonkovic and the work she does in Texas Tech's College of Human Sciences.

Smith: Dr. Anisa Zvonkovic is a bright star in the field of Human Development and Family Studies. She has been a leader in research studying the challenges people face in balancing work and family life, especially when their jobs require considerable travel—something many professionals face today.

Zvonkovic: *The major project that I'm working on is my study of families in which one of*

the family members has a job that requires them to travel, so it's the work-travel-family project. It's funded by the National Institutes of Health. We try to sample according to the occupations people hold, but we interview everyone in the family who's old enough to carry on a conversation with us, so anyone from 8 years of age and up. We talk to spouses and the traveler and the children. So that's my current project. It's a major project, and it takes a lot of time commitment.

Smith: All professions require people to find a balance in their lives among work, family and other obligations, especially professions that require more time away from home. This makes Dr. Zvonkovic's research very important, as many professionals and families have to strive for and work at finding that balance.

Zvonkovic: *I've studied flight attendants, non-profit aid and adoption workers and high-tech consultants. Before that, I studied commercial fishing families and long-haul truckers. So, with this interest in having to be away from your family and how that relates to your everyday life and their life in your absence, then how you reconnect and how does that actually happen. In a lot of ways, it's interesting, because people in that situation can talk about what it's like to come together in a way that people who work 9-5 and see each other in the evening don't really talk about. They experience periodic being away and coming back, but it's hard for them to really focus on that. So, it gives me kind of a window to how people connect and how they are independent.*

Smith: In addition to teaching undergraduate courses about family interactions, Dr. Zvonkovic works closely with her master's and doctoral students by mentoring them through research projects and teaching them in graduate theory courses.

Zvonkovic: *In Human Development and Family Studies, we use theories of the psychological traditions and the sociological traditions. So, what that means is we have to be really conversive in all of those fields and in all of those activities. So, I have taught family theory and also have taught a doctoral level course on theories in both of those areas and how they can be integrated and how that relates to the methodology that we then use to study families.*

Smith: Dr. Zvonkovic's service to her profession includes her work on editorial boards and her work in establishing a new journal in family theory. She is also active in the National Institutes of Health, where she has served as a member of review panels of the National Council of Family Relations. As if that weren't enough, she is involved in the community as well, serving the South Plains Food Bank, getting people involved in the political process through the West Texas Organizing Strategy, and working with the Women's Protective Services. Her expertise in human sciences helps her personally in finding balance in all that she does.

Zvonkovic: *Because I do study work and family life, I am keenly interested in making sure that people have an appropriate balance and aren't all work, and also that they share their family load and burden as well. I do think it's important to model for our graduate students who are going to be professionals and scholars that they can do that as*

well. I think graduate school can be tough, and also being an untenured faculty member can be tough, especially for people who don't have a family. So I think it's important to create a warm atmosphere where people feel they can thrive in those settings.

Smith: Congratulations to Dr. Zvonkovic and all of our integrated scholars for their achievements at Texas Tech and beyond. Thanks for listening! I'm Bob Smith.

Irlbeck: Thanks, Dr. Smith. Texas Tech is finding ways to help advance science and math education in many departments across campus. Texas Tech Education Professor Walter Smith recently traveled to China to learn about science education trends and how to design and implement more science training for children in grades K-12. He attended the conference with the National Science Teacher's Association (NSTA). The association helps get more people talking about science and training future teachers, such as those right here at Texas Tech.

Walter Smith: *The NSTA has an initiative that's called the John Glenn Center, and the John Glenn Center has a number of purposes, one of which is to recruit more people into teaching. The second purpose is to improve the science-teaching ability of those that we do have in the classroom. But, a third part of that initiative is something called Science Matters, and in Science Matters, our hope is that around the metaphorical dining room table all across the country when mom and dad say, 'What did you do in school today?', that they'll be as likely to talk about what they did in science as much as what they did in reading and mathematics.*

Irlbeck: I'm Scott Irlbeck for *AcademiCast*.