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Enright: Hello and welcome to AcademiCast – Texas Tech University's biweekly podcast series from the Office of the Provost. I'm Jason Enright, and I'll be covering the top academic stories on campus. Later in the program, Provost Bob Smith will spotlight Integrated Scholar Michael O'Boyle, a professor of human development and family studies.

First, the news...

The spring semester is underway at Texas Tech. And to invigorate students' interest, many professors are adding Twitter as a social media component in their courses. A couple of instructors, such as professor Ruben Quesada, find that social media is a helpful teaching tool. Quesada has students tweet about his poetry class and their homework.

Quesada: Twitter allowed me to connect to other people that were interested in the same topics as I was. So I thought if I incorporated Twitter into a poetry class, I might find a way to get my students more engaged in poetry.

Enright: Professor Courtney Meyers also uses Twitter in her agricultural communications classes.

Meyers: A lot of our students want to work for public relations or marketing firms, and there are those out there who specialize in social media. We talk a lot about how Twitter can be integrated in your social media plan in communications efforts as a social monitoring tool. It's a great way to find out what people are saying about your organization – good and bad.

Enright: In addition to Twitter, professors are using social media sites like Facebook, YouTube, and LinkedIn to supplement their curriculum and connect outside of the classroom.

For even younger Red Raiders, Texas Tech is now enrolling children in its Super Saturdays academic enrichment program. Children in kindergarten through sixth-grade can come to the university campus to learn about an assortment of topics, including art, paleontology, robotics, and Spanish. The program runs for four straight weeks, beginning February 11th. Classes are offered through Texas Tech's Institute for the Development and Enrichment of Advanced Learners.

Texas Tech's Personal Financial Planning program is spotlighted online and in the current printed issue of SmartMoney magazine. The article, titled "Can These People

Teach Financial Planning?" considers the impact that academic programs have on the field of financial planning.

The Texas Tech Foundation added more than \$4 million to its scholarship pool for undergraduates at Texas Tech. Nearly 80 donors answered the foundation's call in a matching gift challenge prior to the end of 2011. Their donations were matched by funds from the estate of Willis Philips, a businessman from Borger, Texas. That sizable gift followed United Supermarkets' \$3 million offering, most of which went to endow graduate fellowships and undergraduate scholarships at the university.

Michael O'Boyle is a professor of human development and family studies in the College of Human Sciences. He has also been involved in administration, serving as the college's assistant and associate dean and as interim director of the Texas Tech Neuroimaging Institute. Provost Bob Smith spotlights the teaching, research and service of Integrated Scholar Michael O'Boyle.

Smith: Professor Michael O'Boyle is an expert in the area of cognitive neuroscience. He studies how the brain mediates higher-order mental processes such as perception, memory and language. Professor O'Boyle came to the field of cognitive neuroscience after first developing an interest in psycholinguistics, which involves study of the psychological factors of human communication.

O'Boyle: I was interested in how people used different kinds of sound patterns to express their thoughts, ideas and emotions, so I studied language as a kind of formalism. And I got pretty good at that. And it was just a skip and a jump then, of course, to think about people who suffered a brain injury, who experienced some sort of language loss, and then tying the two fields together, that is brain science, with what I was initially interested in, which was psycholinguistics. So that kind of avenue sort of led me not to just image the brain of people who were using language or having trouble with language, but rather to investigate all kinds of things that higher-order cognition might be doing as it relates to brain function.

Smith: After receiving a bachelor's degree in psychology from Loyola University, Professor O'Boyle pursued graduate work in psychology and neuroscience. He earned a doctorate from the University of Southern California and went on to teach at Iowa State University and the University of Melbourne in Australia. In 2004 O'Boyle arrived at Texas Tech, where he has carried on his brain research at the Texas Tech Neuroimaging Institute.

O'Boyle: My focus has been and continues to be how the brains of exceptional individuals operate. And when I mean "exceptional" and say "exceptional," I actually am referring to individuals who are extremely able, like they're math talented or they're gifted beyond perfect scores on the GRE math exam. So they're either exceptional in the sense that they're extremely able or in some way, shape or form, they're disabled.

Interestingly enough, over the years that I've been doing this work, those math-gifted types, in particular, share a lot of characteristics brain-wise with people who are high-functioning autistic, suggesting that in some way, shape or form disability and genius are a lot more alike from a brain sort of point-of-view than they are different.

Smith: Professor O'Boyle is also conducting research on binge drinking.

O'Boyle: This has a particular relevance, I think, for university towns or universities or colleges. We know a lot about how chronic alcohol impacts on brain function, but what we don't know a lot about is how these binge events have an impact on, particularly, the developing brain. And believe me, adolescent and college student brains are still developing – it's part of why they're here. They're gaining an education, for example, which is a component of brain development. And so we're getting some insight into impulsivity, binge drinking, brain function and self-control – those kinds of things that are going on. College students are developing brains. We don't want to set any kind of circumstance in which their brain capabilities are somehow being compromised by the things they do while they're trying to get a college degree.

Smith: Through his appointment as a professor in human development and family studies, O'Boyle teaches courses that complement his research.

O'Boyle: I've taught several types of courses at different levels, but most of them have to do with language and/or brain, in some way, shape or form.

Smith: Similarly, Professor O'Boyle's work at the Texas Tech Neuroimaging Institute has a role in his service efforts.

O'Boyle: Community service is an important part of the Texas Tech Neuroimaging Institute. One of our goals, for example, is to draw in the medical community. So physicians, researchers, rehabilitation people, clinical therapist types, all of those who have an interest in brain activity as a mediator for whatever cognitive or behavioral phenomenon they're interested in usually have an interest in being around some way to image what that brain looks like. So our intention is to have a series of open houses here at the institute, in which people from the community can come over, have a little refreshment, take a look at the magnets, see what we can do in terms of imaging, and so on and so forth, to kind of prompt ideas with regard to community research involvement. So the local hospitals, some of the private practice individuals have all expressed some interest in being part of this in one way, shape, or form. So the TTNI is very much interested in having that occur.

Smith: For faculty who also want to make a contribution through their teaching, research and service, Professor O'Boyle recommends that they put their all into what they are doing.

O'Boyle: The basic principle is work as hard as you possibly can, do the best you can, and things tend to take care of themselves. They seem all overwhelming and from multiple directions like you're going to be absolutely buried, but if you hang in there, work hard and give it a chance, more often than not, your hard work and dedication will override whatever those impending disasters seem to be.

Smith: Likewise, Professor O'Boyle has maintained a strong work ethic and a focus on Integrated Scholarship. His commitment to cognitive neuroscience has strengthened individuals and communities as well as enriched our understanding of the world of human communication and well-being.

Thanks for listening! I'm Bob Smith.

Enright: Thanks, Dr. Smith! You can learn more about Professor O'Boyle and other Integrated Scholars by visiting our website at academicast.ttu.edu.

And finally, AcademiCast would like to congratulate Cody Zilverberg, a doctoral student in plant and soil science, for winning first place in the American Forage and Grassland Council's Emerging Scientist Competition. Zilverberg's research was titled "Fossil fuel use and associated carbon emissions of a long-term grazing experiment." Dow AgroSciences sponsored the competition.

That concludes this edition of AcademiCast. If you would like to learn more about our program or the stories feaured here, please visit our website at **academicast.ttu.edu**. Thanks for listening and join us again in two more weeks for the latest academic news from Texas Tech University.