

SPOTLIGHT ON Texas Veterinary Medicine

Advancing animal health and welfare through research

Research, discovery, and innovation: a novel PhD in One Health Sciences

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In the fall of 2021, the School of Veterinary Medicine (SVM) at Texas Tech University (TTU) welcomed its inaugural class of veterinary students. This comprehensive, innovative, and fully funded DVM program was established in 2018, making it the second publicly funded veterinary education program in Texas. The purpose of the TTU SVM is to serve the veterinary educational and veterinary service needs of rural and regional communities of Texas and to provide access to affordable high-quality education.

The School also set about to become a research-intensive program. Consequently, the School's commitment did not stop with the DVM program. Just 1 year after welcoming its inaugural class, the school launched a PhD in One Health Sciences following approval from the Texas Higher Education Coordinating Board (pending approval from the Southern Association of Colleges and Schools Commission on Colleges). The SVM's innovative and novel PhD in One Health Sciences is the first of its kind in the United States.

The goals of the competency-based PhD in One Health Sciences are the following:¹

1. Train a new generation of scientists and leaders to address 21st-century societal problems with the One Health interdisciplinary approach.
2. Enhance animal, human, and ecosystem health by applying expertise, critical thinking, and systems thinking developed in a core curriculum and reinforced throughout discipline-focused electives.
3. Enable interprofessional research leading to discoveries benefiting populations at regional, national, and global levels.
4. Advance understanding of the determinants of disease in populations and provide solutions to enhance population-based medicine.
5. Provide entrepreneurial opportunities through innovation and discovery.

Located in Amarillo, Texas, the TTU SVM has 2 state-of-the-art facilities. At the academic headquarters, Amarillo Campus, the facility is approximately 185,000 square feet and includes 26,000 square feet of dedicated research laboratories, including shared equipment spaces. Within these facilities and in field-based research, the first cohort of 25 PhD



Inaugural cohort of students enrolled in our PhD in One Health Sciences.

students works alongside faculty to develop and implement research programs that align with the school's 5 interdisciplinary emphases: One Health; Disease Ecology, Prevention, and Management; Andragogical Scholarship; Sustainability of Animal Agriculture; and Molecular Mechanisms of Disease.

Texas Tech University recognizes that current public health challenges require an inclusive vision of—and interdisciplinary/interprofessional approach to—global health. Thus, graduates with a PhD in One Health Sciences will train the next generation of scientists with a broader vision of One Health, in which they identify the connection between animal, human, and ecosystem health, from local to global perspectives and everywhere in between. The program also incorporates traditional graduate training in discipline-focused critical thinking and a competency-based approach to curriculum development and evaluation. As a result, students will demonstrate proficiency in communication, collaboration, teamwork, leadership, systems thinking, and management for successfully addressing current and emerging One Health challenges.

Reference

1. Togami E, Gardy JL, Hansen GR, et al. Core competencies in One Health education: what are we missing? National Academy of Medicine. 2018. Accessed June 4, 2018. <https://doi.org/10.31478/201806a>

