



Montague-CTE Scholar (2014-15)
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**CENTER FOR
 TEACHING EXCELLENCE**
 TEXAS A&M UNIVERSITY

Development of VIBS/ENTO 426/626: Methods in Vector-borne Disease Ecology

A new high-impact class for undergraduate and graduate students from entomology, public health, epidemiology, veterinary medicine, wildlife sciences, and other disciplines.

Students work together to design, conduct, and publish original research based on field and laboratory-based investigations of medically-important blood-sucking vectors.



Tick-borne diseases are emerging worldwide in humans and animals. Students worked at the Sam Houston National Forest to live-trap raccoons and opossums, chemically immobilize animals, collect blood samples, and remove ticks for pathogen analysis.



Great-tailed grackles are a highly abundant invasive bird species. Students used elevated nets to trap birds at night from an urban parking lot to document infection with mosquito-borne viruses, Salmonella, and parasites.



Techniques from parasitology, serology, and molecular biology were used to analyze vectors and gather data for statistical analysis. Manuscripts were written and projects were presented at the end of semester.

Montague-CTE funds purchased field and laboratory equipment and allowed student travel to field sites across Texas. Additionally, funds were used to recruit guest lecturers to expose students to diverse vector-borne disease career paths in military entomology, academia, public health, human and veterinary medicine, and more.