

## SEMINAR ANNOUNCEMENT

### Dr. Michael Turell

**Location:** Rm. 440 Heep Center

**Date and Time:** Monday, March 4; 11:30am

**Zoom link:** <https://tamu.zoom.us/j/97061718476>

**Zoom meeting ID:** 970 6171 8476

**Hosts:** Drs. Tereza Magalhaes and Gabriel Hamer,  
Department of Entomology

**Food:** Pizza lunch will be available for free



#### Title and Abstract: **Vector and Arbovirus Studies in the Amazon Basin Region of Peru**

Viruses transmitted by arthropods (mosquitoes, sand flies, ticks, etc.) are called arboviruses. These include West Nile, dengue, yellow fever, Zika, and various encephalitis viruses and remain a significant cause of human and domestic animal disease, with 10s of thousands of human deaths caused each year. In order to predict, and hopefully prevent, disease caused by these viruses, we need a better understanding of how they are maintained in nature. This presentation will briefly provide an introduction to these viruses and how they are maintained in nature. That will be followed with the description of a study carried out in the Amazon Basin region of Peru to illustrate how these viruses are studied under field conditions and the various factors that affect the ability of mosquitoes to transmit these viruses. The results of the studies to include which species were found, when and where they were biting, and which viruses were isolated will be presented.

#### **Biography**

Dr. Michael Turell is a medical entomologist and arbovirologist who studies factors affecting pathogen transmission by arthropods. These include studies to determine the ability of selected mosquito and tick species to transmit viruses responsible for disease in humans, to assist in the development and safety testing of vaccines, and in the development of novel diagnostic assays. He obtained his BS and MS from Cornell University, served as a Medical Entomologist in the US Army for 5 years, then obtained an MPH from Tulane University followed by a PhD from the University of California – Berkeley, working with Bill Reeves and Jim Hardy. He then began a 34 year career at the U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD. He has over 230 publications that have been cited over 10,740 times with contributions to the areas of transovarial transmission, the influence of infection on behavior, arboviruses and hemoparasite interactions, vector competence of emerging arboviruses, argasid ticks as long-term reservoirs for arboviruses. In addition to laboratory-based studies, his work has included field-studies in Costa Rica, Belize, Peru, Kenya, Uzbekistan, and other countries. His extensive service career includes journal editing, numerous proposal review panels, and helping to train the next generation of medical entomologists and arbovirologists. He was also instrumental to the origin of the American Committee of Medical Entomology (ACME) which started in 1984, serving as secretary-treasurer for one term and as chair for two terms.



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