

2016 Whitney and Anna Harris Conservation Forum



Mosquitoes: Ecology, Disease Vectors, and Control

Thursday, November 10, 2016

The Living World, Saint Louis Zoo

5:30 p.m. Registration and Exhibit Viewing



Session 1: 6:00-6:30 p.m.

“Our companions: Mosquito ecology, invasions, and vector-borne disease”

Steven Juliano, Ph.D., Illinois State University

Steven Juliano is an ecologist with research interests in community, population, and behavioral ecology. Much of his work focuses on ecology of larval mosquitoes, and how competition and predation affect mosquitoes, particularly in small water-filled containers. His ecological research investigates processes contributing to the success and impact of invasive species, how species interactions affect life histories, how ecological processes acting on larvae can affect disease transmission by adult mosquitoes, and how principles and theory of basic ecology can inform efforts to limit mosquito-borne disease.



6:30-7:00 p.m.

“Mosquitoes as vectors of disease”

Kathleen Westby, Ph.D., MSPH, Washington University

Katie Westby is a vector ecologist with the majority of her research focusing on the mosquito vectors of Dengue, West Nile, and La Crosse viruses. Her research asks questions about how biotic and abiotic factors can influence a mosquito's ability to successfully transmit pathogens. She also uses mosquitoes as a model system to address questions in disease ecology, specifically the role of invasive mosquitoes and habitat quality on transmission of a native parasite.

Light Dinner and Exhibit Viewing: 7:00 -7:30 p.m.



Session 2: 7:30-8:00 p.m.

“Living in the Zika Latitudes: Mosquitoes, Pathogens, and History”

Gordon Patterson, Ph.D., Florida Institute of Technology

Gordon Patterson is a specialist in environmental history, modern European intellectual history (German and Austrian) with an interest in the history of science and technology and Florida history. His research activities focus on vector control and the history of mosquito control, and he is currently at work on a history of vector and mosquito control between 1970 and present. Some accomplishments worth noting include a 2004 publication in the University of Florida Press entitled *The Mosquito Wars: A History of Mosquito Control in Florida*, an April 2009 publication in Rutgers University Press entitled *The Mosquito Crusades: A History of the American Anti-mosquito movement from the Reed Commission to the First Earth Day*, and the 2010 Presidential Award from the American Mosquito Control Association.



8:00-8:30 p.m.

“Innovative ways to fight an old enemy”

Raul F. Medina, Ph.D., Texas A&M University

Raul F. Medina's research centers around the role that ecological factors play in the population genetics of arthropods and in the incorporation of evolutionary ecology considerations into pest control practices. His laboratory is currently assessing how species interactions at macroscopic and microscopic levels affect genetic variation of pest species.

Panel Discussion: 8:30-9:00 p.m.

Event is free and open to the public, but registration is required: Call: (314)-516-4246, or email: johnsa@umsl.edu

**Co-sponsored by: Whitney R. Harris World Ecology Center,
University of Missouri-St. Louis, Missouri Botanical Garden, Saint Louis Zoo,
and the Academy of Science-St. Louis.**