



# Rickettsial Determinants for Arthropod Infection and Transmission

**Kevin R. Macaluso, PhD**

Associate Professor, Pathobiological Sciences  
School of Veterinary Medicine, Louisiana State University

The increase in reported rickettsial infections globally coincides with the discovery of unfamiliar arthropod vectors, newly recognized rickettsial pathogens, and documented transmission potential of what have been considered to be rickettsial symbionts. Thus, the transmissibility of rickettsiae, vectorial capacity, and the classification of rickettsial pathogens can be considered variables contributing to emerging rickettsial infections. Using multiple *Rickettsia* species, we are examining the rickettsial determinants of vector infection and transmission. For emerging and re-emerging flea- and tick-borne rickettsial agents, recent studies have identified novel aspects of transmission biology.

**Tuesday, April 10, 2018**

**4:00 p.m.**

**Lecture Hall, Pat Roberts Hall**

**Biosecurity Research Institute**

*Light refreshments served at 3:30 p.m.*

**Co-sponsors:**



**KANSAS STATE  
UNIVERSITY**

Department of Entomology



*The Marty Vanier and Bob Krause  
BRJ Research Fellows Program recognizes principal  
investigators with ongoing projects at the Biosecurity Research  
Institute. The program's purpose is to foster interdisciplinary  
research, educational opportunities, and activities associated  
with research performed at the BRJ.*

**BRI**  
Biosecurity Research Institute

**KANSAS STATE  
UNIVERSITY**