Diana C. Outlaw, Ph.D.
Associate Professor
Mississippi State University

Thursday, February 7
11:20 am
SCI 1190

“Biodiversity and Diversification in Haemosporidian (Malaria) Parasites”

Diana works on research questions about biodiversity, evolution and diversification in malaria parasites. Some of her work has focused on big-picture questions about how malaria parasites have evolved and adapted to new host groups over their evolutionary history, for example: calibrating a molecular clock for malaria parasites, which showed that humans have lived and coevolved with these parasites for the last 2 ½ million years. And, she recently revised the evolutionary tree of all malaria parasites, which has altered our understanding of how malaria parasites have switched hosts and evolved. Her lab’s current projects involve field collection and surveys of birds and insect vectors of malaria, and use microscopy and molecular genetic, genomic and transcriptomic approaches. These projects include molecular mechanisms of diversification in malaria parasites, innate and adaptive immune responses to malaria parasite infection in birds, and an intense regional focus that involves surveys of avian Plasmodium and Leucocytozoon vectors in the South.