



**Candidate for Asst. Professor of
Mosquito Biology/Ecology position:
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Date: Monday, October 10, 2022
Time: 4:00 pm - 4:50 pm
Format: In-Person Seminar & Virtual Access
Location: Genomics Auditorium 1102A
Zoom: 938 1040 4405
Passcode: 833289

Title:

“Multifarious Malaria Mosquitoes - how diverse and diverging vector species complicate malaria control”

Abstract:

With the emergence of drug-resistant malaria parasites in Southeast Asia, understanding the role of diverse vector species and populations in the complex malaria transmission dynamics in this region is crucial to reduce and eliminate malaria. In a series of infection experiments, we showed that these parasites can infect diverse anophelines. In Cambodia, longitudinal field studies confirmed that there are multiple sympatric malaria vectors where these parasites are circulating that bite outdoors, feed on multiple hosts, and are abundant throughout the year.

To further understand these vectors, we performed a deeper population genomic analyses of several of these vector species, including *Anopheles minimus*, from multiple field sites in Cambodia over several years. These analyses have revealed distinct and diverging populations of *An. minimus* in Cambodia with strong signals of selection in the genome. These data will help us to better understand outdoor malaria transmission in Southeast Asia toward improved malaria control.

