

Speaker:

Karthikeyan Chandrasegaran Ph.D. **Assistant Professor** University of California, Riverside

Date: Monday January 13, 2025

Time: 4:00 pm - 4:50 pm

Format: In-Person Seminar & Virtual Access

Location: Genomics Auditorium 1102A

Zoom: 952 1906 3064

Passcode: 505445

Title:

"From Larval Ecology to Adult Host-Seeking: Network Approaches in Mosquito Transcriptomics"

Abstract:

Mosquitoes are critical vectors of diseases that threaten millions of lives annually. Their development in diverse larval habitats influences their adult behavior and vector potential. and female body size plays a pivotal role in host-seeking and reproductive traits.

In this talk, I will discuss how intraspecific competition during larval stages impacts adult females' host-seeking preferences and olfactory responses. I will delve into how networkbased approaches to transcriptomic data analysis reveal key 'hub genes' that mediate these behavioral links.

I will emphasize how these analytical methods provide deeper insights into the complex interactions between ecological factors and gene expression patterns. Finally, I will discuss how these findings form the foundation of my current research, which aims to uncover the molecular mechanisms driving mosquito behavior in wild populations.