## **DEPARTMENT OF ENTOMOLOGY**



Candidate for the position of Assistant Professor / Assistant Entomologist in the area of Genetics/Genomics of **Arthropod Vectors of Human Diseases:** Melina Campos, PhD

**Assistant Project Scientist** 

University of California Davis

Date: Thursday, March 14, 2024

10:15 am - 11:15 am Time:

In-Person Seminar & Virtual Access Format: Location: Genomics Auditorium, Room 1102A

983 6120 0167 Zoom:

Passcode: 818719

## Title:

"About Genetics, Populations and Mosquitoes"

## Abstract:

Around the world, mosquitoes transcend being considered merely as nuisances due to their bites; they play a crucial role in transmitting deadly diseases and profoundly impacting public health. In this research seminar, I will present insights from my work on the genetics and genomics studies of mosquito vectors responsible for human diseases. The subjects of my investigation include the invasive species Aedes aegypti, a vector of several viruses, as well as Anopheles darlingi and Anopheles gambiae, recognized as the primary malaria vectors in the Amazon Basin and Africa, respectively. My primary methodology involves employing a population genetics approach, which has evolved in complexity with the advancements in molecular biology tools over the years. Consequently, I have accumulated experience exploring extensive datasets of whole genome sequencing from field-collected specimens using a diverse set of bioinformatics tools. Furthermore, my research carries a translational component, aligning with ongoing efforts to conduct the first field trial for a genetically engineered mosquito in Africa.