



**Candidate for the position of Assistant Professor / Assistant Entomologist in the area of Genetics/Genomics of Arthropod Vectors of Human Diseases:
Lisa S. Baik, PhD**

Postdoctoral Researcher

Yale University

Department of Molecular, Cellular and Developmental Biology

Date: Monday, March 11, 2024

Time: 4:00 pm - 5:00 pm

Format: In-Person Seminar & Virtual Access

Location: Genomics Auditorium, Room 1102A

Zoom: 983 6120 0167

Passcode: 818719

Title:
“The sensory and circadian biology of dangerous disease vectors”

Abstract:

Mosquitoes are dangerous disease vectors that impose an enormous burden on global health. The taste system and circadian system control many critical insect behaviors but are greatly understudied in mosquitoes. In this seminar, I will discuss how taste and circadian systems of mosquitoes regulate critical behaviors that ultimately contribute to the spread of dangerous diseases. I will describe (i) the basic organization of the mosquito circadian and taste systems, (ii) how taste stimuli are encoded, (iii) how taste cues influence several behaviors including biting, feeding, and egg laying, (iv) how mosquitoes encode for complex human cues, and (v) the transcriptomic profile of taste organs. By better understanding and exploiting the sensory and circadian systems of dangerous vectors, we may be able to yield novel methods of controlling the spread of deadly pathogens.