UC RIVERSIDE

DEPARTMENT OF ENTOMOLOGY

ENTM250 Seminar Series

Speaker:

Franne Kamhi
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Neuroscience Department
Oberlin College

Date: Monday, May 02, 2022
Time: 4:00 pm - 4:50 pm
Format: Virtual Seminar

Zoom: 948 0131 1028
Passcode: 347039

Title:

"The neural basis of nocturnal navigation in Australian bull ants"

Abstract:

Successful navigation is crucial for finding mates, foraging, defending territories, and avoiding predators. Visual landmarks can provide reliable information about an animal's location in space and the direction to a goal. Even with miniaturized brains, ants are exceptionally accurate at visually navigating and pinpointing locations of interest; however, several species are active exclusively at night when the visual signal-to-noise ratio is low. I will first discuss the neural adaptations that support visual behavior in dim light conditions, taking advantage of the diversity of temporal niches in Australian bull ants (*Myrmecia*). I will then discuss how the mushroom body vertical lobe, a brain region involved in integrating sensory information, is necessary for retrieving visual memories for successful view-based navigation in the nocturnal bull ant *Myrmecia midas*.

Refreshments will be served in the Entomology Building Courtyard at 3:00pm