



# RIVERSIDE

DEPARTMENT OF ENTOMOLOGY

ENTM250 Seminar Series



## Speaker:

Meghan Barrett

PhD in Biological Sciences, Drexel University

**Date:** Monday, March 06, 2023

**Time:** 4:00 pm - 4:50 pm

**Format:** In-Person Seminar & Virtual Access

**Location:** Genomics Auditorium 1102A

**Zoom:** 938 1040 4405

**Passcode:** 833289

## Title:

“Bugs on the brain: Sensory evolution and plasticity in insects”

## Abstract:

How do insect nervous systems support behavioral or environmental specialization - across species, between individuals, or throughout the course of an organism's life? This talk will address the relationship between neural investment patterns and environments or behaviors that vary in sensory demands. The talk will cover 1) the impact of nocturnality on brain allometry in paper wasps; 2) correlations between intraspecific behavioral variation in sensory mate location strategy and variation in peripheral neuroanatomy in dimorphic, solitary male bees; and 3) plastic changes in termite brain regions associated with visual information, in *expectation* of novel environments. These examples demonstrate the capacity of the nervous system to support a variety of sensory specializations, on evolutionary or plastic timescales.

*Refreshments will be served in the Entomology Building Courtyard at 3:30pm*