



COLLEGE OF
ARTS AND SCIENCES
CASE WESTERN RESERVE
UNIVERSITY

Case Western Reserve University
Department of Biology
Cleveland, OH 44106-7080
Phone: (216) 368-3557 /Fax: (216)368-4672



via Zoom and in person in Clapp 108
Lecture open to University and Affiliates

Department of Biology Seminar Series Presents:

“Functionally stratified encoding in a biological gyroscope”

Bradley Dickerson, PhD

Assistant Professor

Neuroscience Institute

Princeton University

Meeting ID 931 2408 6897

Passcode 586645



“Although longstanding hypotheses suggest that these different arrays may provide different information relevant to flight control, we know little about how haltere sensor location maps to physiology and behavior. I will discuss ongoing work in which we use a genetically encoded calcium indicator to visualize activity changes in the mechanosensors embedded in the haltere during active, visually mediated flight. I will also address how we are exploring the mechanisms by which mechanosensory input is recruited using reverse correlation analysis. Finally, I will cover our initial forays into connectomics and our development of an atlas describing the structure-function relationship between rapid mechanosensory feedback and motor systems.”

Thursday, February 9, 2023, 4pm