

# Biology Seminar



Western  
UNIVERSITY • CANADA

12:30 - 1:30 pm  
Friday, October 30, 2020  
Seminar to be held via ZOOM



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Department of Neuroscience  
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## Feeding, sleep, and microbial interactions affect *Drosophila* nutrition

The Ja lab uses *Drosophila melanogaster* as a model for dissecting the genetic and neural mechanisms of aging, behavior, and disease. We have recently developed the Activity Recording CAFE (ARC) that enables simultaneous measurements of food intake and motion from individual flies, allowing us to study the dynamic interactions between feeding and sleep. The ARC complements existing assays for quantifying feeding behavior that we have used to: 1) investigate the neurobiology of prandial behavior, including meal size control; 2) identify the leucokinin system as a key regulator of postprandial sleep; and 3) characterize the contribution of fly-associated microbes to host nutrition.