Biology Seminar

Western
UNIVERSITY · CANADA

12:30 - 1:30 pm
Friday, September 6, 2024
BGS 0165

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Adaptive sensorimotor control of walking in fruit flies and snow flies

In Part I of my talk, I will show that descending signals from the *Drosophila* brain predictively inhibit leg proprioceptor axons during walking. Predictively suppressing expected proprioceptive feedback caused by self-generated movement increases sensitivity to unexpected external perturbations. In Part II, I will discuss extreme cold tolerance in the snow fly (*Chionea*), a native of the Pacific Northwest. I will present evidence that snow flies can sustain coordinated walking behavior at internal body temperatures of -10° C.

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