

Speaker:

Catherine Loudon

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Date: Monday, November 13, 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:

"Bioinspired design: Microfabrication of surfaces for physical entrapment of insect pests inspired by plant microstructures on leaves from bean plants"

Abstract:

Bioinspired design can lead to novel technologies, and there are several interesting examples of this from studies of insects. In this talk, I will discuss our research on physical entrapment of insect pests such as bed bugs using a novel bioinspired method. The method is to entrap insect pests on a material inspired by the action of microstructures on the leaves of bean plants (plant trichomes). Bugs walking over the surface of a leaf become entrapped as their feet are pierced by small sharp hooks. This approach of physical entrapment would not require the use of chemical insecticides. There are societal benefits for the development of products that are sustainable and that minimize insecticide exposure for humans.