

SEMINAR

When Memory Guides Action:

From Bird Brains to Robotic Predators



Dr. Chelsey Damphousse

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Monday, November 16, 2026 | **4:00–5:00 PM** | **RNS 410** | **Snacks will be available.**

ABSTRACT

Dr. Damphousse will explore how animals use memory and past experiences to guide decisions, focusing on the hippocampus, a brain region essential to memory. She will discuss research comparing memory in birds and rats, including how researchers adapt memory tests across species and investigate how different regions of the bird hippocampus contribute to memory.

She will also examine how hippocampal activity relates to decision-making in rats as they forage for food while avoiding a robotic predator. By connecting comparative cognition and behavioral neuroscience, the talk will highlight how studying memory across species can deepen our understanding of how animals evaluate risks and rewards, respond to changing circumstances, and decide what to pursue or avoid.

SPEAKER BIOGRAPHY

Dr. ChelseyDamphousse (she/her) is a postdoctoral researcher at the University of Minnesota and an incoming Assistant Professor at Wilfrid Laurier University in Ontario, Canada. Her research combines behavioural neuroscience and comparative cognition to investigate how animals use memory to navigate changing environments and guide their decisions. Her work has taken her from studying memory and hippocampal function in birds to recording neural activity as rats forage in the presence of a robotic predator. Growing up in a farming family in rural Ontario, Chelsey followed her curiosity about the natural world into neuroscience, bringing with her the perspectives of a first-generation PhD and queer woman in science.

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