



Colloquium

The Social Behavior of Ants

Daniel Kronauer

Rockefeller University

Host: Lora Sweeney

The colonies of social insects are complex biological systems in which manifold interactions between individuals give rise to emergent properties that are adaptive at the group level. However, most social insects cannot be propagated in captivity or genetically manipulated, severely limiting the scope for experimentation. The Kronauer lab is developing and utilizing the clonal raider ant, *Ooceraea biroi*, as a new model species that overcomes many of these limitations, allowing them to study social dynamics and underlying mechanisms under controlled laboratory conditions. Their work has led to a deeper understanding of how ants within a colony assume distinct behavioral roles and efficiently divide labor, how they communicate, both as adults and across different developmental stages, and how these interactions result in collective behavior. Additionally, their research has shed light on how evolution has repurposed and expanded genetic, neural, and physiological mechanisms from solitary ancestors to produce highly social organisms. In this seminar, Dr. Daniel Kronauer will provide an overview of this work and discuss future directions in his research program aimed at understanding the evolution and organization of insect societies, spanning from genes to neural circuits and behavior.

Monday, April 20, 2026 11:30am - 12:30pm

Raiffeisen Lecture Hall



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.