

2023-2024 Faculty Colloquium Series

Tuesday, October 3, 2023, 1–2 pm Center for Teaching and Learning (LIB 139)

Squirreling Around for Science: Doing Authentic Research in Undergraduate Courses



Course-based Undergraduate Research Experiences (CUREs) are an inclusive way to engage more undergraduates in scholarship because all students in the course participate in authentic research. Compared to traditional teaching methods, CUREs may also better enhance intellectual independence and critical thinking because outcomes are unknown. Here, we present an overview of Squirrel-Net (http://www.squirrel-net.org), an NSF-funded network supporting four CUREs in the biology of squirrels. Because squirrels are easily observed and abundant across a range of habitats, including many campuses, they are an ideal system for student research in animal behavior and ecology. Additionally, the network connects classes and people: students contribute their data to nationally aggregated datasets to develop a shared resource, and courses from different institutions can connect through presentations and discussions. A preliminary analysis of student assessment data also suggests that Squirrel-Net modules help students to develop strong science identities. We will conclude our presentation with a discussion of course-based research in other disciplines and provide resources for faculty who might be interested in developing their own CUREs.