

BRENDAN BARRETT

Cultural inheritance in context: developing quantitative tools to understand how ecology and life history affect social learning in field research

A hyper-reliance on cultural transmission is central to the success of humans as the most widely distributed and behaviorally diverse vertebrate species on Earth. Despite a rich theoretical literature, analyzing empirical data about innovation and social learning can be challenging, as culture is a dynamic system where differences in individual behavior scale up to shape population-level patterns. Dr. Barrett will discuss hierarchical, Bayesian analytical approaches to analyze social learning data which link individual learning rules and social information use to population-level dynamics by fitting existing mathematical models of learning as statistical models. Using experimental and longitudinal data, they will demonstrate how behavioral context, ecology and life history shape individual innovation rates and the different social learning strategies organisms employ using white-faced capuchin monkeys as a comparative study system. Lastly, they will discuss how age-structure of a population can influence cultural dynamics.



Brendan Barrett is a biocultural anthropologist and evolutionary behavioral ecologist who is currently a postdoctoral researcher at the Max Planck Institute for Ornithology's Cognitive and Cultural Ecology Group and the Max Planck Institute for Evolutionary Anthropology's Department of Human Behavior, Ecology, and Culture. They earned their PhD in Animal Behavior from the University of California, Davis.