

Environmental influences on brain evolution in *Anolis* lizards

Abstract: The environment plays a crucial role in shaping animal behavior and its supporting neural mechanisms. In this talk, I will explore how structural habitat influences brain development, drawing on data from six species of Puerto Rican *Anolis* lizards. These findings reveal that the complexity of a species' habitat correlates with neuron density across multiple brain regions, suggesting that environmental demands drive neuroanatomical evolution. I will conclude by outlining future research aimed at applying this framework to investigate how environmental variation influences brain evolution in fish.