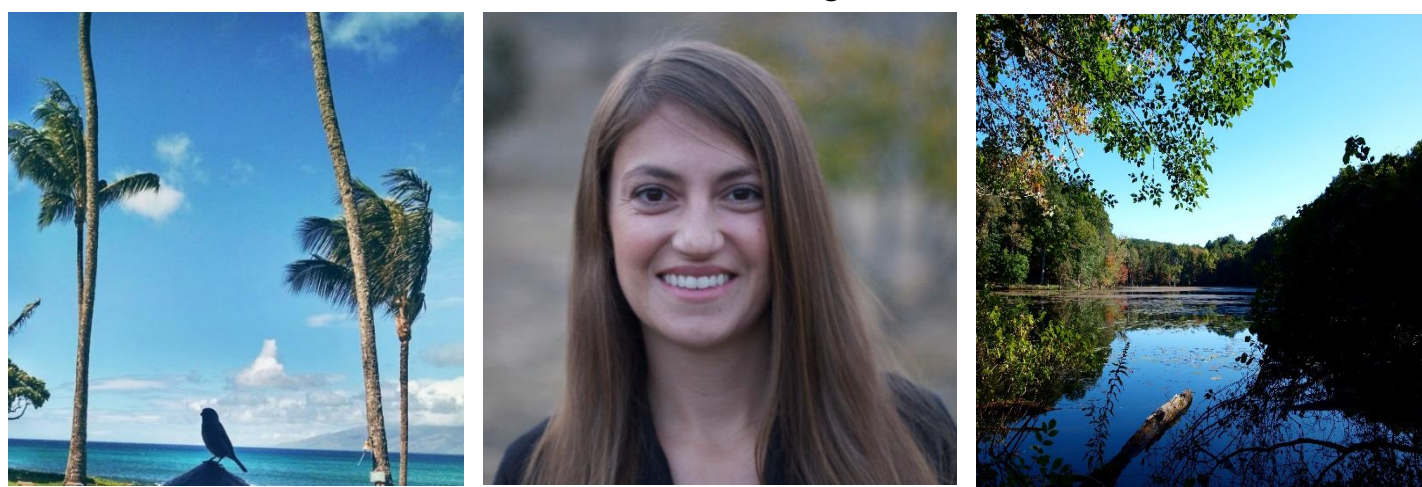


## Dr. Nicole Creanza – Stanford University

“The evolution of learned behaviors: insights from birds and humans”



Cultural traits—behaviors that are learned from others—can change more rapidly than genes and can be inherited not only from parents but also from teachers and peers. How does this complex process of cultural evolution differ from and interact with genetic evolution? In this talk, I will discuss the dynamics of culturally transmitted behaviors on dramatically different evolutionary timescales: the learned songs of a family of songbirds and the spoken languages of modern human populations. Both of these behaviors enable communication between individuals and facilitate complex social interactions that can influence genetic evolution. My analyses of these two systems demonstrate that learned behaviors, while less conserved than genetic traits, can retain evolutionary information across great distances and over long timescales.

