

OR297*Island communities in the context of global hyperdiversification***Evan Economo**, Eli Sarnat, Benoit Guenard, Beatrice Lecroq, Lacey Knowles

The analysis of how island communities assemble through ecological and evolutionary dynamics has long shed light on broader theoretical questions in ecology and evolutionary biology. Here we examine the assembly of Pacific island faunas of the hyperdiverse ant genus *Pheidole*, placed in context of a new global phylogenetic and morphological analysis of the genus. We examine the extent to which communities were formed through dispersal and colonization versus in situ evolution of species and morphotypes, the origins and genetic structure of widespread species, and the role of ecological niches in promoting dispersal. These pieces, taken together, shed light on broader integrated theories for biogeographic dynamics in the region such as Wilson's taxon cycle hypothesis.