

Movement : Mondays...

Extreme elevational migration spurs cryptic speciation in giant hummingbirds

Jessie Williamson Cornell University



ABSTRACT

The Giant Hummingbird (*Patagona gigas*) bends the rules of life. It is two-fold larger than any other hummingbird species, and it represents the longest terminal branch of the hummingbird tree of life (~14 Myrs). It is also unique among hummingbirds for its broad range, which spans >40 degrees of latitude and >4,200 m of elevation in South America. At tropical latitudes, giant hummingbirds reside year-round in the high Andes; however, southern temperate populations breed at sea level and vanish from breeding areas during the austral winter. Darwin speculated that they migrate to "the harsh deserts to the north", but their migratory routes and wintering range have remained unknown. It is also unknown whether differences in elevational range and migratory behavior within Patagona are associated with genetic differentiation or cryptic diversification. I will discuss the results of my work studying the migration, genomics, and blood physiology of giant hummingbirds in Chile and Peru since 2017, which reveal key insights about performance, physiology, and speciation in mountains

Monday, November 13, 3:30 – 4:30 Location: TBD