**Cultural evolution of song: Do zebra finches go wild?**

**Adriana Diez**, **Scott MacDougall-Shackleton**

In both songbirds and humans exposure to conspecific vocalizations is required in order to produce effective communication signals. Birds reared in isolation produce an abnormal isolate song. However, birds tutored with isolate songs progressed toward a more species-typical version over generations (Feher et al. 2009 Nature 459:564-568). Thus zebra finches (ZF) may have a biased predisposition to sing their conspecific song, but tutoring is required in order to transform the isolate song toward a wild type (WT) song. Here, I explore if this effect is associated with the fact that the first tutor was an isolate ZF that sang a song with ZF characteristics, or if the social interaction with a tutor is what matters. I raised birds over multiple generations starting with WT song, isolate song, and song of ZF tutored by heterospecific Bengalese finches (BF). The tutee of each generation served as the tutor for the next over 3-4 generations. Preliminary results show phonological and syntactic changes occur over generations from a BF-like song and isolate-like song toward more WT song. Thus in both cases it appears that the birds have an inherent bias to use song features from their tutor that most closely match their species-typical songs.