

Master in Biology orientation

# Biodiversity & Systematics

## Genomic approach to study flower diversification

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This project aims to better understand the genetic basis of flower evolution. Although several genes controlling flower traits have been identified (e.g. anthocyanine pathway), little is known about the dynamic and mode of their evolution during plant radiation. We will focus on the Sinningieae, a clade of Brazilian Gesneriaceae displaying an outstanding floral diversity associated with frequent transitions to different pollinators including bees, hummingbirds and bats. Our approach will build on the transcriptomic resource available for six Gesneriaceae species. Specific probes or primers will be designed and used to sequence a wide range of floral genes in several Sinningieae species. The data will be used to reconstruct the phylogeny of the group and to test whether morphological convergence in flower results from parallel genetic response.