## "Leveraging physiology to understand the biotic impacts of global change"



Dr. Rory Telemeco, Auburn University AL



Wednesday, November 30, 2016 4:00 – 5:00 PM Science 2, room 109 For further information: www.csufresno.edu/biology

Responses to changing environments are complex, encompassing most biological processes. Most directly, the phenotype of individuals (e.g. physiology, behavior, and morphology) determines population response to changing environments. However, such phenotypes are not static, but vary as a result of phenotypic plasticity and evolution. In this seminar, I will summarize research integrating across the organism to directly address how phenotype, genotype and environment interact to shape reptile responses to changing thermal environments. In particular, I will discuss work to identify the organismal traits and environmental parameters that most limit species' persistence, to examine the ability of organisms to respond to environmental variation through adaptive evolution or phenotypic plasticity, and to develop physiology-based models that examine the effects of environmental variation on populations.

Dr. Rory Telemeco explores the underlying mechanisms that mediate species responses to global change, integrating molecular and cellular physiology with whole-organism behavior and performance. He received his Ph.D. in Ecology and Evolutionary Biology from Iowa State University and has since held post-doctoral appointments at the University of Washington and Auburn University. He has received numerous awards including a Fulbright Fellowship to Australia and an EPA Science to Achieve Results Fellowship.

If you need a disability-related accommodation or wheelchair access, please contact Cindy Douglas at the Department of Biology at 278-2001 or e-mail <a href="mailto:cdouglas@csufresno.edu">cdouglas@csufresno.edu</a> (at least one week prior to event).