



# Gorbman Endowed Lecture Biology Seminar

By: Dr. Cameron Ghalambor

Colorado State University | Professor, Department of Biology

<http://www.biology.colostate.edu/people/cameron1/>

Climate variability, thermal physiology, and dispersal: Are mountain streams higher in the tropics?



Monday, January 30, 2016 | 12:00pm  
HCK 132 Refreshments at 11:45am

The latitudinal gradient in species diversity is one of the most obvious ecological patterns on the planet, yet the mechanisms underlying this pattern remain unresolved and controversial. The fundamental problem relates to linking latitudinal variation in the environment to the processes that lead to the evolution of reproductive isolation and species formation. Dan Janzen's 1967

climate variability hypothesis stands out as one of the few explanations for how reduced seasonality of temperature in the tropics could drive the evolution of physiological tolerance, dispersal, and speciation. While these ideas are increasingly being tested in terrestrial organisms, relatively little is known about the thermal regimes, physiology, dispersal patterns, and diversity of freshwater stream insects. I will present results from a collaborative project comparing the thermal physiology of temperate and tropical stream insects and how they inform the mechanisms underlying the latitudinal gradient in biodiversity.

