

Biology Seminar



Western
UNIVERSITY · CANADA

12:30 - 1:30 pm
Friday, March 22, 2019
BGS 0153



**Graduate Student
invited speaker**

Amanda E. Bates
Associate Professor
Canada Research Chair in Marine
Physiological Ecology
Ocean Sciences Centre

Thermal Safety, Environmental Variability and Biodiversity Change

Determining the vulnerability of species in an era of global change remains a priority in order to make accurate predictions, prioritize future research, and advise conservation and management practices. The identification of mechanisms enabling species to cope with temperature change underpins our capacity to predict biotic responses to climate variability and develop reliable ecological indicators for accurate and meaningful tracking of threats. Global data sets of thermal niche data can thus help define patterns in thermal physiology of ectotherms across a wide range of habitats and latitudes. While the magnitude of experienced temperature is clearly important, environmental variability is also a key determinant of physiological response that will influence species survival if variability also becomes more extreme. Considering environmental variability in combination with thermal physiology can inform predictions of species and community vulnerability, range shifts and change in the functional traits of communities.

