

# "Variation of the endocrine stress response in wild, free-living vertebrates"

Dr. Carolyn Bauer, North Dakota State University

***Stress is ubiquitous.*** On a daily basis wild animals may have to deal with stressors such as **predation** attempts, decreased **food** availability, and **social instability**. On a seasonal basis these same animals may have to cope with **snowstorms, floods, drought, and disease**. And now due to an increased human presence, wild animals must also face the effects of **habitat destruction, urbanization, pollution, and climate change**.



**Friday, November 18, 2016**

3:00 – 4:00 PM

Science 2, room 109

For further information: [www.csufresno.edu/biology](http://www.csufresno.edu/biology)

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As the endocrine stress response is essential for appropriately responding to environmental challenges, my research aims to uncover the relative fitness consequences of different endocrine stress profiles in different environmental contexts. To address this, my work focuses on the variation of the vertebrate endocrine stress response both within and across individuals.

Within individuals, I'm interested in how early life experiences and aging affect the stress response. Across individuals, I'm interested in how different life history stages and environments influence population stress profiles. Answering these questions will allow us to better understand how animals will cope with environmental change.

Dr. Carolyn Bauer's research focuses on how the endocrine stress response helps vertebrates appropriately respond to environmental challenges. Her interest in stress started during her time as an undergraduate researcher in John Wingfield's lab at the University of Washington. After receiving her B.S. in Ecology and Evolution, she joined Michael Romero's lab at Tufts University where she studied maternal effects of stress in a plural-breeding rodent for her PhD thesis. Currently, Dr. Bauer is a postdoctoral scholar in Tim Greive's lab at North Dakota State University, where she is studying dark-eyed juncos to ask a variety of questions concerning timing of breeding, aging biology, and migration physiology.

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