

# From Predation to Anthrophobia: The Consequences of Fear in Animal Populations



**Breanna Putman, PhD**

**Friday, February 21, 2020**

**3:00 – 4:00 PM**

**Music, room 160**

**For further information:**

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**Presentation:** Almost all animals face the risk of predation at some point in their lives. Hence, fear—the perceived risk of predation from actual predators or other threats—can drive behavioral and physiological traits. I use predator-prey theory to understand how animals evaluate and respond to risk, an approach that ultimately informs larger population-level responses. I will show, through my work with the rattlesnake-California ground squirrel system, how predators can have non-lethal effects on prey, but prey can manage risk through honest communication to the predator. I will then show how fear responses can modulate an animal’s interaction with humans, ultimately affecting its ability to live and reproduce in human-dominated landscapes. My current work on lizards in Southern California asks the question of whether fear filters certain species or individuals from urban environments. Lizard species vary in tolerance to human disturbance, and habituation to human presence is likely an important requirement for succeeding in urban habitats. Using predator-prey theory to understand how animals respond to human-induced change will be key for future urban planning, management, and conservation.

**About the speaker:** Bree Putman is an assistant professor at California State University San Bernardino and research associate at the Natural History Museum of Los Angeles County. She is a behavioral ecologist and herpetologist and a native Californian. She credits the movie Jurassic Park for her venture into herpetological research.