

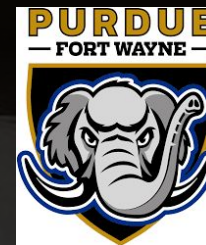


BALL STATE  
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## The Mathematical Laws of Morphology and Biomechanics

**Tuesday 22nd February 2022 noon EST**

Virtual Presentation: <https://purdue.webex.com/meet/aselvite>



**Dr. Kristin M. Winchell**

Princeton University

Department of Ecology and Evolutionary Biology

### **Locomotion in a novel structural environment: urban adaptation in *Anolis* lizards**

Urban ecosystems provide an exciting opportunity to explore contemporary adaptive evolution under conditions that starkly differ from those in which organisms evolved over much longer timescales. Although many species are unable to cope with the drastic environmental changes associated with human activities, some persist and even thrive in these novel habitats. One group, *Anolis* lizards in the Caribbean, seem to be particularly well suited for colonizing urban environments. In fact, the urban selective landscape appears to favor alternate phenotypes compared to forest environments, resulting in repeated morphological shifts relevant to navigating the urban structural habitat. In this talk I will discuss how the urban structural environment might impact locomotion for arboreal animals and findings from my research on *Anolis* lizards exploring locomotor morphology and performance.



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