

Phenotypes in Context

Predicting behavior in a changing world



Science and Mathematics Colloquium Series

Presentation by Emilia Martins
Professor, School of Life Sciences
ASU College of Liberal Arts and Sciences

Wednesday, April 11, 2018
3 – 4 p.m.
Student Union, Cooley Ballroom B
ASU Polytechnic campus

Animals use a rich combination of sights, sounds and smells to detect shifts in their environments. When climate change, urbanization or pollution change their habitats, animals often react behaviorally by shifting where and how they eat, sleep or interact with each other.

In this talk, Dr. Martins will discuss the interactions among sensory systems at behavioral, physiological, and evolutionary levels, and how those interactions can shape the behavioral response to environmental change. Along the way, she will summarize her lab's research on the evolution of communication signals in *Sceloporus* lizards and the impact of environment on zebrafish social behavior, and make predictions about how the behavior of these animals are likely to change in the face of modern environmental challenges.

Faculty and practitioners discuss their current research and field projects in the Science and Mathematics Colloquium Series, held throughout the academic year at ASU's Polytechnic campus. All seminars are free and open to the public.

Emilia Martins joined the School of Life Sciences at ASU's Tempe campus in 2017 after serving as a rotating program director at the National Science Foundation, professor of biology at Indiana University, and associate professor of biology at the University of Oregon.

Martin's lab pioneered the use of phylogenetic comparative methods to infer the evolutionary mechanisms underlying phenotypic evolution, and has also contributed substantively to our understanding of how different sensory systems intertwine to produce and to perceive animal communicative signals, primarily in lizards and fish, to form fibril aggregates.

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