



## Ylenia Chiari, PhD

Assistant Professor, Biology

### Education

PhD, Evolutionary Biology, University of Konstanz (Germany)

### Key Interests

Evolution | Reptiles | Conservation | Fish | Morphological Evolution | Aging, Longevity and Cancer | Response to Anthropogenic Changes | Ecology | Genetics | Vertebrate Physiology

### CONTACT

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### SELECT PUBLICATIONS

- › Allen, W. L., *et al.* (2020). Ecological, behavioral, and phylogenetic influences on the evolution of dorsal color pattern in geckos. *Evolution*, 74: 1033-1047.
- › Kiskowski, M.A., *et al.* (2019). Isolating and quantifying the role of developmental noise in generating phenotypic variation. *PLoS Computational Biology*, 15(4), e1006943.
- › Chiari, Y., Glaberman, S., and Lynch, V.J. (2018). Insights on cancer resistance in vertebrates: Reptiles as a parallel system to mammals. *Nature Reviews Cancer*, 18(8), 525-525.
- › Quesada, V., *et al.* (2019). Giant tortoise genomes provide insights into longevity and age-related disease. *Nature Ecology & Evolution*, 3(1), 87-95.

### Research Focus

There is a lot of variation within and among species. How such a variation is produced, maintained, and used has implications for how long species may potentially live, how they may respond to environmental disturbance - including climate change, sea level rise, pollution and urbanization, and in general for their biology, including - but not exclusively - how they communicate, how they use vision, how they escape predators, etc. I study how this incredible variation in morphology, physiology, biology, behavior is produced and why. The results obtained in my work have an impact on species and habitat conservation and on species - including humans - health.

### Current Projects

- Evolution of color and color pattern in geckos.
- Conservation genetics of endangered turtles.
- Aging, longevity and cancer.
- Adaptation to anthropogenic activity.