

Genetics and Genomics (G2) Seminar Series



**INSTITUTE FOR GENOME
SCIENCES AND SOCIETY**
TEXAS A&M UNIVERSITY

The Interdisciplinary Faculty of Genetics
Genetics Graduate Student Association



Extreme environments, physiological adaptation and the origin of species

Dr. Michael Tobler

**Department of Biology, Kansas State
University**

Our work uses extremophile fishes as a model to ask questions about the origins of functional trait diversity and speciation. We study how selection shapes genetic changes that mediate adaptive modification of biochemical properties and physiological processes that govern organismal function, and how the resulting functional differences among diverging populations mediate reproductive isolation. We leverage over a dozen independent lineages of fishes in sulfide springs and representative lineages from non-sulfidic environments to determine how ecological, genetic, and functional factors contribute to convergence at macroevolutionary scales and test when and why evolutionary change is repeatable and predictable.



Monday, December 4, 2017

3:30 p.m.

Rudder Tower 410

**Seminar co-hosted with the Ecology &
Evolutionary Biology (EEB) Seminar
Series**

Host: Dr. Gary Voelker
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Genetics

Texas A&M Institute for Genome
Sciences and Society (TIGSS)