

# Sex, death, acrobatics and combat, Capitalizing on the weird biology of an amphibious fish

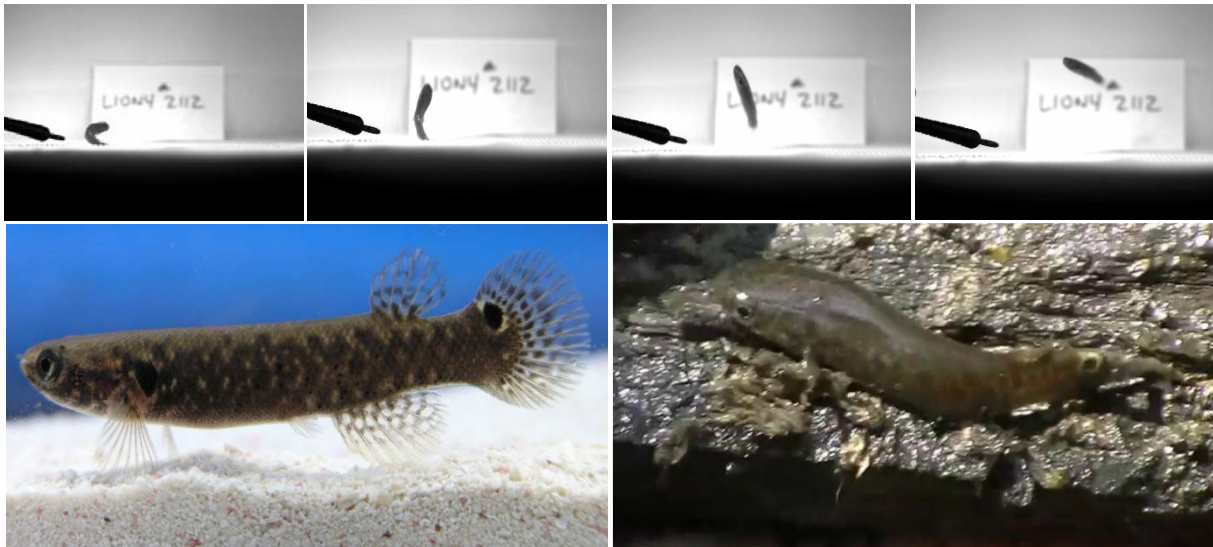
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September 6<sup>th</sup>

Social 3pm SCEN 502

Seminar 3:30pm SCEN 604



Deep in the mangroves of Florida, the Caribbean and Central America, there's a fish that defies all odds and exhibits some truly remarkable characteristics. Mangrove rivulus fish live in some of the nastiest conditions on Earth and can tolerate dramatic fluctuations in oxygen levels, salinity, temperature, and water availability, as well as infiltration of pollutants into their natural environment. They are highly plastic and exist predominantly as self-fertilizing hermaphrodites, which allows (effectively) for the production of clones. They can also change sex from hermaphrodite to male, live on land for 2 months, navigate terrestrial environments using Olympic jumps, and engage in intense combat. We have combined field and laboratory-based studies to examine a host of questions related to phenotypic plasticity, physiology, morphology, behavior and performance in this species. I will discuss a number of recent advances that have emerged from studying this odd organism; a potpourri of cool science driven largely by the graduate and undergraduate students in my lab!