Institut für Ökologie, Evolution und Diversität

EINLADUNG

Kolloquium Sommersemester 2021

Jennifer L. Stynoski, PhD

Research Professor Clodomiro Picado Institute University of Costa Rica

hält am Dienstag, den **18.05.2021**, um 16:15 Uhr einen Vortrag über "Becoming toxic: eco-evo-devo of chemical defenses in tropical frogs and toads"

> Many organisms use chemical defenses as a mechanism to deter predators via toxicity or unpalatability. Some provide offspring with chemical defenses before or after hatching or birth, and others are undefended until they develop the structural and functional capacity to synthesize or sequester their own toxins. My research group examines the mechanisms by which an individual becomes toxic or unpalatable on evolutionary and developmental time scales, within the context of the proteins, steroids, and alkaloids secreted in the skin of Neotropical frogs and toads. In this talk, I will describe frogs that feed their tadpoles with poison, toad tadpoles that make poison before they have poison glands, and patterns of unpalatability that reflect predator strategies and prey ontogeny across the order Anura. I will highlight how a combination of classic

approaches like histology, predator bioassays, and behavioral studies in lowland tropical rainforests can be integrated with modern approaches like RNA-seq, comparative genomics, and phylogenetic mixed models to uncover the ways that an individual or species accomplishes the switch from vulnerable to chemically defended.

Einladende: Jun.-Prof. Dr. Lisa M. Schulte

Dieser Vortrag findet digital per Zoom statt. Über diesen Link kommen Sie zu der entsprechenden Veranstaltung: <u>https://uni-frankfurt.zoom.us/j/97678326502?pwd=c2dYWmxTbENPMDFneDM3d0hLbnJCQT09</u>

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Meeting-ID: 976 7832 6502 Kenncode: 204728





