EcoEncontros Convida:

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"Predator-Prey Arms Race and the Evolution of Tetrodotoxin Resistance in Snakes"

04 de novembro de 2014 às 13 horas
AG da Zoologia

"Tetrodotoxin (TTX) is a potent neurotoxin that acts on voltage gated sodium channels; it is found in a wide array of organisms, including some amphibians. The presence of TTX renders organisms generally inedible to predators. We have studied the coevolution of the newt, *Taricha granulosa* and a garter snake, *Thamnophis sirtalis*; the presence of TTX in the newt and the presence of resistance to TTX in the snake seemingly have led to an escalating arms race. This arms race has resulted in elevated TTX levels in the newt and elevated resistance levels in the snake. We have discovered that other snakes faced with amphibian prey having TTX have adapted by altering the sodium channels in a way similar to garter snakes. Recently we have discovered that caddis fly larvae are resistant to TTX and feed on newt eggs. This will require rethinking what we "know" about snake-newt coevolution."

Comissão organizadora: pós-graduandos do PPG em Ecologia

Interessados em participar como palestrante, favor contatar ecoencontros@ib.usp.br