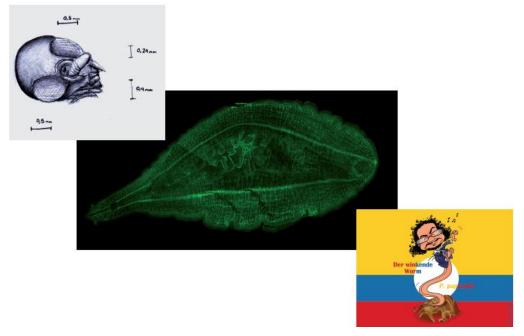
## EcoEncontros Convida: Federico Brown

Professor – Departamento de Zoologia, IB-USP

"Novelties and shifts in evolution: (a) four-eyed subfunctionalization in beetles, (b) cryptic regenerate brains in flatworms, and (2) neuromodulation of dancing behavior in nematodes"



## 30 de abril às 13 horas AG da Zoologia, IB-USP

"In this talk, I will discuss concepts related to mechanisms of evolutionary change, specifically: co-option, subfunctionalization, cryptic genotypic/phenotypic variation, modularity, and developmental systems drift. I will provide experimental evidence on the occurrence of, at least, some of these in three experimental invertebrate models studied in my laboratory. Co-option and subfunctionalization will be shown in the four-eyed whirligig beetle that shows differences in opsin expression of dorsal and ventral eyes; a novel and cryptic brain will be shown to develop after decapitation of polyclad flatworms; and different neurotransmitters will shown to modulate the same stand-and-wave behavior (i.e. nictation) in different species of nematodes."

Comissão organizadora: pós-graduandos do PPG em Ecologia Interessados em participar como palestrante, favor contatar <u>ecoencontros@ib.usp.br</u>