

Cognitive constraints, flexibility and decision-making: Insights from a frog-eating bat

Date 10th Sept (Fri.)



Time 09:00 HKT

Venue Zoom ONLY

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Abstract: We see stunning morphological diversity across the animal world. Less conspicuous but equally fascinating are the cognitive adaptations and constraints that shape the way animals make their livings. Here I discuss experiments investigating learning, attention and decision-making in Neotropical bats. Our investigations focus on *Trachops cirrhosus*, an eavesdropping predator that uses frog mating calls to assess and locate its prey. Our studies show that individuals can rapidly learn new prey-cue/prey-quality associations in response to variation in foraging success, and that foraging information can spread rapidly from bat to bat via social transmission. Frog-eating bats make consistent, rational and transitive foraging decisions, but rational behavior breaks down when comparing large chorus sizes or complex signals. I discuss cognitive adaptations and constraints in light of the ecological foraging demands of eavesdropping predators.



About speaker: Dr Rachel A. Page, Smithsonian Tropical Research Institute

Dr. Rachel Page is a behavioral ecologist at the Smithsonian Tropical Research Institute in Panama. After completing a BA at Columbia University in New York and a PhD at the University of Texas at Austin, Page conducted postdoctoral research as an Alexander von Humboldt fellow at the Max Planck Institute for Ornithology in Seewiesen, Germany. Page is currently a Smithsonian staff scientist, leading a lab group investigating sensory and cognitive ecology, with a focus on bat behavior.

All are welcome!