

AES 2025 Day 2

9:00	Housekeeping	
9:15	ECR Plenary Paul Battlay Genomic structural variation drives rapid adaptation in invasive plants	
	Room 1	Room 2
	Plasticity. Chair: Dan Noble	Sexual selection. Chair: Ian Brennan
10:00	Jade Kannangara: The evolutionary implications of mitochondrial heteroplasmy	Mathilde Le Levier: The role of iridescent colours in butterfly sexual selection
10:15	Giulia Ghedini: Evolving with competitors: what do species maximise and what are the consequences for communities?	Taylor Hoster: Thermal plasticity of sexually and naturally selected traits and the influence on adaptation.
10:30	Tahlia Fulton: Adaptive nutrition: Cross-protection by amino acid restriction	Hyoseul Hyun: How sex differences balance genome-wide fitness of facultative asexual organisms?
10:45	Morning tea	
	Nutrients, guts, antibiotics, immunity. Chair: Damian Dowling	Morphological evolution/speciation. Chair: Kris Wild
11:15	Yu-Pei Tseng: The impact of resource fluctuations on coexistence in a gut microbial community	Putter Tiatragul: Evolution of Australia's endemic diplodactylid geckos
11:30	Alistair Senior: The effects of macronutrients on age-specific mortality. A replicable effect!	David Brito: Insights on the evolution of skull shape in Australian fossorial elapids
11:45	Christopher Brown: Optimising antibiotic, resource covariance and frequency to minimise resistance evolution	Ammresh: How would a snake wear a tie? Regionalisation within the elapid vertebral column
12:00	Alicia Williams: What does it cost to resist antibiotics? The fitness landscape of rifampicin mutations	Sam Campbell: Heavy Metal Predators: diverse patterns of metal enrichment in scorpion weapons
12:15		Kenzie Melanson: Comparison of sperm availability in hybridizing male <i>Fundulus heteroclitus</i> and <i>F. diaphanus</i> in Porters Lake, Nova Scotia, Canada
12:30	Lunch	
	Conservation/Phylogenetics. Chair: Giulia Ghedini	Tag Team Talk. Lead: Daniel Ortiz-Barrientos
13:30	Matthew Silcocks: Retracing the stepwise evolution of a deadly human pathogen using ancestral sequence reconstruction	15m Daniel Ortiz-Barrientos: Ecotypes as natural experiments: the making of adaptive traits in <i>Senecio</i> 5m Jack Price: Defining complexity as an evolvable trait 12m Zoe Broad: The role of gene expression during adaptation 5m Yulin Sun: Evaluating gene flow inference with forward simulations: A case study of ABBA-BABA 10m Maddie James: When does local adaptation lead to reproductive isolation? 5m Aparna Thulaseedharan: Leveraging local adaptations for crop improvement: the future from the past
13:45	Kamryn Carter: Genomic management of a captive breeding program of endangered Southern Stuttering Frogs (<i>Mixophyes australis</i>)	
14:00	Zenon Czenze: Bridging the gap: combining thermal physiology, ecology and biophysics for conservation	
14:15	Patra Petrohilos: When Cells Rebel: using comparative genomics to investigate cancer susceptibility in marsupials	

14:30	Anupama Nayak: A global comparative analysis links PFAS contamination with marine fish functional traits	5m Charles Zhou : Making the Most of Less in Imputation for Non-Model Species 15m Questions
15:00	Afternoon tea	
	Flash Talks (various topics). Chair: Damien Esquerre	
15:30	Thomas Veldhuis; Apoorva Gopinath; Andres Porras; Claire Larroux; Tina Wu; Arlie Macdonald; Emma Holvast; Jackson Rendall; Peisong Tian; Diana Fisher; Avantika Sharma; Angi De Silva; Matthew Baker	
16:45 (~1 hr)	Zoe Kean: How to become a great science communicator	
19:00	Dinner at The Burrow, 52 Russell Street, West End	