

# AES 2025 Day 2

9:00	Housekeeping	
9:15	<b>ECR Plenary</b> <b>Paul Battlay</b> <b>Genomic structural variation drives rapid adaptation in invasive plants</b>	
	<b>Room 1</b>	<b>Room 2</b>
	<b>Plasticity. Chair: Dan Noble</b>	<b>Sexual selection. Chair: ????????</b>
10:00	<b>Jade Kannangara:</b> The evolutionary implications of mitochondrial heteroplasmy	<b>Mathilde Le Levier:</b> The role of iridescent colours in butterfly sexual selection
10:15	<b>Giulia Ghedini:</b> Evolving with competitors: what do species maximise and what are the consequences for communities?	<b>Taylor Hosler:</b> Thermal plasticity of sexually and naturally selected traits and the influence on adaptation.
10:30	<b>Tahlia Fulton:</b> Adaptive nutrition: Cross-protection by amino acid restriction	<b>Hyoseul Hyun:</b> How sex differences balance genome-wide fitness of facultative asexual organisms?
10:45	Morning tea	
	<b>Nutrients, guts, antibiotics, immunity. Chair: Damian Dowling</b>	<b>Morphological evolution/speciation. Chair: Kris Wild</b>
11:15	<b>Yu-Pei Tseng:</b> The impact of resource fluctuations on coexistence in a gut microbial community	<b>Putter Tiatragul:</b> Evolution of Australia's endemic diplodactylid geckos
11:30	<b>Alistair Senior:</b> The effects of macronutrients on age-specific mortality. A replicable effect!	<b>David Brito:</b> Insights on the evolution of skull shape in Australian fossorial elapids
11:45	<b>Christopher Brown:</b> Optimising antibiotic, resource covariance and frequency to minimise resistance evolution	<b>Ammresh:</b> How would a snake wear a tie? Regionalisation within the elapid vertebral column
12:00	<b>Alicia Williams:</b> What does it cost to resist antibiotics? The fitness landscape of rifampicin mutations	<b>Sam Campbell:</b> Heavy Metal Predators: diverse patterns of metal enrichment in scorpion weapons
12:15	<b>Sandie Degnan:</b> Host-symbiont recognition underpins the origin of animal innate immunity	<b>Kenzie Melanson:</b> 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	
	<b>Conservation/Phylogenetics. Chair: Giulia Ghedini</b>	<b>Tag Team Talk. Lead: Daniel Ortiz-Barrientos</b>
13:30	<b>Matthew Silcocks:</b> Retracing the stepwise evolution of a deadly human pathogen using ancestral sequence reconstruction	15m <b>Daniel Ortiz-Barrientos:</b> Ecotypes as natural experiments: the making of adaptive traits in <i>Senecio</i> 5m <b>Jack Price:</b> Defining complexity as an evolvable trait 12m <b>Zoe Broad:</b> The role of gene expression during adaptation 5m <b>Yulin Sun:</b> Evaluating gene flow inference with forward
13:45	<b>Kamryn Carter:</b> Genomic management of a captive breeding program of endangered Southern Stuttering Frogs ( <i>Mixophyes australis</i> )	

14:00	<b>Zenon Czenze:</b> Bridging the gap: combining thermal physiology, ecology and biophysics for conservation	simulations: A case study of ABBA-BABA 10m <b>Maddie James:</b> When does local adaptation lead to reproductive isolation? 5m <b>Aparna Thulaseedharan:</b> Leveraging local adaptations for crop improvement: the future from the past 5m <b>Charles Zhou:</b> Making the Most of Less in Imputation for Non-Model Species 15m Questions
14:15	<b>Patra Petrohilos:</b> When Cells Rebel: using comparative genomics to investigate cancer susceptibility in marsupials	
14:30	<b>Anupama Nayak:</b> A global comparative analysis links PFAS contamination with marine fish functional traits	
15:00	Afternoon tea	
	Flash Talks (various topics). Chair: Damien Esquerre	
15:30	Thomas Veldhuis; Apoorva Gopinath; Samuel Ingloff-Richards; 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	