



# Australasian Evolution Society

University of Queensland

Brisbane, Qld, 2025

Day 1 Wednesday 1st October			Day 2 Thursday 2nd October			Day 3 Friday 3rd October		
Time	Room 1	Room 2	Time	Room 1	Room 2	Time	Room 1	Room 2
8:45	Welcome to AES: Renée Fisman (AES President) and Simone Blomberg (Conference Host) - Welcome to Country Ceremony		9:00	Housekeeping		9:00	Housekeeping	
9:15	ECR Plenary Janiema Sara Philip Easy come, easier go: mapping the loss of flagellar motility across the tree of life		9:15	ECR Plenary Paul Battay Genomic structural variation drives rapid adaptation in invasive plants		9:15	ECR Plenary Kristoffer Wild Climate change and the cost-of-living squeeze in desert lizards	
10:00	Sociality, Chair: Renée Fisman Kim Wong: Royal Blood, Mortal Cost: The effects of inbreeding on survivorship and fecundity in European Royal Families	Morphological evolution, Chair: Bryan Fry Carley Goodwin: A computational fluid dynamics (CFD) study exploring the effects of nasal passage morphology on respiratory airflow of bats (Rhinolophidae).	10:00	Plasticity, Chair: Dan Noble Jade Kamangara: The evolutionary implications of mitochondrial heteroplasmy	Sexual selection, Chair: Ian Brennan Mathilde Le Levier: The role of iridescent colours in butterfly sexual selection	10:00	Sociality/Development/Macroevo. Chair: Tom Schmidt Maxim Adams: Behavioural island syndrome in the Lord Howe Island cockroach <i>Panesthia lata</i>	Plasticity, Chair: Erin Macartney Russell Bonduriansky: Born old: Transmission of ageing from mothers to offspring
10:15	Lachlan von Pein: The potential for territorial defence and group augmentation to drive the evolution of human cooperation	Uz Surovic: A comparative morphology study of blennies looking at the water to land transition	10:15	Giulia Ghedini: Evolving with competitors: what do species maximise and what are the consequences for communities?	Taylor Hooser: Thermal plasticity of sexually and naturally selected traits and the influence on adaptation.	10:15	Sonnie Flores: Roars, rumbles, and resonance: A systematic review and meta-analysis of crocodilian acoustic signals	Dan Noble: Limited plasticity but increased variance in physiological rates across ectotherm populations under climate change
10:30	Avantika Sharma: Intra-sexual competition in cooperatively breeding Western Australian magpies	Ray Chatterjee: Dietary specialization drives adaptation, convergence, and integration across the cranial and appendicular skeleton in Waterfowl (Anseriformes)	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?	10:30	Bernie Degnan: Origin of the regulatory genome	Andre Nogueira Alves: How naturally occurring insecticide resistance alleles lead to broader colonizing opportunities in <i>D. melanogaster</i>
10:45	Morning tea		10:45	Morning tea		10:45	Morning tea	
11:15	Macroevo. Chair: Matt Baker Steve Cooper: Molecular evolution of Circadian Rhythm genes in blind water beetles from the dark biosphere	Sexual selection, Chair: Lucinda Autsebrook Andrea Piccinetti: Buried alive: Post-copulatory behaviour of a Western Australian species of wolfbone spider	11:15	Nutrients, guts, antibiotics, immunity, Chair: Damian Dowling Alistair Senior: The effects of macronutrients on age-specific mortality. A replicable effect?	Morphological evolution/speciation, Chair: Kris Wild Putter Tiatragal: Evolution of Australia's endemic dipodotyld geckos	11:15	Venom, Chair: Dan Hoops Bryan Fry: Make acetylcholine great again! Predators and prey of venomous snakes convergently evolved multiple types of neurotoxin-proof neuromuscular receptors	Various, Chair: Cynthia Riggins Lucinda Autsebrook: Warming temperatures induce severe spinal deformities and mortality in highly successful tropical invader, <i>Gambusia holbrooki</i>
11:30	Lachlan King: Consistent patterns of mutational covariance for <i>Drosophila</i> wing shape traits in three genetic backgrounds	Samiel Shwartz: Flashing signals and butterfly visual behaviour	11:30	Christopher Brown: Optimising antibiotic, resource covariance and frequency to minimise resistance evolution	David Brito: Insights on the evolution of skull shape in Australian fossorial elapids	11:30	Lorenzo Seneca: Convergent yet divergent evolutions of two novel procoagulant venom phenotypes nested within North American anticoagulant rattlesnakes	Fabian Rupert: The ocean in me - Molecular profiling of sponge movement reveals an ancient relevant-inflammatory response
11:45	Toby Kovacs: Genomics uncovers demographic declines in marsupials	Vicky Ying: Is parthenogenesis equivalent to inbreeding? Experimental evidence from a facultatively parthenogenetic stick insect	11:45	Alicia Williams: What does it cost to resist antibiotics? The fitness landscape of <i>flamphen</i> mutations	Ammeres: How would a snake wear a tie? Regionalisation within the elapid vertebral column	11:45	Kat Kempae: Clinical implications of regional variations in coagulotoxic effects and antivenom efficacies for Swiss <i>Asps</i> populations of <i>Vipera aspis</i> ( <i>Asp Viper</i> )	Jeremias Nan: Selecting window sizes for phylogenomic analyses of whole genome alignments
12:00	Ian Brennan: The evolving adaptive landscape of Australian dragons	Daniela Wilner: Sex-resistant stick insects and their microscopic inhabitants: Could endosymbionts explain patterns of geophagic parthenogenesis?	12:00		Sam Campbell: Heavy Metal Predators: diverse patterns of metal enrichment in scorpion venoms	12:00	Kate Jordan: Clinical implications of dramatic ontogenetic shifts in Yellow Beard ( <i>Bothrops asper</i> ) venom activation of blood clotting factors	Samantha Howitt: Mixed up <i>Mytilus</i> : contrasting outcomes of hybridisation in admixed populations
12:15	Annie Guillaume: Corals, currents and climate: seascape genomics for informing conservation	Shay Hsiang: Scaling and developmental integration of a massively exaggerated secondary sexual sensory trait	12:15		Kenzie Melanson: Comparison of sperm availability in hybridizing male <i>Fundulus heteroclitus</i> and <i>F. daphanus</i> in Porters Lake, Nova Scotia, Canada	12:15	Patrick Champagne: Factor <i>Via</i> as an obligate cofactor as the missing key to understanding viper venom procoagulation toxicity	Zoe Meziere: Repeatability and predictability of local (mal)adaptation under climate change
12:30	Lunch		12:30	Lunch		12:30	Lunch	
	Plasticity, Chair: Alistair Senior	Various, Chair: Cynthia Riggins		Conservation/Phylogenetics, Chair: Giulia Ghedini	Tag Team Talk, Lead: Daniel Ortiz-Barrientos		Chair: Simone Blomberg	
13:45	Erin Macartney: Paternal dietary effects on seminal fluid and offspring development	Manuel Poretti: Genome evolution and adaptive potential of symbiotic algae <i>ostreobium</i> in coral bleaching recovery	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>	13:30	Senior Plenary David Lambert Evolution & ancient DNA: People and ideas	
14:00	Tim Temizyurek: Definitions of phenotypic plasticity	Tom Schmidt: Dissecting new pest invasions with evolutionary genomics	13:45	Kamryn Carter: Genomic management of a captive breeding program of endangered Southern Shuttering Frogs ( <i>Mixophyes australis</i> )	5m Jack Price: Defining complexity as an evolvable trait			
14:15	Simon Hart: The effect of phenotypic plasticity on plant population dynamics in a non-anthropogenic environment	Jia Chang: The distinct genomic evolution of <i>Serratia</i> symbionts in the redlegged earth mite	14:00	Jonas Czeze: Bridging the gap: combining thermal physiology, ecology and biophysics for conservation	5m Zoe Broad: The role of gene expression during adaptation			
14:30	Daniel Hoops: Neuroanatomical changes in Australian lizards detected using 3D imaging	Moshe Jager: Demography & selection in the <i>Aedes aegypti</i> invasion of the Asia-Pacific	14:15	Patia Petrohiles: When Cells Rebel: using comparative genomics to investigate cancer susceptibility in marsupials	10m Madieff James: When does local adaptation lead to reproductive isolation?			
14:45	Eve Maunders: The microbial makings of a marine sponge	Janne Torkkola: Mapping reproductive mode in Australian sphenomorphine skinks	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		14:30	Closing and Prizes
15:00	Afternoon tea		15:00	Afternoon tea				
	Macroevo. Chair: Putter Tiatragal	Speciation/Development/Various, Chair: Tahlia Fulton		Flash Talks (various topics), Chair: Damien Esquerre				
15:30	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunism pair	Kai-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots	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				
15:45	Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction	Byron Nongthongbam: Genome size and TE content variation in a global invasive species						
16:00	Romane Normand: Meta-analysis on the evolutionary parallelism of native and introduced plants	Owen Holland: Revisiting the cytogenetics of the parthenogenetic grasshopper <i>Warramaba virgo</i> with hybridisation and Next-generation sequencing						
16:15	Alex Skeete: Paleobiome dynamics shaped a large Gondwanan plant radiation	Iva Popovic: Parallel adaptive admixture in a coral species triad						
16:30	Oceane Bland: Sponge metamorphosis uses conserved animal developmental mechanisms	Jie Wang: Reticulation patterns in Australian burrowing frogs <i>Neobatrachus</i> mechanisms		Zoe Kean: How to become a great science communicator				
16:45	Alexandros Sotiriopoulos: First indication of structural homology and co-evolution of candidate effector proteins of diverse fungi that attack other fungi	Tsering Chan: DNA methylation changes in response to infection by a co-evolved parasite in cane toads						
17:00		Sandra Degnan/Huifang Yuan: Environmental regulation of cell state reprogramming revealed in ancient animal life cycles						
			(~1 hr)					
18:00	Welcome drinks at Saint Lucy (Caffe e Cucina), Blair Drive, University of Queensland		19:00	Dinner at The Burrow, 52 Russell Street, West End				