



# 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 Battley 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	
	<b>Sociality, Chair: Renée Fisman</b>	<b>Morphological evolution, Chair: Bryan Fry</b>		<b>Plasticity, Chair: Dan Noble</b>	<b>Sexual selection, Chair: ????????</b>		<b>Sociality/Development/Macroevo. Chair: Tom Schmidt</b>	<b>Plasticity, Chair: Erin Macartney</b>
10:00	<b>Kim Wong:</b> Royal Blood, Mortal Cost: The effects of inbreeding on survivorship and accuracy in European Royal Families	<b>Carley Goodwin:</b> A computational fluid dynamics (CFD) study exploring the effects of nasal passage morphology on respiratory airflow of bats (Phyllostomidae).	10:00	<b>Jade Kamangara:</b> The evolutionary implications of mitochondrial heteroplasmy	<b>Mathilde Le Levier:</b> The role of iridescent colours in butterfly sexual selection	10:00	<b>Huain Adams:</b> Behavioural island syndrome in the Lord Howe Island cockroach <i>Paranethia lata</i>	<b>Russell Bonduriansky:</b> Born old: Transmission of ageing from mothers to offspring
10:15	<b>Lachlan von Pein:</b> The potential for territorial defence and group augmentation to drive the evolution of human cooperation	<b>Uz Surovic:</b> A comparative morphology study of blennies looking at the water to land transition	10:15	<b>Giulia Ghedini:</b> Evolving with competitors: what do species maximise and what are the consequences for communities?	<b>Taylor Hooser:</b> Thermal plasticity of sexually and naturally selected traits and the influence on adaptation.	10:15	<b>Bonnie Flores:</b> Roars, rumbles, and resonance: A systematic review and meta-analysis of crocodilian acoustic signals	<b>Dan Noble:</b> Limited plasticity but increased variance in physiological rates across ectotherm populations under climate change
10:30	<b>Avantika Sharma:</b> Intra-sexual competition in cooperatively breeding Western Australian magpies	<b>Ray Chatterjee:</b> Dietary specialization drives adaptation, convergence, and integration across the caudal and appendicular skeleton in Waterfowl ( <i>Anseriformes</i> )	10:30	<b>Tahlia Fulton:</b> Adaptive nutrition: Cross-protection by amino acid restriction	<b>Hyeseul Hyun:</b> How sex differences balance genome-wide fitness of facultative asexual organisms?	10:30	<b>Bernie Degnan:</b> Origin of the regulatory genome	<b>Andre Nogueira Alves:</b> 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	
	<b>Macroevo. Chair: Matt Baker</b>	<b>Sexual selection, Chair: Lucinda Autsebrook</b>		<b>Nutrients, guts, antibiotics, immunity, Chair: Damian Dowling</b>	<b>Morphological evolution/speciation, Chair: Kris Wild</b>		<b>Venom, Chair: Dan Hoops</b>	<b>Various, Chair: Cynthia Riggins</b>
11:15	<b>Steve Cooper:</b> Molecular evolution of Circadian Rhythm genes in blind water beetles from the dark biosphere	<b>Andrea Piccinini:</b> Buried alive: Post-copulatory behaviour of a Western Australian species of wolfbone spider	11:15	<b>Yu-Pei Tseng:</b> The impact of resource fluctuations on coexistence in a gut microbial community	<b>Putter Tiatragal:</b> Evolution of Australia's endemic dipodactylid geckos	11:15	<b>Bryan Fry:</b> Make acetylcholine great again! Predators and prey of venomous snakes convergently evolved multiple types of neurotoxin-proof neuromuscular receptors	<b>Lucinda Autsebrook:</b> Warming temperatures induce severe spinal deformities and mortality in highly successful tropical invader, <i>Gambusia holbrooki</i>
11:30	<b>Lachlan King:</b> Consistent patterns of mutational covariance for <i>Drosophila</i> wing shape traits in three genetic backgrounds	<b>Samiel Shwartz:</b> Flashing signals and butterfly visual behaviour	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	11:30	<b>Lorenzo Seneca:</b> Convergent yet divergent evolutions of two novel procoagulant venom phenotypes nested within North American antioagulant rattlesnakes	<b>Fabian Rupert:</b> The ocean in me - Molecular profiling of sponge movement reveals an ancient reticent inflammatory response
11:45	<b>Toby Kovacs:</b> Genomics uncovers demographic declines in marsupials	<b>Vicky Ying:</b> Is parthenogenesis equivalent to inbreeding? Experimental evidence from a facultatively parthenogenetic stick insect	11:45	<b>Christopher Brown:</b> Optimising antibiotic, resource covariance and frequency to minimise resistance evolution	<b>Ammeres:</b> How would a snake wear a tie? Regionalisation within the elapid vertebral column	11:45	<b>Kat Kempner:</b> Clinical implications of regional variations in coagulotoxic effects and antivenom efficacies for Swiss <i>Aspis</i> populations of <i>Vipera aspis</i> ( <i>Asp Viper</i> )	<b>Artemias Ivan:</b> Selecting window sizes for phylogenomic analyses of whole genome alignments
12:00	<b>Ian Brennan:</b> The evolving adaptive landscape of Australian dragons	<b>Daniela Wilner:</b> Sex-resistant stick insects and their microscopic inhabitants: Could endosymbionts explain patterns of geographic parthenogenesis?	12:00	<b>Alicia Williams:</b> What does it cost to resist antibiotics? The fitness landscape of <i>flamphenic</i> mutations	<b>Sam Campbell:</b> Heavy Metal Predators: diverse patterns of metal enrichment in scorpion venoms	12:00	<b>Kate Jordan:</b> Clinical implications of dramatic ontogenetic shifts in Yellow Beard ( <i>Bothrops asper</i> ) venom activation of blood clotting factors	<b>Samantha Howitt:</b> Mixed up Mytilus: contrasting outcomes of hybridisation in admixed populations
12:15	<b>Amie Guillaume:</b> Corals, currents and climate: seascape genomics for informing conservation	<b>Shay Hsiang:</b> Scaling and developmental integration of a massively exaggerated secondary sexual sensory trait	12:15		<b>Kenzie Melanson:</b> Comparison of sperm availability in hybridizing male <i>Fundulus heteroclitus</i> and <i>F. daphanus</i> in Porters Lake, Nova Scotia, Canada	12:15	<b>Patrick Champagne:</b> Factor <i>Via</i> as an obligate cofactor as the missing key to understanding viper venom procoagulation toxicity	
12:30	Lunch		12:30	Lunch		12:30	Lunch	
	<b>Plasticity, Chair: Alistair Senior</b>	<b>Various, Chair: Cynthia Riggins</b>		<b>Conservation/Phylogenetics, Chair: Giulia Ghedini</b>	<b>Tag Team Talk, Lead: Daniel Ortiz-Barrientos</b>		<b>Chair: Simone Blomberg</b>	
13:45	<b>Erin Macartney:</b> Paternal dietary effects on seminal fluid and offspring development	<b>Manuel Poretti:</b> Genome evolution and adaptive potential of symbiotic algae ostreobium in coral bleaching recovery	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>	13:30	<b>Senior Plenary David Lambert Evolution &amp; ancient DNA: People and ideas</b>	
14:00	<b>Tim Temizyurek:</b> Definitions of phenotypic plasticity	<b>Tom Schmidt:</b> Dissecting new pest invasions with evolutionary genomics	13:45	<b>Kamryn Carter:</b> Genomic management of a captive breeding program of endangered Southern Shuttering Frogs ( <i>Mixophyes australis</i> )	5m <b>Jack Price:</b> Defining complexity as an evolvable trait 5m <b>Zoe Broad:</b> The use of gene expression during adaptation 5m <b>Yulin Sun:</b> Evaluating gene flow inference with forward simulations: A case study of ABGA-BABA			
14:15	<b>Simon Hart:</b> The effect of phenotypic plasticity on plant population dynamics in a non-anthropogenic environment	<b>Jia Chang:</b> The distinct genomic evolution of <i>Serratia</i> symbionts in the redlegged earth mite	14:00	<b>Zeeon Czeze:</b> Bridging the gap: combining thermal physiology, ecology and biophysics for conservation	5m <b>Madieffe James:</b> When does local adaptation lead to reproductive isolation?			
14:30	<b>Daniel Hoops:</b> Neuroanatomical changes in Australian lizards detected using 3D imaging	<b>Moshe Jager:</b> Demography & selection in the <i>Aedes aegypti</i> invasion of the Asia-Pacific	14:15	<b>Patsia Petrolakos:</b> When Cells Rebel: using comparative genomics to investigate cancer susceptibility in marsupials	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			
14:45	<b>Eve Maunders:</b> The microbial makings of a marine sponge	<b>Janne Torkkola:</b> Mapping reproductive mode in Australian sphenomorphine skinks	14:30	<b>Anupama Nayak:</b> A global comparative analysis links PFAS contamination with marine fish functional traits		14:30	Closing and Prizes	
15:00	Afternoon tea		15:00	Afternoon tea				
	<b>Macroevo. Chair: Putter Tiatragal</b>	<b>Speciation/Development/Various, Chair: Tahlia Fulton</b>		Flash Talks (various topics), Chair: Damien Esquerre			<b>Thomas Veldhuis; Apoorva Gopinath; Andres Porras; Claire Larroux; Tina Wu; Arlie Macdonald; Emma Holvast; Jackson Rendall; Pelsong Tian; Diana Fisher; Avantika Sharma; Angi De Silva; Matthew Baker</b>	
15:30	<b>James Richardson:</b> Cross-feeding supports the evolution of a gleaner-opportunistic pair	<b>Kai-Lin Ooi:</b> Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots		<b>Zoe Kean: How to become a great science communicator</b>				
15:45	<b>Thea Elson-Green:</b> We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction	<b>Byron Nongthongbam:</b> Genome size and TE content variation in a global invasive species						
16:00	<b>Romane Normand:</b> Meta-analysis on the evolutionary parallelism of native and introduced plants	<b>Owen Holland:</b> Revisiting the cytogenetics of the parthenogenetic grasshopper <i>Warramaba virgo</i> with hybridisation and Next-generation sequencing						
16:15	<b>Alex Steete:</b> Paleobiome dynamics shaped a large Gondwanan plant radiation	<b>Iva Popovic:</b> Parallel adaptive admixture in a coral species triad						
16:30	<b>Oceane Bland:</b> Sponge metamorphosis uses conserved animal developmental mechanisms	<b>Jie Wang:</b> Reticulation patterns in Australian burrowing frogs <i>Neobatrachus</i> alignments						
16:45	<b>Alexandros Sotiriopoulos:</b> First indication of structural homology and co-evolution of candidate effector proteins of diverse fungi that attack other fungi	<b>Tsering Chan:</b> DNA methylation changes in response to infection by a co-evolved parasite in cane toads						
17:00		<b>Sandra Degroot/Huifeng Yuan:</b> Environmental regulation of cell state reprogramming revealed in ancient animal life cycles	16:45					
			(~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				