



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 Battail 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	
	Sociality. Chair: Renée Fisman	Morphological evolution. Chair: Bryan Fry		Plasticity. Chair: Dan Noble	Sexual selection. Chair: ????????		Sociality/Development/Macroevo. Chair: Tom Schmidt	Plasticity. Chair: Erin Macartney
10:00	Kim Wong: Royal Blood, Mortal Cost: The effects of inbreeding on survivorship and accuracy in European Royal Families	Carley Goodwin: A computational fluid dynamics (CFD) study exploring the effects of nasal passage morphology on respiratory airflow of bats (Phyllostomidae).	10:00	Jade Kamangara: The evolutionary implications of mitochondrial heteroplasmy	Mathilde Le Levier: The role of iridescent colours in butterfly sexual selection	10:00	Huain Adams: Behavioural island syndrome in the Lord Howe Island cockroach <i>Paranethia lata</i>	Russel Bonduriansky: Born old: Transmission of ageing from mothers to offspring
10:15	Lachlan van 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	Bonnie 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 ecoterm 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 (<i>Anseriformes</i>)	10:30	Tahlia Fulton: Adaptive nutrition: Cross-protection by amino acid restriction	Hyeseul 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	
	Macroevo. Chair: Matt Baker	Sexual selection. Chair: Lucinda Autsebrook		Nutrients, guts, antibiotics, immunity. Chair: Damian Dowling	Morphological evolution/speciation. Chair: Kris Wild		Venom. Chair: Dan Hoops	Various. Chair: Cynthia Riggins
11:15	Steve Cooper: Molecular evolution of Circadian Rhythm genes in blind water beetles from the dark biosphere	Andrea Piccinini: Buried alive: Post-copulatory behaviour of a Western Australian species of wishbone spider	11:15	Yu-Pei Tseng: The impact of resource fluctuations on coexistence in a gut microbial community	Putter Tiatragal: Evolution of Australia's endemic diplocladid geckos	11:15	Bryan Fry: Make acetylcholine great again! Predators and prey of venomous snakes convergently evolved multiple types of neurotoxin-proof neuromuscular receptors	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	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	11:30	Lorenzo Senack: Convergent yet divergent evolutions of two novel procoagulant venom phenotypes nested within North American antioagulant rattlesnakes	Fabian Rupert: The ocean in me - Molecular profiling of sponge movement reveals an ancient relaxant 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	Christopher Brown: Optimising antibiotic, resource covariance and frequency to minimise resistance evolution	Ammeah: How would a snake wear a tie? Regionalization within the elapid vertebral column	11:45	Kat Kempner: Clinical implications of regional variations in coagulotoxic effects and antivenom efficacies for Swiss Alps populations of <i>Vipera aspis</i> (Asp Viper)	Artemias Iwan: Selecting window sizes for phylogenomic analyses of whole genome alignments
12:00	Ian Brennan: The evolving adaptive landscape of Australian dragons	Daniela Wilmer: Sex-resistant stick insects and their microscopic inhabitants: Could endosymbionts explain patterns of geographic parthenogenesis?	12:00	Alicia Williams: What does it cost to resist antibiotics? The fitness landscape of <i>Escherichia coli</i> mutants	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 Mytilus: contrasting outcomes of hybridisation in admixed populations
12:15	Amie Guillaume: Corals, currents and climate: seascape genomics for informing conservation	Shay Hissam: Scaling and developmental integration of a massively exaggerated secondary sexual sensory trait	12:15	Sandee Degnan: Host-symbiont recognition underpins the origin of animal innate immunity	Kendie Melamsee: 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 Poretto: Genome evolution and adaptive potential of symbiotic algae ostreobium 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 Temizperek: 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	Zeeon Czeze: Bridging the gap: combining thermal physiology, ecology and biophysics for conservation	5m Zoe Broad: The use of gene expression during adaptation			
14:30	Daniel Hoops: Neuroanatomical changes in Australian lizards detected using 3D imaging	Moshe Jasper: Demography & selection in the <i>Aedes aegypti</i> invasion of the Asia-Pacific region	14:15	Patia Petroski: When Cells Rebel: using comparative genomics to investigate cancer susceptibility in marsupials	5m Yulin Sun: Evaluating gene flow inference with forward simulations: A case study of ABBA-BABA			
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 Madeline James: When does local adaptation lead to reproductive isolation?			
15:00	Afternoon tea		15:00	Afternoon tea		14:30	Closing and Prizes	
	Macroevo. Chair: Putter Tiatragal	Speciation/Development/Various. Chair: Tahlia Fulton		Flash Talks (various topics). Chair: Damien Esquerre			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	
15:30	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunistic pair	Kai-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots		Zoe Kean: How to become a great science communicator				
15:45	Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction	Byron Nongthombam: 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 Stead: 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						
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	16:45	Zoe Kean: How to become a great science communicator				
17:00		Sandee Degnan/Huifeng 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				