



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
08:45	Welcome to AES: Renée Firman (AES President) and Simone Blomberg (Conference Host) - Welcome to Country Ceremony		09:00	Housekeeping		09:00	Housekeeping	
09:15	ECR Plenary Jamiema Sara Philip Easy come, easier go: mapping the loss of flagellar motility across the tree of life		09:15	ECR Plenary Paul Battlay Genomic structural variation drives rapid adaptation in invasive plants		09:15	ECR Plenary Kristoffer Wild Climate change and the cost-of-living squeeze in desert lizards	
	Sociality. Chair: Renée Firman	Morphological evolution. Chair: XXXXXXX		Plasticity. Chair: XXXXX	Sexual selection. Chair:		Sociality/Development. Chair:	Plasticity. Chair: Erin Macartney
10:00	Kim Wong: Royal Blood, Mortal Cost: The effects of inbreeding on survivorship and fecundity in European Royal Families	Carley Goodwin: A computational fluid dynamics (CFD) study exploring the effects of nasal passage morphology on respiratory airflow of bats (Rhinolophidae).	10:00	Jade Kannangara: The evolutionary implications of mitochondrial heteroplasmy	Mathilde Le Levier: The role of Iridescent colours in butterfly sexual selection	10:00	Maxim Adams: Behavioural island syndrome in the Lord Howe Island cockroach <i>Panesthia lata</i>	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		10:15	Lisa Schwanz: TBA	Taylor Hosler: 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 crocodylian acoustic signals	Daniel 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 Chatterji: Dietary specialization drives adaptation, convergence, and integration across the cranial and appendicular skeleton in Waterfowl (Anseriformes)	10:30	Tahila Fulton: Adaptive nutrition: Cross-protection by amino acid restriction	Hyoseul Hyun: How sex differences balance genome-wide fitness of facultative asexual organisms?	10:30	Lachlan King: Consistent patterns of mutational covariance for <i>Drosophila</i> wing shape traits in three genetic backgrounds	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	
	Macroevolution. Chair: XXXXXXX	Sexual selection. Chair: XXXXXXXX		Nutrients, guts, antibiotics, immunity. Chair: XXXXXXX	Morphological evolution/speciation. Chair:		Venom. Chair:	Phylogenetics/Conservation. Chair:
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 Tiatragut: Evolution of Australia's endemic dipodactylid 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 Aulsebrook: Warming temperatures induce severe spinal deformities and mortality in highly successful tropical invader, <i>Gambusia holbrooki</i>
11:30	Bernie Degnan: Origin of the regulatory genome	Sanni Silvasti: Flashing signals and butterfly visual behaviour	11:30	Alistair Senior: The effects of macronutrients on age-specific mortality. A replicable effect!	David Brito: Exploring Morphology and Habitat in Ecuadorian Whortail-Iguanas	11:30	Lorenzo Seneci: Convergent yet divergent evolutions of two novel procoagulant venom phenotypes nested within North American anticoagulant rattlesnakes	Fabian Ruperti: 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	Wai Chi 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	Ammresh: Regionalisation within the elapid vertebral column	11:45	Kat Kempson: Clinical implications of regional variations in coagulotoxic effects and antivenom efficacies for Swiss Alps populations of <i>Vipera aspis</i> (Asp Viper)	Jeremias Ivan: 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 geographic parthenogenesis?	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	12:00	Kate Jordan: Clinical implications of dramatic ontogenetic shifts in Yellow Beard ( <i>Bothrops atrox</i> ) venom activation of blood clotting factors	Samantha Howitt: Mixed up Mytilus: contrasting outcomes of hybridisation in admixed populations
12:15		Shay Hirani: Scaling and developmental integration of a massively exaggerated secondary sexual sensory trait	12:15	Sandie Degnan: Host-symbiont recognition underpins the origin of animal innate immunity	Kenzie Melanson: Comparison of sperm availability in hybridizing male <i>Fundulus heteroclitus</i> and <i>F. diaphanus</i> in Porters Lake, Nova Scotia, Canada	12:15	Patrick Champagne: Factor Va 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: XXXXXXX	Phylogenetics. Chair: XXXXXXX		Conservation/Phylogenetics. Chair:	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 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> 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 5m Charles Zhou: Making the Most of Less in Imputation for Non-Model Species 15m Questions	13:30	Senior Plenary David Lambert TBA	
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 Stuttering Frogs ( <i>Mixophyes australis</i> )				
14:15	Boris Zec: The effect of phenotypic plasticity on plant population dynamics in a non-stationary environment	Jia Chang: The distinct genomic evolution of <i>Serratia</i> symbionts in the redlegged earth mite	14:00	Zenon Czenze: Bridging the gap: combining thermal physiology, ecology and biophysics for conservation				
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	14:15	Patra Petrohilos: When Cells Rebel: using comparative genomics to investigate cancer susceptibility in marsupials				
14:45		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		14:30	Closing and Prizes	
15:00	Afternoon tea		15:00	Afternoon tea				
	Macroevolution. Chair: XXXXXXX	Speciation/Development. Chair: XXXXXXX		Flash Talks (various topics). Chair: Damien Esquerre			Thomas Veldhuis; Apoorva Gopinath; Vishwa Patel; Samuel Ingloff-Richards; Andres Porras; Claire Larroux; Yuxuan Zhao; Tianchun Wu; Arlie Macdonald; Emma Holvast; Jackson Rendall; Peisong Tian; Diana Fisher; Avantika Sharma; Nissanka De Silva; Matthew Baker	
15:30	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair	Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots						
15:45	Roawn Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction	Byonkesh Nongthongbam: Genome size and TE content variation in a global invasive species						
16:00	Romane Normand: Meta-analysis reveals the tempo of evolutionary parallelism of local adaptation between native and introduced ranges of invasive plant	Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper <i>Warramaba virgo</i> with hybridisation and Next-generation sequencing						
16:15	Alexander Skeels: Paleobiome dynamics shaped a large Gondwanan plant radiation	Iva Popovic: Parallel adaptive admixture in a coral species triad						
16:30	Oceane Biard: Sponge metamorphosis uses conserved animal developmental mechanisms	Jie Wang: Reticulation patterns in Australian burrowing frogs <i>Neobatrachus</i>						
16:45	Alexandros Sotiropoulos: First indication of structural homology and co-evolution of candidate effector proteins of diverse fungi that attack other fungi	Huifang Yuan: Divergent developmental roles of duplicated FoxO transcription factors in a basal metazoan, the marine demosponge <i>Amphimedon queenslandica</i>						
			16:45	Zoe Kean: How to become a great science communicator				
			(~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				