



Australasian Evolution Society

University of Western Australia

Perth, WA 2024

Day 1 Wednesday 4th December

Time	Room 1	Room 2
9:00	Welcome - AES President Emma Sherratt and Vice-President Renée Firman	
9:15	ECR Plenary Sara Ryding	
9:30	Long- and short-term responses to climate change in body and appendage size of diverse Australian birds	
9:45		
	Thermal tolerance/climate change. Chair: Bob Wong	Genomics/population genetics. Chair: Marcus Michelangeli
10:00	Christen Mirth - Stressful interactions: how does genetic variation shape plastic responses to combined thermal and nutritional stress?	Rhiannon Schembri - Gene expression divergence in <i>Poephila</i> finches
10:15	Md Tangigul Haque - Seasonal plasticity of thermal tolerance indicates resilience to future climate in Australian damselfishes	Lucy Ockert - Preliminary Insights into the Population Structure and Connectivity of Little Penguins in Australia
10:30	Greg Walter - Small-scale geographic variation maintains adaptive genetic variation in thermal tolerance	Kate Cooper - How does hybridisation affect the phenotypic variability of parthenogens?
10:45	Morning tea	
11:00	Microbial evolution/resistance. Chair: Mike McDonald	Macroevolution. Chair: Kenny Travouillon
11:15	Storne de Scally - Coevolution leads to increased resistance to invasion	Neil Balchan - Investigating lineage and venom diversification in two medically important snake clades
11:30	Christopher Blake - Ecosystem in a bottle: Experimental evolution of a multi-trophic microcosm	Damien Esquerre - Museum Venomics Opens a Window to Understanding Snake Evolution and the Museum of All Possible Shells
11:45	Soffi Kei Kei Law - Exploiting trade-off to delay the evolution of antibiotic resistance	Simone Blomberg - The Botanist, The Spin-Doctor, The Wiener Sausage and the Museum of All Possible Shells
12:00	Athava Rhide - Nitrogen availability shapes microbial community evolution on plant roots	Matthew Symonds - Differences between appendages in the regulation of heat loss: implications for body shape evolution in response to climate change
12:15	Sarah Hurley - Experimental Evolution of Nitrogen-fixing Bacteria on the Plant Root	
12:30	Lunch	
12:45		
13:00		
13:15		
	Sexual selection. Chair: Samuel Lymbery	Life history/quantitative genetics. Chair: Mandy Ridley
13:30	Daisuke Kyogoku - Experimental evolution of sexual selection on <i>Callosobruchus chinensis</i>	Robert Dugand - Using inbreeding to test the contribution of non-additive genetic effects to additive genetic variance
13:45	Diego Solano Bienes - Does weapon size matter in bulb mites during intrasexual competition?	Christopher Barker - It's not the size that matters, it's how you use it: Questioning the link between body mass and longevity
14:00	Jackson Rendall - Genomic evidence of polygamy and paternity skew in the trapdoor spider <i>Blakistonia aurea</i>	Alistair Senior - Diet mixing and life-history traits: an integrated meta-analysis of mean-variance effects
14:15	Incheol Shin - Impact of kinship and mate competition on male aggression in bulb mites	Matthew Hall - Infection differentially alters the pace and shape of ageing in males and females
14:30	Joseph Tomkins - The need to breed: a test of the null model for polyandry	Tahila Fulton - Gene x Diet Interactions and Lifespan
14:45	Bruno Buzatto - Sigmoid allometries generate male dimorphism in secondary sexual traits	
15:00	Afternoon tea	
15:15	Sexual selection. Chair: Joe Tomkins	Behaviour. Chair: Anne Aulsebrook
15:30	Andrea Piccinini - Sexual selection, diversification and behavioural insights in the Australian wishbone spiders (genus <i>Aname</i>) in the Northern Jarrah Forest	Kate Fergusson - Impacts of long-term fluoxetine exposure on behaviour in fish
15:45	Upama Aich - Disrupting the Balance: Long-term Effects of Pharmaceutical Pollution in Fish	Gabriel Melhado - Effects of Antidepressant on Behaviours and Immune Responses of Fish
16:00	Adam Bode - Sex differences in romantic love: An evolutionary perspective	Jack Maners - Drugs in a social setting: How pharmaceutical pollution affects the shoaling behaviour of fish
16:15	Shiho Ozeki - Fish on the pill: impact of a widespread pharmaceutical contaminant on the relationship between pre- and post-copulatory sexual traits in pygmy halfbeaks (<i>Dermogobius coelestis</i>)	Marcus Michelangeli - Do pharmaceutical pollutants impact animal interactions and survival in the wild?
16:30	Meng-Han Chung - Live longer or die young? Sex-specific responses to environmental fluctuations	Sebastian Hayden - Assessing aggregation preferences within <i>Rhizoglyphus</i> echinopus
16:45		
17:00		
17:15		
17:30	Welcome drinks at Steve's Bar, Café and Winestore	
17:45		
18:00		

Day 2 Thursday 5th December

Time	Room 1	Room 2
9:00	Housekeeping	
9:15	ECR Plenary Maddie James	
9:30	Uncovering the genetic architecture of parallel evolution	
9:45		
	Taxonomy/phylogenetics. Chair: Emma Sherratt	Adaptation. Chair: John Whale
10:00	Kenny Travouillon - New Fossil Koala (Marsupialia: Phascolarctidae) from the Pleistocene of Western Australia	Genevieve Law - Mutation rate and mito-nuclear co-adaptation in the unusual duplicated mitogenomes of Australasian stingless bees (Apidae: Meliponini)
10:15	Cameron Dodd - Cryptic Kulture: Two new species of dasyurid marsupial	Kathleen McLay - Chromosomal Inversions facilitate adaptive evolution in a native Australian wildflower
10:30	Emma Holvas - Do Morphometric Data Improve Phylogenetic Reconstruction? A Systematic Review and Assessment	Rowan Lymbery - Adaptation to climate change via range shifts and genetic evolution in a global biodiversity hotspot
10:45	Morning tea	
11:00	Sexual selection/reproduction. Chair: Natasha LeBas	Behaviour/development. Chair: Alistair Senior
11:15	Rhiannon Eastment - The evolutionary genetics of mouthbrooding in African cichlids	Emily Belcher - Temperature and the progression of developmental milestones in embryogenesis
11:30	Aadhikesav Ramkumar - Empirical evidence for mating status-dependent choosiness in <i>Drosophila melanogaster</i>	Anne Aulsebrook - Sleepless on the tundra: costs and benefits of extreme activity in a polygynous shorebird
11:45	Hyoseul Hyun - Another cost of sex: Is the frequency of sex linked to changes in male and female quality?	Katherine H. McLean - Death and Dying in Genus Pan: A Comparative Evolutionary Perspective
12:00	Ashley Potter - Ejaculate Volumes Exceed Female Tracts Across Metazoans	Edward Galluccio - The relationship between cognitive performance and anti-predator behaviour in the Western Australian magpie
12:15	Yavani Abeyasinghe - Shifting pathogen landscapes: Understanding the effects of host sex ratio on disease dynamics	Michael Kasumovic - What affects generosity in a multiplayer iterated prisoner's dilemma?
12:30	Lunch	
12:45		
13:00		
13:15		
	Speciation/conservation. Chair: Putter Tiatragul	Behaviour/sociality. Chair: Jen Kelley
13:30	Monique Van Dorssen - A lonely worm genome in a rapidly changing environment	Eleanor Moore - Impacts of a widespread pharmaceutical pollutant on cognition in fish
13:45	Linette Umbrello - Evolution of the world's smallest marsupials (Dasyuridae: Planigale)	Samuel Lymbery - Ants and the science of war
14:00	Kamryn Carter - Hiding in plain sight: uncovering cryptic diversity in a hyper-arid desert gecko	Grace Blackburn - Investigating the relationship between physical cognitive tasks and a social cognitive task in a wild bird
14:15	Renee Catullo - The persistence of astonishingly old and naturally fragmented species in the SW peats	Lucy Southwell-Hamby - Evolution of cuticular hydrocarbon profiles in Myrmecia (bull-ant) species
14:30	Shengyao Lin - Conservation genetic management of the Northern Territory's only threatened frog, the short range endemic Howard Springs Toadlet (<i>Uperoleia davesae</i>)	Stephanie Mason - Social magpies learn faster: how social complexity influences vocal ontogeny in the Western magpie
14:45	Afternoon tea	
15:00	Flash Talks (various topics). Chair: Upama Aich	
15:15		
15:30	Lucinda Aulsebrook - Is sexual selection adaptive in warming environments Jennifer Kelley - Evolution of leaf memory in bull-gingering moths Annie Guillaume - Multiscale variables for nuanced insights into local adaptation Anna Deplazzi - Taxonomic trends in protein domain diversity in teleosts Jess Herbert - Are beekeepers a buzzkill? The effects of temperature on native bee behaviour and cognition Lucas Le Gall - Inferring ancestral foraging and locomotion traits to trace the evolution of hopping among marsupials: why do kangaroos hop? Sudeep Meena - The co-evolution of life-history traits and macronutrient appetites Patricia Slattery - Male dimorphism and kin recognition in euglossin Australian sweat bees (Halictidae: Hymenoptera) Danielle van den Berg - TBC	
15:45		
16:00		
16:15	<i>free time</i>	
16:30		
16:45		
17:00		
17:15	ECR breakout	
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18:00		

Day 3 Friday 6th December

Time	Room 1	Room 2
9:00	Annual General Meeting (AGM)	
9:15		
9:30		
9:45		
	Plasticity. Chair: Jon Evans	Genomics. Chair: Rich Edwards
10:00	Erin Macartney - Macronutrient balance on brown adipose tissue function in fathers and non-genetic inheritance in offspring	Jennifer Evans - Genomic evidence for inbreeding depression in an endangered Australian bird
10:15	Aidan Stuckey - Sex, Genetics, and Plasticity in Allometry	Patra Petrosilos - When Cells Rebel: a comparative genomics investigation into marsupial cancer susceptibility
10:30	Marta Favero - Phenanthrene pollution disrupts behavioural individuality and plasticity in the brine shrimp <i>Artemia franciscana</i>	Ben Phillips - Genetic Allee effects for containment of invasive species
10:45	Morning tea	
11:00	Morphological evolution. Chair: Damien Esquerre	Genomics. Chair: Renee Catullo
11:15	Antonio Rayos - Another case of morphological reduction in the large hepatic family Lepidoziaceae shown by <i>Meinungeria</i>	Manuel Poretti - Beyond centromeres: the role of pericentromeric transposable elements in chromosome evolution
11:30	Jeremy Wilson - Correlation with a limited set of behavioral niches explains the convergence of somatic morphology in mygalomorph spiders	Alexandros Georgios Sotiropoulos - Lichen metagenomes reveal highly complex micro-environments
11:45	Putter Tiatragul - Vertebra number evolution in Australian blindsnakes	Liang Liu - Transcriptomic and Epigenomic Changes Driving Freshwater Adaptation in Sticklebacks
12:00	Boikhuso Lerato Rapalal - Environmental change and the evolution of body colouration in the ornate dragon, <i>Ctenophorus ornatus</i>	Richard Edwards - Depth-based correction of gene duplications and losses in genome assemblies
12:15	Nuttakorn Taewcharoen - Intraspecific variation pattern of vertebrae in leopards with gradient of locomotive ability	Kelton Cheung - Does standing genetic variation contribute to local adaptation of cane toads in Australia?
12:30	Diana Fisher - The evolution of marsupial pouch opening direction	Jamie Botting - TBC
12:45	Lunch	
13:00		
13:15		
	Senior Plenary Natalie Warburton How to build a kangaroo	
14:00		
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14:30		
14:45	Closing and Prizes	
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15:15		
	Walk around botanical gardens	
16:00		
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16:45		
17:00		
17:15	<i>free time</i>	
17:30		
17:45		
18:00	Dinner at Market Grounds	