



# Australasian Evolution Society

University of Western Australia

Perth, WA 2024

## Day 1 Wednesday 4th December

Time	Room 1	Room 2
9:00	<b>Welcome - AES President Emma Sherratt and Vice-President Renée Firman</b>	
9:15	<b>ECR Plenary Sara Ryding</b>	
9:30	Long- and short-term responses to climate change in body and appendage size of diverse Australian birds	
9:45		
10:00	<b>Thermal tolerance/climate change. Chair: Bob Wong</b>	<b>Genomics/population genetics. Chair: Marcus Michelangeli</b>
10:00	<b>Christen Mirth</b> - Stressful interactions: how does genetic variation shape plastic responses to combined thermal and nutritional stress?	<b>Rhianon Schembri</b> - Gene expression divergence in <i>Poephila</i> finches
10:15	<b>Md Tangiul Haque</b> - Seasonal plasticity of thermal tolerance indicates resilience to future climate in Australian damselflies	<b>Lucy Ockert</b> - Preliminary Insights into the Population Structure and Connectivity of Little Penguins in Australia
10:30	<b>Greg Walter</b> - Small-scale geographic variation maintains adaptive genetic variation in thermal tolerance	<b>Kate Cooper</b> - How does hybridisation affect the phenotypic variability of parthenogens?
10:45	<b>Morning tea</b>	
11:00	<b>Macroevolution. Chair: Kenny Travoillon</b>	<b>Behaviour/development. Chair: Alistair Senior</b>
11:15	<b>Neil Balchan</b> - Investigating lineage and venom diversification in two medically important snake clades	<b>Emily Belcher</b> - Temperature and the progression of developmental milestones in embryogenesis
11:30	<b>Damien Esquerre</b> - Museum Venomics Opens a Window to Understanding Snake Evolution	<b>Anne Aulsebrook</b> - Sleepless on the tundra: costs and benefits of extreme activity in a polygynous shorebird
11:45	<b>Simone Blomberg</b> - The Botanist, The Spin-Doctor, The Wiener Sausage and the Museum of All Possible Shells	<b>Katherine H. McLean</b> - Death and Dying in Genus Pan: A Comparative Evolutionary Perspective
12:00	<b>Matthew Symonds</b> - Differences between appendages in the regulation of heat loss: implications for body shape evolution in response to climate change	<b>Edward Galluccio</b> - The effect of heat stress on anti-predator behaviour in the Western Australian magpie
12:15		<b>Michael Kasumovic</b> - What affects generosity in a multiplayer iterated prisoner's dilemma?
12:30	<b>Lunch</b>	
12:45		
13:00		
13:15	<b>Sexual selection. Chair: Samuel Lymbery</b>	<b>Life history/quantitative genetics. Chair: Mandy Ridley</b>
13:30	<b>Daisuke Kyogoku</b> - Experimental evolution of sexual selection on <i>Callosobruchius chinensis</i>	<b>Robert Dugand</b> - Using inbreeding to test the contribution of non-additive genetic effects to additive genetic variance
13:45	<b>Diego Solano Brenes</b> - Does weapon size matter in bulb mites during intrasexual competition?	<b>Christopher Barker</b> - It's not the size that matters, it's how you use it: Questioning the link between body mass and longevity
14:00	<b>Jackson Rendall</b> - Genomic evidence of polygamy and paternity skew in the trapdoor spider <i>Blakistonia aurea</i>	<b>Alistair Senior</b> - Diet mixing and life-history traits: an integrated meta-analysis of mean-variance effects
14:15	<b>Incheol Shin</b> - Impact of kinship and mate competition on male aggression in bulb mites	<b>Matthew Hall</b> - Infection differentially alters the pace and shape of ageing in males and females
14:30	<b>Joseph Tomkins</b> - The need to breed: a test of the null model for polyandry	<b>Tahlia Fulton</b> - Gene x Diet Interactions and Lifespan
14:45	<b>Bruno Buzatto</b> - Sigmoid allometries generate male dimorphism in secondary sexual traits	
15:00	<b>Afternoon tea</b>	
15:15	<b>Sexual selection. Chair: Joe Tomkins</b>	<b>Behaviour. Chair: Anne Aulsebrook</b>
15:30	<b>Andrea Piccinini</b> - Sexual selection, diversification and behavioural insights in the Australian wishbone spiders (genus <i>Anane</i> ) in the Northern Jarrah Forest	<b>Kate Fergusson</b> - Impacts of long-term fluoxetine exposure on behaviour in fish
15:45	<b>Upama Aich</b> - Disrupting the Balance: Long-term Effects of Pharmaceutical Pollution in Fish	<b>Gabriel Melhado</b> - Effects of Antidepressant on Behaviours and Immune Responses of Fish
16:00	<b>Adam Bode</b> - Sex differences in romantic love: An evolutionary perspective	<b>Jack Manera</b> - Drugs in a social setting: How pharmaceutical pollution affects the shoaling behaviour of fish
16:15	<b>Shiho Ozeki</b> - Fish on the pill: impact of a widespread pharmaceutical contaminant on the relationship between pre- and post-copulatory sexual traits in pygmy halfbeaks (Dermogenys collettei)	<b>Marcus Michelangeli</b> - Do pharmaceutical pollutants impact animal interactions and survival in the wild?
16:30	<b>Meng-Han Chung</b> - Live longer or die young? Sex-specific responses to environmental fluctuations	<b>Sebastian Hayden</b> - Assessing aggregation preferences within <i>Rhizoglyphus echinopus</i>
16:45		
17:00		
17:15	<b>Welcome drinks at Steve's Bar, Café and Winestore</b>	
17:30		
17:45		
18:00		

## Day 2 Thursday 5th December

Time	Room 1	Room 2
9:00	<b>Housekeeping</b>	
9:15	<b>ECR Plenary Maddie James</b>	
9:30	Uncovering the genetic architecture of parallel evolution	
9:45		
10:00	<b>Taxonomy/phylogenetics. Chair: Emma Sherratt</b>	<b>Adaptation. Chair: John Whale</b>
10:00	<b>Kenny Travoillon</b> - New Fossil Koala (Marsupialia: Phascolarctidae) from the Pleistocene of Western Australia	<b>Genevieve Law</b> - Mutation rate and mito-nuclear co-adaptation in the unusual duplicated mitogenomes of Australasian stingless bees (Apidae: Meliponini)
10:15	<b>Cameron Dodd</b> - Cryptic Kullar: Two new species of dasyurid marsupial	<b>Kathleen McLay</b> - Chromosomal Inversions facilitate adaptive evolution in a native Australian wildflower
10:30	<b>Emma Holvasi</b> - Do Morphometric Data Improve Phylogenetic Reconstruction? A Systematic Review and Assessment	<b>Rowan Lymbery</b> - Adaptation to climate change via range shifts and genetic evolution in a global biodiversity hotspot
10:45	<b>Morning tea</b>	
11:00	<b>Sexual selection/reproduction. Chair: Natasha LeBas</b>	<b>Microbial evolution/resistance. Chair: Mike McDonald</b>
11:15	<b>Rhianon Eastment</b> - The evolutionary genetics of mouthbrooding in African cichlids	<b>Storme de Scally</b> - Coevolution leads to increased resistance to invasion
11:30	<b>Aadhikesav Ramkumar</b> - Empirical evidence for mating status-dependent choosiness in <i>Drosophila melanogaster</i>	<b>Christopher Blake</b> - Ecosystem in a bottle: Experimental evolution of a multi-trophic microcosm
11:45	<b>Hyoseul Hyun</b> - Another cost of sex: Is the frequency of sex linked to changes in male and female quality?	<b>Soffi Kei Kei Law</b> - Exploring trade-off to delay the evolution of antibiotic resistance
12:00	<b>Ashley Potter</b> - Ejaculate Volumes Exceed Female Tracts Across Metazoans	<b>Atharva Bhide</b> - Nitrogen availability shapes microbial community evolution on plant roots
12:15	<b>Vayani Abeyasinghe</b> - Shifting pathogen landscapes: Understanding the effects of host sex ratio on disease dynamics	<b>Sarah Hurley</b> - Experimental Evolution of Nitrogen-fixing Bacteria on the Plant Root
12:30	<b>Lunch</b>	
12:45		
13:00		
13:15	<b>Speciation/conservation. Chair: Putter Tiatragul</b>	<b>Behaviour/sociality. Chair: Jen Kelley</b>
13:30	<b>Monique Van Dorssen</b> - A lonely worm genome in a rapidly changing environment	<b>Eleanor Moore</b> - Impacts of a widespread pharmaceutical pollutant on cognition in fish
13:45	<b>Linette Umbrello</b> - Evolution of the world's smallest marsupials (Dasyuridae: Planigale)	<b>Samuel Lymbery</b> - Ants and the science of war
14:00	<b>Kamryn Carter</b> - Hiding in plain sight: uncovering cryptic diversity in a hyper-arid desert gecko	<b>Grace Blackburn</b> - Investigating the relationship between physical cognitive tasks and a social cognitive task in a wild bird
14:15	<b>Renée Catullo</b> - The persistence of astonishingly old and naturally fragmented species in the SW peats	<b>Lucy Southwell-Hambly</b> - Evolution of cuticular hydrocarbon profiles in Myrmecina (bul-ant) species
14:30	<b>Shengyao Lin</b> - Conservation genetic management of the Northern Territory's only threatened frog: the short range endemic Howard Springs Toadlet ( <i>Uperoleia daviesae</i> )	<b>Stephanie Mason</b> - Social magpies learn faster; how social complexity influences vocal ontogeny in the Western magpie
14:45	<b>Afternoon tea</b>	
15:00	<b>Flash Talks (various topics). Chair: Upama Aich</b>	
15:15	<b>Luinda Aulsebrook</b> - Is sexual selection adaptive in warming environments	<b>Jennifer Kelley</b> - Evolution of leaf mimicry in fruit-gearing moths
15:30	<b>Annie Guillaume</b> - Multiscale variables for nuanced insights into local adaptation	<b>Anna Depazzi</b> - Taxonomic trends in protein domain diversity in teleosts
15:45	<b>Jessie Herbert</b> - Are bees a buzzkill? The effects of temperature on native bee behaviour and cognition	<b>Lucas Le Gall</b> - Inferring ancestral foraging and locomotion traits to trace the evolution of hopping among marsupials: why do kangaroos hop?
16:00	<b>Sushep Meena</b> - The co-evolution of life-history traits and macronutrient appetites	<b>Patricia Slatyer</b> - Male dimorphism and kin recognition in euglossinid Australian sweat bees (Halictidae: Hymenoptera)
16:15	<b>Danielle van den Berg</b> - TBC	
16:30	<b>free time</b>	
16:45		
17:00		
17:15	<b>ECR breakout</b>	
17:30		
17:45		
18:00		

## Day 3 Friday 6th December

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