



Australasian
Evolution
Society

University of Western Australia

Perth, WA 2024

Day 1 Wednesday 4th December			Day 2 Thursday 5th December			Day 3 Friday 6th December			
Time	Room 1	Room 2	Time	Room 1	Room 2	Time	Room 1	Room 2	
9:00	Welcome - AES President Emma Sherratt and Vice-President Renée Firman		9:00	Housekeeping		9:00	AGM		
9:15	ECR Plenary Sara Ryding		9:15	ECR Plenary Maddie James		9:15			
9:30	Long- and short-term responses to climate change in body and appendage size of diverse Australian birds		9:30	Uncovering the genetic architecture of parallel evolution		9:30			
9:45			9:45			9:45			
10:00	Thermal tolerance/climate change. Chair: Bob Wong Christian Mirth - Stressful interactions: how does genetic variation shape plastic responses to combined thermal and nutritional stress?	Population genetics. Chair: Marcus Michelangeli Rhiannon Schembri - Gene expression divergence in <i>Poephila</i> finches	10:00	Taxonomy/phylogenetics. Chair: Emma Sherratt Kenny Travouillon - New Fossil Koala (<i>Marsupialia: Phascolarctidae</i>) from the Pleistocene of Western Australia	Adaptation. Chair: John Whale Genevieve Law - Mutation rate and mito-nuclear co-adaptation in the unusual duplicated mitogenomes of Australasian stingless bees (<i>Apidae: Meliponini</i>)	10:00	Plasticity. Chair: Jon Evans Erin Macarthey - Macronutrient balance on brown adipose tissue function in fathers and non-genetic inheritance in offspring	Genomics. Chair: Rich Edwards Jennifer Evans - Genomic evidence for inbreeding depression in an endangered Australian bird	
10:15	Mid 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	10:15	Cameron Dodd - Cryptic Kullar: Two new species of dasyurid marsupial	Kathleen McLay - Chromosomal Inversions facilitate adaptive evolution in a native Australian wildflower	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	Greg Walter - Small-scale geographic variation maintains adaptive genetic variation in thermal tolerance	Kate Cooper - How does hybridisation affect the phenotypic variability of parthenogens?	10:30	Emma Holvast - 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	10:30	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		10:45	Morning tea		10:45	Morning tea		
11:00			11:00			11:00			
11:15	Microbial evolution/resistance. Chair: Mike McDonald Storme de Scally - Coevolution leads to increased resistance to invasion	Macroevolution. Chair: Kenny Travouillon Neil Balchan - Investigating lineage and venom diversification in two medically important snake clades	11:15	Sexual selection/reproduction. Chair: Natasha LeBas Rhiannon Eastment - The evolutionary genetics of mouthbrooding in African cichlids	Behaviour/development. Chair: Alistair Senior Emily Belcher - Temperature and the progression of developmental milestones in embryogenesis	11:15	Morphological evolution. Chair: Damien Esquerre Antonio Rayos - Another case of morphological reduction in the large hepatic family Lepidocrocidae shown by <i>Meinungeria</i>	Genomics. Chair: Renee Catullo Manuel Poretti - Beyond centromeres: the role of pericentromeric transposable elements in chromosome evolution	
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	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	11:30	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	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	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	11:45	Sarin Tiatragul - Vertebrate number evolution in Australian blindsnakes	Liang Liu - Transcriptomic and Epigenomic Changes Driving Freshwater Adaptation in Sticklebacks	
12:00	Athava Bhide - 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	12:00	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	12:00	Boikhitso Lerato Rapala - 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	Sarah Hurley - Experimental Evolution of Nitrogen-fixing Bacteria on the Plant Root		12:15	Vyanti 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?	12:15	Nuttakorn Tawachroen - Intraspecific variation pattern of vertebrae in leopards with gradient of locomotive ability	Kelton Cheung - TBC	
12:30	Lunch		12:30	Lunch		12:30	Lunch		
12:45			12:45			12:45			
13:00			13:00			13:00			
13:15			13:15			13:15			
13:30	Sexual selection. Chair: Samuel Lymbery Daisuke Kyogoku - Experimental evolution of sexual selection on <i>Callosobruchus chinensis</i>	Life history/quantitative genetics. Chair: Mandy Ridley Robert Dugand - Using inbreeding to test the contribution of non-additive genetic effects to additive genetic variance	13:30	Speciation/conservation. Chair: Putter Tiatragul Monique Van Dorssen - A lonely worm genome in a rapidly changing environment	Behaviour/sociality. Chair: Jen Kelley Eleanor Moore - Impacts of a widespread pharmaceutical pollutant on cognition in fish	13:30	Senior Plenary Natalie Warburton How to build a kangaroo		
13:45	Diego Solano Brenes - 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	13:45	Linette Umbrello - Evolution of the world's smallest marsupials (<i>Dasyuridae: Planigale</i>)	Samuel Lymbery - Ants and the science of war	13:45			
14:00	Jackson Rendall - Genomic evidence of polygamy and paternity skew in the trapdoor spider <i>Bakstonsia aurea</i>	Alistair Senior - Diet mixing and life-history traits: an integrated meta-analysis of mean-variance effects	14:00	Karmyn Carter - Hiding in plain sight: uncovering cryptic diversity in a hyper- and desert gecko	Grace Blackburn - Investigating the relationship between physical cognitive tasks and a social cognitive task in a wild bird	14:00			
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	14:15	Renee Catullo - The persistence of astonishingly old and naturally fragmented species in the SW peats	Lucy Southwell-Hambly - Evolution of cuticular hydrocarbon profiles in <i>Myrmecia</i> (bull-ant) species	14:15			
14:30	Joseph Tomkins - The need to breed: a test of the null model for polyandry	Tahlia Fulton - Gene x Diet Interactions and Lifespan	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	14:30			
14:45	Bruno Buzatto - Sigmoid allometries generate male dimorphism in secondary sexual traits		14:45	Afternoon tea		14:45	Closing and Prizes		
15:00	Afternoon tea		15:00	Flash Talks (various topics). Chair: Upama Aich		15:00			
15:15			15:15			15:15			
15:30	Sexual selection. Chair: Joe Tomkins Andrea Piccinini - Sexual selection, diversification and behavioural insights in the Australian wishbone spiders (genus <i>Anane</i>) in the Northern Jarrah Forest	Behaviour. Chair: Anne Aulsebrook Kate Fergusson - Impacts of long-term fluoxetine exposure on behaviour in fish	15:30	Lucy Southwell-Hambly - Is sexual selection adaptive in warming environments? Jennifer Kelley - Evolution of leaf mimicry in fruit-eating moths Annie Gullautume - Multiscale variables for nuanced insights into local adaptation Anna Delapiaz - Taxonomic trends in protein domain diversity in teleosts	Stephanie Mason - Multiscale variables for nuanced insights into local adaptation Anna Delapiaz - Taxonomic trends in protein domain diversity in teleosts Jessa Herbert - Are beesheaves a buzzcut? 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?	15:30	Walk around botanical gardens		
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	15:45	Suleep Meena - The co-evolution of life-history traits and macronutrient appetites Patricia Slatyer - Male dimorphism and kin recognition in eusocial Australian sweat bees (<i>Halictidae: Hymenoptera</i>) Daisuke Ueda, Bob Wong, TBC	15:45				
16:00	Adam Bode - Sex differences in romantic love: An evolutionary perspective	Jack Manera - Drugs in a social setting: How pharmaceutical pollution affects the shoaling behaviour of fish	16:00			16:00			
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>Dermogenys collettii</i>)	Marcus Michelangeli - Do pharmaceutical pollutants impact animal interactions and survival in the wild?	16:15	free time		16:15			
16:30	Meng-Han Chung - Live longer or die young? Sex-specific responses to environmental fluctuations	Sebastian Hayden - Assessing aggregation preferences within <i>Rhizoglyphus echinopus</i>	16:30			16:30			
16:45			16:45			16:45			
17:00			17:00			17:00			
17:15	Welcome drinks (location TBC)		17:15	ECR breakout		17:15	free time		
17:30			17:30			17:30			
17:45			17:45			17:45			
18:00			18:00			18:00	Dinner at Market Grounds		