

Australasian Evolution Society

AusEvo Conference 2023

Schedule of Events

Wednesday 13 December

Time	Activity
12:00 - 14:00	Registration Desk Opens @Scott Theatre Foyer
12:30 - 14:00	Lunch @Pfitzner Court
14:00 - 14:30	Welcome address @Scott Theatre
14:30 - 15:30	Plenary 1: Dustin Rubenstein @Scott Theatre
15:30 - 16:00	Afternoon tea @Pfitzner Court
16:00 - 17:00	Concurrent sessions
17:30 onwards	Welcome event @Unibar Cloisters

Thursday 14 December

Time	Activity
09:00 - 09:45	ECR Plenary: Claudia Crowther @Scott Theatre
09:45 - 10:45	Concurrent sessions
10:45 - 11:15	Morning tea @Pfitzner Court
11:15 - 12:30	Concurrent sessions
12:30 - 14:00	Lunch @Pfitzner Court AES General Meeting from 13:00 onwards in Scott Theatre
14:00 - 15:00	Tag Team Talk 1 @Scott Theatre
15:00 - 15:30	Afternoon tea @Pfitzner Court
15:30 - 16:30	Concurrent sessions
16:30 - 17:30	ECR Breakout session @Barr Smith South 2032

Friday 15 December

Time	Activity
09:00 - 09:45	ECR Plenary: Samuel Lymbery @Scott Theatre
09:45 - 10:45	Concurrent sessions
10:45 - 11:15	Morning tea @Pfitzner Court
11:15 - 12:30	Concurrent sessions
12:30 - 13:30	Lunch @Pfitzner Court
13:30 - 14:30	Tag Team Talk 2
14:30 - 15:30	Concurrent sessions
15:30 - 16:00	Afternoon tea @Pfitzner Court
16:00 - 17:00	Flash talks (Scott Theatre)
17:00 - 17:30	Closing and Prizes @Scott Theatre
17:30 - 19:00	Free time
19:00 - 23:00	Conference Dinner @Peter Rabbit

*Lunch and Morning/Afternoon tea may be served in the Foyer of Scott Theatre if it is raining outside.

Daily Program

Wednesday 13 December

Wednesday

Opening Plenary

Afternoon	Scott Theatre
14:30 - 15:30	Dustin Rubenstein The Evolution of Cooperative Breeding: New Perspectives and Future Directions

Presentations

Wednesday

Standard talks (10mins + 3 mins questions)

Afternoon	Darling West G14 Lecture Theatre (Room 1) Macroevolution 1 (Chair: Matt Symonds)	Scott Theatre (Room 2) Evolution and climate change (Chair: Julian Beaman)
16:00	Zhuzhi Zhang The phylogenetic and parallel origin of Australian soil burrowing cockroaches	Pieter Arnold Selection on phenotypic traits and their plasticity in response to warming of both parental and offspring environments
16:15	Sally Potter Cytonuclear discordance and introgression in the brachyotis group of rock-wallabies	Matthew Hall The sicker sex in a warming world
16:30	Amy Slender Genomic population structure of a widely distributed Southern Australian lizard (<i>Tiliqua rugosa</i>)	Belinda van Heerwaarden Do endosymbionts influence thermal tolerance?
16:45	Toby Kovacs Historical population sizes and mutation rates in marsupials	Damien Dowling Experimental support for a mitochondrial genetic contribution to climatic adaptation
17:00	Kyle Ewart Pervasive relaxed selection in termite genomes	John Whale Optimus Prime-ing: Can thermal resilience of seagrass seedlings be enhanced by a priming event?

Social Event

Wednesday

Social Event

17:30	University Bar Cloisters
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Thursday 14 December

Thursday		ECR Plenary 1
Morning	Scott Theatre	
09:00 - 09:45	Claudia Crowther Off the straight and narrow: Non-linear plasticity in a changing world	

Thursday		Standard talks (10mins + 3 mins questions)		
Morning	Darling West G14 Lecture Theatre (Room 1) Reproduction (Chair: Alistair Senior)	Scott Theatre (Room 2) Morphological Evolution 1 (Chair: Amy Slender)	Kerr Grant Lecture Theatre (Room 3) Evolution of resistance (Chair: Ros Gloag)	
9:45	Soleille Miller Intergenerational Loss of Genetic Diversity in a Facultative Parthenogenetic Stick Insect Species	Nuttakorn (Win) Taewcharoen No holding back: vertebral column shape in fast-running prey converges on their speedy predators	Thomas Schmidt Global, asynchronous sweeps at multiple resistance genes in <i>Aedes</i> mosquitoes	
10:00	Liang Liu Evolutionary Adaptation of Reproduction: The Pleiotropic Role of TSH β 2-Producing Cells in Sticklebacks	Ellen Martin Grasping hold of functional trade-offs using the diversity of foot forms in Australian birds	Joshua Thia Attack of the (resistant) clones: the rise and spread of insecticide resistance in an invasive aphid pest	
10:15	Caitlin Creak Accidentally murderous spiders: a true crime on where they live and how they work.	Russell Bonduriansky What can allometry and life history tell us about the evolution of brain size?	Alicia Williams Costs of antibiotic resistance through the lens of resource competition theory	
10:30	Jinglin Wen Evidence of Maternal-fatal Communication in Skink Pregnancy	Rex Mitchell Sizing up cranial allometry in mammals	Ian Gooi The predictability of antibiotic resistance evolution in <i>Acinetobacter baylyi</i>	

Thursday

Standard talks (10mins + 3 mins questions)

Morning	Darling West G14 Lecture Theatre (Room 1) Quantitative/ population genetics (Chair: Rowan Lymbery)	Scott Theatre (Room 2) Invasive species (Chair: Jon Evans)	Kerr Grant Lecture Theatre (Room 3) Microbial Evolution 1 (Chair: Masato Yamamichi)
11:15	Peta Hill Episodic population fragmentation and gene flow reveal a trade-off between heterozygosity and allelic richness	Felipe Floreste Host-parasite immune dynamics along the invasion range of cane toads in Australia	Elisha Freedman The distribution of secondary symbionts across scale insects and its evolutionary and ecological implications
11:30	Iva Popovic High germline mutation rates, but not extreme population size outbreaks, influence genetic diversity in a keystone coral predator	Lauren Common The Avian Vampire Fly and Darwin's Finches	Atharva Bhilde Investigating the ecological and coevolutionary dynamics of a root associated microbiome
11:45	Lachlan King The effect of genetic background on quantitative mutational variation	Kelton Cheung Selection signatures of the invasive cane toad through whole genome analyses	Chris Blake Experimental Evolution of Ecosystem Topography in a Two-Species Community
12:00	Katrina McGuigan Effects of spontaneous mutations on fitness traits of <i>Drosophila serrata</i> infected with <i>Drosophila C</i> virus	Ros Gloag A population genetic timeline of a natural insect invasion	James Richardson Species coexistence via higher order consumer-resource interactions
12:15	Simone Blomberg Phylogenetic Comparative Methods for the Quantitative Genetic G-Matrix	Paul Battlay Chromosomal inversions underlie rapid adaptation on multiple continents in an invasive weed	Andrew Letten Not-so-simple assembly rules support multispecies coexistence on a single resource

Thursday

Tag Team Talks 1

Afternoon	Scott Theatre
14:00 - 15:00	Jon Evans, Jess Hadlow, Rowan Lymbery, and Thina Kunalan Post-ejaculatory environments, paternal effects and more

Thursday		Standard talks (10mins + 3 mins questions)		
Afternoon	Darling West G14 Lecture Theatre (Room 1) Sexual selection 1 (Chair: Bruno Buzatto)	Scott Theatre (Room 2) Evolution and Conservation 1 (Chair: Amanda Petterson)	Kerr Grant Lecture Theatre (Room 3) Microbial Evolution 2 (Chair: Matt Symonds)	
15:30	Fatema Akhter Teasing apart the cost of sexual harassment and mating in females	Grace Marsh Genomic vulnerability to climate change in a Critically Endangered possum from southwestern Australia	Christopher Brown rescomp: An R package for resource competition modelling	
15:45	Daniela Wilner Can sexual conflict explain geographic parthenogenesis?	Emily Roycroft Genetic load in island populations of Australian mammals	Neetika Ahlawat Nutrient packaging alters adaptation and genetic divergence in <i>E. coli</i>	
16:00	Nirjana Dewan Long-term fitness consequences of <i>D.melanogaster</i> populations evolved in the absence versus presence of male-male competition	Oliver Stuart Genetic rescue of reproductive fitness in a captive bred insect	Jan Engelstaedter The impact of natural transformation on adaptation to heterogeneous environments	
16:15	Pietro Pollo Synthesis of sexual selection: a systematic map of meta-analyses with bibliometric analysis	Aysegul Birand Cheating evolution for conservation	Michael McDonald Horizontal gene transfer: making things happen in the microbial world	

ECR Event

Thursday		ECR Breakout Session
17:30	Barr Smith South 2032	

Friday 15 December

Friday		ECR Plenary 2
Morning	Scott Theatre	
09:00 - 09:45	Samuel Lymbery Warfare in ants and video games	

Friday		Standard talks (10mins + 3 mins questions)		
Morning	Darling West G14 Lecture Theatre (Room 1) Morphological Evolution 2 (Chair: Masato Yamamichi)	Scott Theatre (Room 2) Evolution and Conservation 2 (Chair: Ros Gloag)	Kerr Grant Lecture Theatre (Room 3) Development (Chair: Jon Evans)	
9:45	Yuxuan (George) Zhao Hourglass-shaped adults and 'Pinocchio-listed' larvae: Morphological transition of Australian water beetles (Coleoptera: Dytiscidae) from aboveground to underground	Maxim Adams Evolution, phylogeography and conservation genetics of the Lord Howe Island cockroach <i>Panesthia lata</i>	Ondi Crino From eggs to adulthood: unveiling the sustained impacts of developmental conditions on skink physiology and size	
10:00	Tory Botha Shape note: Morphological investigation of Tribachidium from Nilpena, South Australia	Patra Petrohilos Attack of the Clones: no evidence for distinct phenotypic subgroups of Devil Facial Tumour Disease (DFTD)	Huifang Yuan Pioneer and immediate early transcription factors orchestrate an environmentally-induced life cycle transition that is highly conserved across the animal kingdom	
10:15	Natasha Lee Hiotis Hip, hop, and a fossil drop: Identifying fossil frogs from Naracoorte Caves using their ilium bone	Julian Beaman Eco-evolutionary projections to guide genetic rescue for threatened Australian marsupials	Ivan Vinogradov How inbreeding and developmental stress impact cognition	
10:30	Vera Weisbecker The thylacine as an evolutionary curiosity	Bob Wong Toxicants in the wilderness: an evolutionary perspective	Alistair Senior Nutrition and life-history in <i>Drosophila melanogaster</i>	

Friday		Standard talks (10mins + 3 mins questions)	
Morning	Darling West G14 Lecture Theatre (Room 1) Macroevolution 2 (Chair: Amy Slender)	Scott Theatre (Room 2) Evolution and temperature (Chair: Ondi Crino)	Kerr Grant Lecture Theatre (Room 3) Evolution: not classified elsewhere (Chair: Alistair Senior)
11:15	Patrice Pottier Vulnerability of amphibians to global warming	Amanda Pettersen Intergenerational plasticity aligns with temperature-dependent selection on offspring metabolic rates	Fabian C. Salgado-Roa Drivers of colour polymorphism in a colourful widespread spider
11:30	Carmen da Silva Local climate change velocity and evolutionary history explains multidirectional range shifts in North American butterflies	Jigmidmaa Boldbaatar Effects of heat shock stress on egg hatching success in <i>Megacrania batesii</i> (Phasmatodea: Phasmatidae)	Christopher Barker Evolution of Ageing is driven adaptive gains
11:45	Yun Li Evolution across adaptive landscape in a hyperdiverse beetle radiation	Md Mahmud Al Hasan Effects of inbreeding and stressful developmental temperatures on guppy fitness	Daisuke Kyogoku Evolution of realized niche breadth diversity driven by community dynamics
12:00	Diego Garcia-Bellido Australian Ediacaran & Cambrian contribution to Evolution	Rebecca Raynal Natural oviposition site temperatures of ectotherms - a review	Masato Yamamichi Prey rapid evolution promotes fluctuation-dependent species coexistence
12:15	Doaa Doudin Evolution of subtelomeres in birds and reptiles	Diego de Moura Campos Synergistic effects of diet restriction and temperature on guppy development	Devi Stuart-Fox From bioinspired to bioinformed: materials science meets evolutionary biology

Friday		Tag Team Talks 2
Afternoon	Scott Theatre	
13:30 – 14:30	Australian Centre for Ancient DNA Recent Advances in Ancient DNA	

Friday		Standard talks (10mins + 3 mins questions)	
Afternoon	Darling West G14 Lecture Theatre (Room 1) Sexual selection 2 (Chair: Pietro Pollo)	Scott Theatre (Room 2) Morphological Evolution 3 (Chair: Vera Weisbecker)	
14:30	Megan Folwell Co-evolution of genitalia in Northern Pacific rattlesnakes (<i>Crotalus oreganus</i>)	Sarin (Putter) Tiatragul Spags and Snags: morphological evolution of Australian blindsnakes	
14:45	Bruno Buzatto Mating behaviour in the Sydney funnel-web spider and the evolution of clasping structures in mygalomorph spiders	Tamika Nash-Hahn Sequential scales: New perspectives on snake axial evolution	
15:00	Tom Allison Sexual selection shapes the evolution of mitochondrial efficiency	Yasmin Asar Testing the link between molecular and morphological rates of evolution	
15:15	Martin Whiting Evolution of a conspicuous dynamic visual signal in an introduced chameleon"	Estefany Karen Lopez Estrada Testing the punctuated equilibria model using morphological and molecular data"	

Friday		Flash talks (3 minutes, no questions)	
Afternoon	Scott Theatre		
16:00 – 17:00	Jasmine Towle		
	Aubrey Keirnan		
	Chenke Zang		
	Austin Fitzpatrick		
	Lorenzo Ricolfi		
	Melissa Hernandez Poveda		
	Lucy Ockert		
	Adi Nugroho		
	Veerabhadra (Raju) Dantuluri		
	Lynea Witczak Oldfather		
	Tariq Ezaz		
	Marcus Michelangeli		

Conference dinner

Friday

Conference dinner

19:00

Peter Rabbit
234-244 Hindley St