

	Day 1 Wedneso
Time	Room 1
8:45	Welcome to AES: Renée Firman (AES President) and Simone E
9:15	ECR P Jamiema S Easy come, easier go: mapping the loss o
	Sociality. Chair: Renée Firman
10:00	Kim Wong: Royal Blood, Mortal Cost: The effects of inbreeding on survivorship and fecundity in European Royal Families
10:15	Lachlan von Pein: The potential for territorial defence and group augmentation to drive the evolution of human cooperation
10:30	Avantika Sharma: Intra-sexual competition in cooperatively breeding Western Australian magpies
10:45	Morni
	Macroevolution. Chair: Matt Baker
11:15	Steve Cooper: Molecular evolution of Circadian Rhythm genes in blind water beetles from the dark biosphere
11:30	Lachlan King: Consistent patterns of mutational covariance for Drosophila wing shape traits in three genetic backgrounds

11:45	
	Toby Kovacs: Genomics uncovers demographic declines in marsupials
12:00	lan Brennan: The evolving adaptive landscape of Australian dragons
12:15	Annie Guillaume: Corals, currents and climate: seascape genomics for informing conservation
12:30	Lur
	Plasticity. Chair: Alistair Senior
13:45	Erin Macartney: Paternal dietary effects on seminal fluid and offspring development
14:00	Tim Temizyurek: Definitions of phenotypic plasticity
14:15	Simon Hart: The effect of phenotypic plasticity on plant population dynamics in a non- stationary environment
14:30	Daniel Hoops: Neuroanatomical changes in Australian lizards detected using 3D imaging
14:45	Eve Maunders: The microbial makings of a marine sponge
15:00	Afterno
	Manuacualistian Ohain Puttan Tiatna sul
	Macroevolution. Chair: Putter Tiatragul
15:30	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair
15:30 15:45	
	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for
15:45 16:00	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction Romane Normand: Meta-analysis on the evolutionary parallelism of native and introduced plants Alex Skeels: Paleobiome dynamics shaped a large Gondwanan plant radiation
15:45 16:00	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction Romane Normand: Meta-analysis on the evolutionary parallelism of native and introduced plants
15:45 16:00 16:15	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction Romane Normand: Meta-analysis on the evolutionary parallelism of native and introduced plants Alex Skeels: Paleobiome dynamics shaped a large Gondwanan plant radiation Oceane Blard: Sponge metamorphosis uses conserved animal developmental
15:45 16:00 16:15 16:30	James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction Romane Normand: Meta-analysis on the evolutionary parallelism of native and introduced plants Alex Skeels: Paleobiome dynamics shaped a large Gondwanan plant radiation Oceane Blard: Sponge metamorphosis uses conserved animal developmental mechanisms Alexandros Sotiropoulos: First indication of structural homology and co-evolution of

stralasian olution ciety

lay 1st October	
Room 2	
Slomberg (Conference Host) - Welcome to Country Ceremony	
lenary Sara Philip of flagellar motility across the tree of life	
Morphological evolution. Chair: Bryan Fry	
Carley Goodwin: A computational fluid dynamics (CFD) study exploring the effects of nasal passage morphology on respiratory airflow of bats (Rhinolophoidea).	10:00
Liz Surovic: A comparative morphology study of blennies looking at the water to land transition	10:15
Ray Chatterji: Dietary specialization drives adaptation, convergence, and integration across the cranial and appendicular skeleton in Waterfowl (Anseriformes)	10:30
ng tea	10:45
Sexual selection. Chair: Lucinda Aulsebrook	
Andrea Piccinini: Buried alive: Post-copulatory behaviour of a Western Australian species of wishbone spider	11:15
Sanni Silvasti: Flashing signals and butterfly visual behaviour	11:30

Vicky Ying: Is parthenogenesis equivalent to inbreeding? Experimental evidence from a facultatively parthenogenetic stick insect Daniela Wilner: Sex-resistant stick insects and their microscopic inhabitants: Could endosymbionts explain patterns of geographic parthenogenesis?	
Daniela Wilner: Sex-resistant stick insects and their microscopic inhabitants: Could	11:45
lendosymbionts explain natterns of geographic narthenogenesis?	12:00
Shay Hirani: Scaling and developmental integration of a massively exaggerated secondary sexual sensory trait	12:15
Sexual Sensory trait	
nch	12:30
Various. Chair: Cynthia Riginos	
Manuel Poretti: Genome evolution and adaptive potential of symbiotic algae ostreobium in coral bleaching recovery	13:30
Tom Schmidt: Dissecting new pest invasions with evolutionary genomics	13:45
Jia Chang: The distinct genomic evolution of Serratia symbionts in the redlegged earth mite	14:00
Moshe Jasper: Demography & selection in the Aedes aegypti invasion of the Asia-Pacific	14:15
Janne Torkkola: Mapping reproductive mode in Australian sphenomorphine skinks	14:30
oon tea	15:00
Speciation/Development/Various. Chair: Tahlia Fulton	
Speciation/Development/Various. Chair: Tahlia Fulton Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots	
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism,	
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots	15:30
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba	15:30
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba virgo with hybridisation and Next-generation sequencing	15:30
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba virgo with hybridisation and Next-generation sequencing Iva Popovic: Parallel adaptive admixture in a coral species triad	15:30
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba virgo with hybridisation and Next-generation sequencing Iva Popovic: Parallel adaptive admixture in a coral species triad Jie Wang: Reticulation patterns in Australian burrowing frogs Neobatrachus Tsering Chan: DNA methylation changes in response to infection by a co-evolved parasite	15:30
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba virgo with hybridisation and Next-generation sequencing Iva Popovic: Parallel adaptive admixture in a coral species triad Jie Wang: Reticulation patterns in Australian burrowing frogs Neobatrachus Tsering Chan: DNA methylation changes in response to infection by a co-evolved parasite in cane toads	15:30 16:45
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba virgo with hybridisation and Next-generation sequencing Iva Popovic: Parallel adaptive admixture in a coral species triad Jie Wang: Reticulation patterns in Australian burrowing frogs Neobatrachus Tsering Chan: DNA methylation changes in response to infection by a co-evolved parasite in cane toads Sandie Degnan/Huifang Yuan: Environmental regulation of cell state reprogramming	
Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism, conspicuousness and eyespots Byon Nongthongbam: Genome size and TE content variation in a global invasive species Owen Holland: Revisiting the cytogenetics of the parthenogenic grasshopper Warramaba virgo with hybridisation and Next-generation sequencing Iva Popovic: Parallel adaptive admixture in a coral species triad Jie Wang: Reticulation patterns in Australian burrowing frogs Neobatrachus Tsering Chan: DNA methylation changes in response to infection by a co-evolved parasite in cane toads Sandie Degnan/Huifang Yuan: Environmental regulation of cell state reprogramming	

University of

Day 2 Thursda

Room 1

Housek

ECR P

Paul B

Genomic structural variation drives

Plasticity. Chair: Dan Noble

Jade Kannangara: The evolutionary implications of mitochondrial heteroplasmy

Giulia Ghedini: Evolving with competitors: what do species maximise and what are the consequences for communities?

Tahlia Fulton: Adaptive nutrition: Cross-protection by amino acid restriction

Morni

Nutrients, guts, antibiotics, immunity. Chair: Damian Dowling

Yu-Pei Tseng: The impact of resource fluctuations on coexistence in a gut microbial community

Alistair Senior: The effects of macronutrients on age-specific mortality. A replicable effect!

Christopher Brown: Optimising antibiotic, resource covariance and frequency to
minimise resistance evolution
Alicia Williams: What does it cost to resist antibiotics? The fitness landscape of
rifampicin mutations
Sandie Degnan: Host-symbiont recognition underpins the origin of animal innate
immunity
Lu
Conservation/Phylogenetics. Chair: Giulia Ghedini
Matthew Silcocks: Retracing the stepwise evolution of a deadly human pathogen using
ancestral sequence reconstruction
Kamryn Carter: Genomic management of a captive breeding program of endangered
Southern Stuttering Frogs (Mixophyes australis)
Zenon Czenze: Bridging the gap: combining thermal physiology, ecology and biophysics
for conservation
Patra Petrohilos: When Cells Rebel: using comparative genomics to investigate cancer
susceptibility in marsupials
Anupama Nayak: A global comparative analysis links PFAS contamination with marine
fish functional traits
Aftern
Flash Talks (various topic
Thomas Veldhuis; Apoorva Gopinath; Samuel Ingloff-Richards; Andres P Rendall; Peisong Tian; Diana Fisher; Avantika Sharma; Angi De Silva; Ma
Zoe Kean: How to become a Dinner at The Burrow, 52

Queensland

y 2nd October	
Room 2	Time
ceeping	9:00
lenary attlay rapid adaptation in invasive plants	9:15
Sexual selection. Chair: ???????	
Mathilde Le Levier: The role of iridescent colours in butterfly sexual selection	10:00
Taylor Hosler: Thermal plastcity of sexually and naturally selected traits and the influence on adaptation.	10:15
Hyoseul Hyun: How sex differences balance genome-wide fitness of facultative asexual organisms?	10:30
ng tea	10:45
Morphological evolution/speciation. Chair: Kris Wild	
Putter Tiatragul: Evolution of Australia's endemic diplodactylid geckos	11:15
David Brito: Insights on the evolution of skull shape in Australian fossorial elapids	11:30

Ammresh: How would a snake wear a tie? Regionalisation within the elapid vertebral column	11:45
Sam Campbell: Heavy Metal Predators: diverse patterns of metal enrichment in scorpion weapons	12:00
Kenzie Melanson: Comparison of sperm availability in hybridizing male Fundulus	12:15
heteroclitus and F. diaphanus in Porters Lake, Nova Scotia, Canada	12.10
nch	12:30
Tag Team Talk. Lead: Daniel Ortiz-Barrientos	
15m Daniel Ortiz-Barrientos: Ecotypes as natural experiments: the making of adaptive traits in Senecio 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	13:30
15m Questions	
on tea	
i). Chair: Damien Esquerre	
orras; Claire Larroux; Tina Wu; Arlie Macdonald; Emma Holvast; Jackson thew Baker	
great science communicator	
Russell Street, West End	
	l

Brisbane, Qld, 2025

Day 3 Friday

Room 1

Housek

ECR P

Kristoff

Climate change and the cost-of

Sociality/Development/Macroevolution. Chair: Tom Schmidt

Maxim Adams: Behavioural island syndrome in the Lord Howe Island cockroach

Panesthia lata

Sonnie Flores: Roars, rumbles, and resonance: A systematic review and meta-analysis of crocodylian acoustic signals

Bernie Degnan: Origin of the regulatory genome

Morni

Venom. Chair: Dan Hoops

Bryan Fry: Make acetylcholine great again! Predators and prey of venomous snakes convergently evolved multiple types of neurotoxin-proof neuromuscular receptors

Lorenzo Seneci: Convergent yet divergent evolutions of two novel procoagulant venom phenotypes nested within North American anticoagulant rattlesnakes

Kat Kempson: Clinical implications of regional variations in coagulotoxic effects and
antivenom efficacies for Swiss Alps populations of <i>Vipera aspis</i> (Asp Viper)
Kate Jordan: Clinical implications of dramatic ontogenetic shifts in Yellow Beard
(Bothrops atrox) venom activation of blood clotting factors
Patrick Champagne: Factor Va as an obligate cofactor as the missing key to
understanding viper venom procoagulation toxicity
Lur
Chair: Simone Blomberg
Senior I
David L
Evolution & ancient D
Evolution & ancient D
Closing a
Otosing u

3rd October

Room 2

ceeping

lenary

er Wild

-living squeeze in desert lizards

Plasticity. Chair: Erin Macartney

Russell Bonduriansky: Born old: Transmission of ageing from mothers to offspring

Dan Noble: Limited plasticity but increased variance in physiological rates across ectotherm populations under climate change

Andre Nogueira Alves: How naturally occurring insecticide resistance alleles lead to broader colonizing opportunities in D. melanogaster

ng tea

Various. Chair: Cynthia Riginos

Lucinda Aulsebrook: Warming temperatures induce severe spinal deformities and mortality in highly successful tropical invader, Gambusia holbrooki

Fabian Ruperti: The ocean in me - Molecular profiling of sponge movement reveals an ancient relaxant-inflammatory response

Jeremias Ivan: Selecting window sizes for phylogenomic analyses of whole genome
alignments
Samantha Howitt: Mixed up Mytilus: contrasting outcomes of hybridisation in admixed
populations
Zoe Meziere: Repeatability and predictability of local (mal)adaptation under climate
change
ach.
ıch
Plenary
ambert
NA: People and ideas
nd Prizes
114 1 11200