

in a basal metazoan, the marine demosponge Amphimedon queenslandica

16:45

(~1 hr)

19:00

16:45 Alexandros Sotiropoulos: First indication of structural homology and co-evolution of candidate effector proteins of diverse fungi that attack other fungi

Huifang Yuan: Divergent developmental roles of duplicated FoxO transcription factors in a basal metazoan, the marine demosponge Amphimedon queenslandica

Welcome drinks at Saint Lucy (Caffe e Cucina), Blair Drive, University of Queensland

18:00

## University of Queensland

## Brisbane, Qld, 2025

Day 1 Wednesday 1st October			Day 2 Thursday 2nd October			Day 3 Friday 3rd October	
Time Room 1	Room 2	Time	Room 1	Room 2	Time	Room 1	Room 2
08:45 Welcome to AES: Renée Firman (AES President) and Simone	Blomberg (Conference Host) - Welcome to Country Ceremony	09:00	House	keeping	09:00	Hous	ekeeping
ECR Plenary			ECR Plenary		09:15	ECR	Plenary
09:15  Easy come, easier go: mapping the loss of flagellar motility across the tree of life		09:15	Paul Battlay Genomic structural variation drives rapid adaptation in invasive plants			Kristoffer Wild  Climate change and the cost-of-living squeeze in desert lizards	
Sociality. Chair: Renée Firman	Morphological evolution. Chair: XXXXXXX			Sexual selection. Chair:		Sociality/Development/Macroevolution. Chair:	Plasticity. Chair: Erin Macartney
10:00 Kim Wong: Royal Blood, Mortal Cost: The effects of inbreeding on survivorship and	Carley Goodwin: A computational fluid dynamics (CFD) study exploring the effects of		Jade Kannangara: The evolutionary implications of mitochondrial heteroplasmy			Maxim Adams: Behavioural island syndrome in the Lord Howe Island cockroach Panesthia lata	Russell Bonduriansky: Born old: Transmission of ageing from mothers to offspring
fecundity in European Royal Families  Lachlan von Pein: The potential for territorial defence and group augmentation to driv	nasal passage morphology on respiratory airflow of bats (Rhinolophoidea). <b>Liz Surovic:</b> A comparative morphology study of blennies looking at the water to land			Taylor Hoslor: Thormal plasteity of soyually and naturally solocted traits and the		Sannia Flaras: Dogre rumbles, and resonance: A systematic review and mota analysis	
the evolution of human cooperation	transition	10.15	Lisa Schwanz: TBA	initidence on adaptation.	10:15	of crocodylian acoustic signals	ectotherm populations under climate change
10:30 Avantika Sharma: Intra-sexual competition in cooperatively breeding Western Australian magpies	Ray Chatterji: Dietary specialization drives adaptation, convergence, and integration across the cranial and appendicular skeleton in Waterfowl (Anseriformes)	10:30	Tahlia Fulton: Adaptive nutrition: Cross-protection by amino acid restriction	<b>Hyoseul Hyun:</b> How sex differences balance genome-wide fitness of facultative asexual organisms?	10:30	Bernie Degnan: Origin of the regulatory genome	<b>Andre Nogueira Alves:</b> How naturally occurring insecticide resistance alleles lead to broader colonizing opportunities in D. melanogaster
10:45 Morning tea		10:45	Morn	ing tea	10:45	Moi	ning tea
Macroevolution. Chair: Matt Baker	Sexual selection. Chair: XXXXXXXXX			Morphological evolution/speciation. Chair:		Venom. Chair:	Phylogenetics/Conservation. Chair:
11:15 Steve Cooper: Molecular evolution of Circadian Rhythm genes in blind water beetles from the dark biosphere	Andrea Piccinini: Buried alive: Post-copulatory behaviour of a Western Australian species of wishbone spider	11:15	Yu-Pei Tseng: The impact of resource fluctuations on coexistence in a gut microbial community	Putter Tiatragul: Evolution of Australia's endemic diplodactylid geckos	11:15	<b>Bryan Fry:</b> Make acetylcholine great again! Predators and prey of venomous snakes convergently evolved multiple types of neurotoxin-proof neuromuscular receptors	<b>Lucinda Aulsebrook:</b> Warming temperatures induce severe spinal deformities and mortality in highly successful tropical invader, Gambusia holbrooki
11:30 Lachlan King: Consistent patterns of mutational covariance for Drosophila wing shape traits in three genetic backgrounds	Sanni Silvasti: Flashing signals and butterfly visual behaviour	11:30	Alistair Senior: The effects of macronutrients on age-specific mortality. A replicable effect!	David Brito: Exploring Morphology and Habitat in Ecuadorian Whortail-Iguanas		<b>Lorenzo Seneci:</b> Convergent yet divergent evolutions of two novel procoagulant veno phenotypes nested within North American anticoagulant rattlesnakes	Fabian Ruperti: The ocean in me - Molecular profiling of sponge movement reveals ar ancient relaxant-inflammatory response
11:45 Toby Kovacs: Genomics uncovers demographic declines in marsupials	<b>Vicky Ying:</b> Is parthenogenesis equivalent to inbreeding? Experimental evidence from a facultatively parthenogenetic stick insect	11:45	<b>Christopher Brown:</b> Optimising antibiotic, resource covariance and frequency to minimise resistance evolution	Ammresh: Regionalisation within the elapid vertebral column	11:45	<b>Kat Kempson:</b> Clinical implications of regional variations in coagulotoxic effects and antivenom efficacies for Swiss Alps populations of Vipera aspis (Asp Viper)	<b>Jeremias Ivan:</b> Selecting window sizes for phylogenomic analyses of whole genome alignments
12:00 Ian Brennan: The evolving adaptive landscape of Australian dragons	<b>Daniela Wilner:</b> Sex-resistant stick insects and their microscopic inhabitants: Could endosymbionts explain patterns of geographic parthenogenesis?	12:00	Alicia Williams: What does it cost to resist antibiotics? The fitness landscape of rifampicin mutations	scorpion weapons	12:00	(Bothrops atrox) venom activation of blood clotting factors	Samantha Howitt: Mixed up Mytilus: contrasting outcomes of hybridisation in admixe populations
12:15 Annie Guillaume: Corals, currents and climate: seascape genomics for informing conservation	<b>Shay Hirani:</b> Scaling and developmental integration of a massively exaggerated secondary sexual sensory trait	12:15	Sandie Degnan: Host-symbiont recognition underpins the origin of animal innate immunity	<b>Kenzie Melanson:</b> Comparison of sperm availability in hybridizing male Fundulus heteroclitus and F. diaphanus in Porters Lake, Nova Scotia, Canada	12:15	<b>Patrick Champagne:</b> Factor Va as an obligate cofactor as the missing key to understanding viper venom procoagulation toxicity	<b>Zoe Meziere:</b> Repeatability and predictability of local (mal)adaptation under climate change
12:30 L	unch	12:30	Lu	nch	12:30		unch
Plasticity. Chair: Alistair Senior	Phylogenetics. Chair: XXXXXXX		Conservation/Phylogenetics. Chair:	Tag Team Talk. Lead: Daniel Ortiz-Barrientos		Chair: Simone Blomberg	
13:45 Erin Macartney: Paternal dietary effects on seminal fluid and offspring development	Manuel Poretti: Genome evolution and adaptive potential of symbiotic algae ostreobium in coral bleaching recovery	13:30	<b>Matthew Silcocks:</b> Retracing the stepwise evolution of a deadly human pathogen using ancestral sequence reconstruction	15m <b>Daniel Ortiz-Barrientos:</b> Ecotypes as natural experiments: the making of adaptive traits in Senecio 5m <b>Jack Price:</b> Defining complexity as an evolvable trait			
14:00 Tim Temizyurek: Definitions of phenotypic plasticity	Tom Schmidt: Dissecting new pest invasions with evolutionary genomics	13:45	Kamryn Carter: Genomic management of a captive breeding program of endangered Southern Stuttering Frogs (Mixophyes australis)	12m <b>Zoe Broad:</b> The role of gene expression during adaptation 5m <b>Yulin Sun:</b> Evaluating gene flow inference with forward simulations: A case study of	13:30		r Plenary Lambert
14:15 Boris Zec: The effect of phenotypic plasticity on plant population dynamics in a non-stationary environment	<b>Jia Chang:</b> The distinct genomic evolution of Serratia symbionts in the redlegged earth mite	14.00	<b>Zenon Czenze:</b> Bridging the gap: combining thermal physiology, ecology and biophysics for conservation	ABBA-BABA 10m <b>Maddie James</b> : When does local adaptation lead to reproductive isolation?			ТВА
14:30 Daniel Hoops: Neuroanatomical changes in Australian lizards detected using 3D	Moshe Jasper: Demography & selection in the Aedes aegypti invasion of the Asia-		Patra Petrohilos: When Cells Rebel: using comparative genomics to investigate cancer	5m <b>Aparna Thulaseedharan</b> : Leveraging local adaptations for crop improvement: the			
14:45 Eve Maunders: The microbial makings of a marine sponge	Janne Torkkola: Mapping reproductive mode in Australian sphenomorphine skinks	14:30	susceptibility in marsupials  Anupama Nayak: A global comparative analysis links PFAS contamination with marine fish functional traits	future from the past 5m <b>Charles Zhou</b> : Making the Most of Less in Imputation for Non-Model Species 15m Ouestions			
15:00 After	noon tea	15:00	Afternoon tea		14:30	Closing	g and Prizes
			Flash Talks (various topic	s). Chair: Damien Esquerre			
Macroevolution. Chair: XXXXXXX	Speciation/Development. Chair: XXXXXXX		and the control of th		i e		
Macroevolution. Chair: XXXXXXX  15:30 James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair	Kei-Lin Ooi: Diversification in nymphalid butterflies: effects of sexual size dimorphism						
15:30 James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair  15:45 Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction  Pomane Normand: Meta-analysis on the evolutionary parallelism of native	<b>Kei-Lin Ooi:</b> Diversification in nymphalid butterflies: effects of sexual size dimorphism conspicuousness and eyespots	15:30	Thomas Veldhuis; Apoorva Gopinath; Vishwa Patel; Samuel Ingloff-Ric Macdonald: Emma Holvast: Jackson Rendall: Peisong Tian: Diana Fishe	hards; Andres Porras; Claire Larroux; George Zhao; Tina Wu; Arlie er: Avantika Sharma; Angi De Silva: Matthew Baker			
15:30 James Richardson: Cross-feeding supports the evolution of a gleaner-opportunist pair  15:45 Thea Elson-Green: We'll cross that bridge when we get there - diffusion bridges for ancestral trait reconstruction	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	15:30	Thomas Veldhuis; Apoorva Gopinath; Vishwa Patel; Samuel Ingloff-Ric Macdonald; Emma Holvast; Jackson Rendall; Peisong Tian; Diana Fishe	hards; Andres Porras; Claire Larroux; George Zhao; Tina Wu; Arlie er; Avantika Sharma; Angi De Silva; Matthew Baker			

Zoe Kean: How to become a great science communicator

Dinner at The Burrow, 52 Russell Street, West End