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Australasian Evolution Society

SASB
Society of Australian Systematic Biologists

Evolution in the Gong 2026

University of Wollongong, Dec 2-4 2026

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Tuesday 1 December

13:00–17:00 **PRE-CONFERENCE WORKSHOP** Introduction to Phylogenomics — Building 43: Room XX

Wednesday 2 December

08:30–08:50 Registration open (continued during breaks until lunch time)

08:50–09:10 Welcome to Evolution in the Gong (Damien Esquerré & Nikolas Johnston). Acknowledgement of Country

09:10–10:00 PLENARY
Prof Phil Byrne · The evolution of polyandry: causes and consequences Building 67: Menura (R107)

10:00–10:30 Morning tea

	1 Menura (R107) Genomic evolution Chair: Ethan Briggs	2 Morelia (R104) Phylogenetics and comparative methods Chair: Rob Lanfear	3 Amenia (R102) Systematics and evolution Chair: Nik Johnston
10:30	**Maxim Adams** Uncovering thousands of endosymbiont DNA transfer events within single cockroach genomes	**Changsen Jiang** A bias in a popular phylogenetic model	**Julian Brown** Exploring the under-studied diversity of Australian tephritid fruit fly parasitoids with genomics
10:45	**Rhiannon Schembri** Using linked reads to understand the evolution of chromosome inversions in Australian finches	**Joshua Rowe** Nested Phylogenetic Collector Curves Reflect Occupancy Structure Analogous to Spatial Relationships	**Liam Foley** Uncovering Australia's hidden radiation of endemic cluster flies through integrative museomics
11:00	**Ethan Briggs** Investigating spider genome evolution with a new chromosome-level tarantula genome	**Kira Lowe** oliveTree: An R Package for Human-Readable Ancestral Change Data and Annotated Phylogenetic Trees	**Encui Wang** Integrative systematics reveals hidden diversity in the parasitic *Calliphora flexipenis* species-group of Australian Calliphorinae
11:15	**Alex Sotiropoulos** The genome evolution of the black root rot (*Berkeleyomyces*) fungi is shaped by repeat-induced point mutations	**Simone Blomberg** The filling of trait space: what can we learn from evolutionary stochastic processes on trees?	**Perry Beasley-Hall** Aola Richards: a trailblazing entomologist with a "creepy" cave cricket legacy
11:30	**Joshua Thia** Let's talk about sex (determination loci): Genomic insights from three Aphidiinae parasitoid wasps	**Manuela Cascini** Evolutionary rates in living fossils across the Tree of Life	**Rosalyn Gloag** Mito-nuclear divergence and barrier loci in the hybrid zones of Australian stingless bees
11:45	**James Bickerstaff** Convergent genome evolution underpins the repeated evolution of the ambrosia symbiosis in beetles	**Jordan Douglas** Influence of the climate on molecular evolutionary rates in flowering plants (Proteaceae)	**Mengjie Jin** Phylogeny of Australian Heliozelidae (Lepidoptera: Adeloidea)
12:00	**Thomas Schmidt** Evolutionary genomics of a natural *Wolbachia* superinfection in the dengue mosquito Aedes albopictus	**Simon Ho** The tempo and mode of molecular and morphological evolution	**Taia Artemov** Developing AI assisted methods for monitoring insect biodiversity

12:15–13:15 Lunch

	1 Menura (R107) **Genomic evolution and landscape genetics** Chair: Putter Tiatragul	2 Morelia (R104) **Phylogenetics and macro-evolution** Chair: Juanita Rodriguez	3 Amenia (R102) **Plasticity and development** Chair: Lee Rollins
13:15	**Maddison Teys** Uncovering the genomics and spatial patterns of *Pharohylaeus lactiferus*	**Giorgio Muneretto** Exploring the genomic, phylogeographic and adaptive landscapes of the native shrub *Calothamnus quadrifidus*	**Kyungwoon Min** What is the effect of nutritionally modified larval condition on adult lifespan in *Drosophila melanogaster*??
13:30	**Felix James** Rare but promising: Resistance to myrtle rust and genetic diversity in a declining paperbark support assisted evolution	**Kamryn Carter** Freaky frogday: phylogenomics explains evolution and introgression in a complex of Australian toadlets	**Harry Mortimer** Forms in Flow: Spatial and temporal plasticity in body shape between and within wild arid fish populations
13:45	**Hafiza Sehrish Kiani** Eco-Evolutionary Dynamics of the Duckweed Microbiome: Towards a Self-Sustaining Ecosystem	**Maha Yudha Samawi** Reconstructing the Biogeographic History of White-Toothed Shrews (*Crocidura* Wagler 1832) in the Indo-Australian Archipelago	**Aidan Stuckey** pleiotropy or modularity: genomic architecture of body shape plasticity
14:00	**Katarina Stuart** Concordant landscape patterns of population demography and genetic diversity: links to fitness across restoration-relevant species	**Consolata Nanjala** Unravelling the evolutionary history of the hyperdiverse genus *Bulbophyllum* (Orchidaceae) in Southeast Asia and Australasia	**Eva Sulkova** How does combined thermal-nutritional stress affect wing and ovary development and associated life-history traits in *Drosophila melanogaster*
14:15	**Renee Firman** Genomic signatures of Pleistocene climatic fluctuation in Australian pebble mound mice	**Hayden Jones** Signals of hybrid speciation in the genus *Anigozanthos*	**Andre Nogueira Alves** Why won't it fix? The mystery of the *Cyp6g1* polymorphism
14:30	**Christopher Friesen** Stuck in the middle: phenotypes, genome and geography in the painted dragon (*Ctenophorus pictus*)	**Lyn Cook** Macs tracks: debogging the history of Stuart's Central Australian "palm"	**Hayley Cameron** Re-evaluating the evidence for transgenerational plasticity
14:45		**Millicent Oulo** Phylogenomic and evolutionary analysis of Sword sedges (*Lepidosperma*)	**Matthew Piper** The way nutrition shapes *Drosophila* life histories

15:00–15:30 Afternoon tea

	1 Menura (R107) **Micro-evolution** Chair: Ondi Crino (TBC)	2 Morelia (R104) **Morphological and trait evolution** Chair: Perry Beasley-Hall	3 Amenia (R102) **Behaviour** Chair: Iliana Medina
15:30	**Jonas Courtalon** Benign but not harmless: tumours hinder fitness-related performance and competitiveness in a predatory freshwater planarian	**Guoyi Zhang** When shell mathematical model meets phylogenomics: adaptive evolution in Australian camaenid land snails	**Yuxin Hou** Evolutionary history of brood-parasitic bronze-cuckoos: towards testing cospeciation with their hosts
15:45	**Grace Day** Characterisation of Major Histocompatibility Complex Class I and Class II inBurrunan Dolphins (*Tursiops australis*): Evidence for Genetic Erosion and Putative Novelty	**Cameron Dodd** Convergent cochlea morphology as a signal of arid adaptation in the Sminthopsinae	**Maddison Howie** Evolving escape: the genetic basis of antipredator behaviour in an Australian threatened bird, the Hooded Plover
16:00	**Anuk Jayasinghe** Mitochondrial Genetic effects on *Wolbachia* Fitness Traits in *Drosophila melanogaster*.	**Danelle van den Berg** The evolutionary link between diet and habitat choice in Australian marsupials	**Caleb Wellard** Keeping time to hatch: impacts of rhythmic light and temperature cues on gene expression and hatch timing in chicks
16:15	**Robert Laird** Linking parental age, offspring fitness, and population dynamics in an aquatic plant	**David Brito** Diet, not soil properties, explains morphological diversification in Australian fossorial elapids	**Yuxuan Zhao** Comparative Analyses Reveal Attenuation of Circadian Organisation in Australian Subterranean Diving Beetles
16:30	**Jan Engelstaedter** Quantifying the mutational spectrum of antibiotic resistance	**Daniel Hoops** Neuroanatomical variation in snakes	**Ewan Auld** Calling against the clock: amphibian chytrid fungus infection effects calling investment in male Brown Toadlets (*Pseudophryne bibronii*)
16:45	**Matt Hall** Hotter, faster, sicker? Warming shifts the cost of infection from individuals to populations	**Nikolas Johnston** Colour evolution in Australian blowflies	**Tsering Chan** Sex-Specific responses to lungworm infection in cane toads
17:00		**Christen Mirth** Genetic variation in body size traits across environments	**Evie Cotterill** Intergenerational effects of bisphenol S on movement and reproduction at different temperatures in zebrafish

17:15 Welcome mixer at UniBar

Thursday 3 December

08:40–09:00 Housekeeping address

09:00–09:50 PLENARY
Dr Ian Brennan · Oz-versification. Do Australian animals show adaptive syndromes? Building 67: Menura (R107)

09:50–10:20 Morning tea

10:20–11:05 PHD AWARD PLENARY
Dr Li "Living" Yun · Endless forms most charming: ecomorphological diversification of beetles Building 67: Menura (R107)

	1 Menura (R107) **Theoretical evolution and big ideas** Chair: Alistair Senior	2 Morelia (R104) **Venom evolution** Chair: Damien Esquerré	3 Amenia (R102) **Microbial evolution** Chair: Bethany Hoye
11:05	**Disha Chaudhary** Molecular dynamics of co-evolution in experimental populations.	**Katherine Jordan** Variation in the clotting strength of brown snake (*Pseudonaja*) venom and implications for antivenom efficacy	**Divyangi Pandit** Hook, Line, and Swimmer!: Investigating the evolution of the bacterial flagellar filament proteins
11:20	**Jack Price** Simulating the effects of complexity in genetic architecture on evolution	**Felipe Triana** Tracing the macroevolutionary pathway of venom composition in Viperidae	**Jasmine Saghafifar** Profile-mixture models for viral protein evolution
11:35	**Alistair Senior** Scientists (i.e., me) say this simple diet trick could knock 4 years off your biological clock in just 4 weeks!	**Navaneel Sarangi** A Toxic Arsenal - Evolutionary underpinnings of venom composition in snakes	**Alvaro Conca Esquembre** Captivity leaves a microbial footprint: the gut microbiome of the Lord Howe Island stick insect
11:50	**Jodi Edwards** Before Time There Was Story: The Foundations of Indigenous Cultural Marine Science	**Juanita Rodriguez** Uncovering the evolution of spider wasp venoms from fresh and museum specimens	**Ryan O'Donnell** The Tightrope Hypothesis: Reconsidering the orchid mycorrhizal 'symbiosis' as a controlled plant-pathogen interaction
12:05		**Andrew Walker** Genome of venomous caterpillar *Doratifera vulnerans* reveals recruitment of immune peptides and their adaptation as pain-inducing toxins	**Bethany Hoye** Bacterial pathogen evolution in an era of global change

12:20–13:15 Lunch

	1 Menura (R107) **Adaptation and natural selection** Chair: Alistair Senior	2 Morelia (R104) **Speciation, species delimitation and systematics** Chair: Helen Armstrong	3 Amenia (R102) **Sexual selection** Chair: Keith Bayless
13:15	**Xinyi Liu** The Effects of Micro-plastics on the Fitness of Marine Animals: a Meta-analysis	**Naomi Laven** The clone wars: physiological consequences of mitonuclear discordance in hybrid parthenogens	**Incheol Shin** Is bigger better? The evolution and function of exaggerated weapons in bulb mites
13:30	**Adi Nugroho** Adaptive variants show stronger a genetic diversity area relationship than neutral variants in rusa deer (*Cervus timorensis*) introduced populations	**Reilly Seet** Insect-microbe symbiosis as a driver of speciation in Australian stingless bees	**Lachlan King** Sexual dimorphism of mutational effects for *Drosophila* wing shape
13:45	**Ting Yin** Understanding adaptive patterns in Alpine ash (*Eucalyptus delegatensis*) in a changing climate	**Jenny Wang** Species boundaries and drivers of evolution in a species complex of fairy wrasses (Labridae: *Cirrhilabrus*)	**Aadhi Ramkumar** Cloaked in Darkness - Melanisation as a signal
14:00	**Chandler Tsz To Tsang** Epigenetic mechanism of thermal acclimation: acclimation of performance is decoupled from reproductive fitness	**Jackson Rendall** Population genomics and connectivity in a jarrah forest endemic trapdoor spider	**Patricia Slattery** Fancy facades and pigment preferences: are the colourful faces of male bees sexy?
14:15	**Jade Kannangara** More than a powerhouse: Unravelling the Mitochondrial Role in Climate Adaptation	**Felipe Lin** Dual mitochondrial capture shaped mito-nuclear discordance in sky-island skinks (Scincidae: *Sphenomorphus*)	**Vicky Ying** How do pre-copulatory male behaviours affect female fitness? Insights from a facultatively parthenogenetic stick insect
14:30	**Carla Sgro** Climatic adaptation and species' ranges	**Patricia Lu-Irving** Invasive lantana in Australia comprises multiple taxa and hybrids	**Keith Bayless** Patterns underlying the evolution of stalk eyes in multiple lineages of flies
14:45	**Brooke Zanco** Does mother know best? Evolutionary narrowing of biotic interactions due to climate change could compromise future population resilience in a UK butterfly	**Stephen Zozaya** Underestimating admixture is easy	**Keaghan Yaxley** The evolution of semelparity in response to intense sexual competition and sexual conflict

15:00–15:25 Afternoon tea

1 Menura (R107)

Chair: Ondi Crino (TBC)

2 Morelia (R104)

Chair: Perry Beasley-Hall

15:25

Speed talks 1 (5 minutes each)

15:25	**Joe Painter**	Does nipple shape matter?
15:30	**William Brooker**	Why Cooperate? Using a synthetic *Escherichia coli* Model System to Investigate the Origins of Reproductive Division of Labour
15:35	**Boris Yagound**	Epigenetic markers of rapid adaptation in cane toads
15:40	**Maddie James**	Using MAGIC to deconstruct and reconstruct the genetic basis of adaptation
15:45	**Jacob Scadden**	Characterisation of bacterial flagellar filaments from extreme environments
15:50	**Frank Fan**	Hidden herds in borrowed homes: the scale insects in *Psydrax* nests of *Crematogaster*
15:55	**Matthew Symonds**	Do species differences in physiological control of heat loss predict shape-shifting responses to climate change?

Speed talks 2 (5 minutes each)

15:25	**Madalyn Iaria**	Temporal trends in avian colouration under climatic warming
15:30	**Shamia Shoma**	Evolution of semelparity in terrestrial arthropods
15:35	**Zhe-Yu Chen**	Mitogenomes and nuclear rDNA reveal complex lineage histories in the Australian pond snail genus *Austropeplea* (Gastropoda, Hygrophila, Lymnaeidae)
15:40	**Wednesday Elgar**	Evolution & Systematics of Neoniphargidae Amphipods
15:45	**Jacqueline Nguyen**	Estimating the timing of passerine evolution using Bayesian tip dating and fossil occurrences
15:50	**Laura Wilson**	The evolution of prenatal cranial growth and development in bats
15:55	**Devi Stuart-Fox**	The eco-evo of skin colour in reptiles, and the rediscovery of riboflavin

1 Menura (R107)

2 Morelia (R104)

16:10

16:10–16:25
Annual General Meeting: Australasian Evolution Society

16:10–16:25
Annual General Meeting: Society of Australian Systematic Biologists

Friday 4 December

08:50–09:00 Housekeeping address

09:00–09:50 PLENARY
Dr Iliana Medina · Taking it to the nest-level: Building as a superpower Building 67: Menura (R107)

09:50–10:20 Morning tea

10:20–11:05 ECR AWARD PLENARY
Dr Carmen Da Silva · Nest microclimates drive evolution of heat tolerance in Australian native bees Building 67: Menura (R107)

	1 Menura (R107) **Evolution of viviparity** Chair: Dan Noble	2 Morelia (R104) **Conservation genomics** Chair: Putter Tiatragul	3 Amenia (R102) **Genomics and adaptation** Chair: Nik Johnston
11:05	**Dineth Pathirana** Oviparity, viviparity, and transitional pregnancy in the lizard Saiphos equalis	**Putter Tiatragul** Genomic representation of endangered corroboree frogs	**Hongyuan Chen** Long-read sequencing reveals DNA methylation changes along the cane toad invasion trajectory
11:20	**Lizz Peni-Pearson** Single-cell analysis of the placenta of a live bearing lizard, *Pseudemoia entrecasteauxii*	**Shengyao Lin** Population genomics of *Uperoleia daviesae* (Anura: Myobatrachidae) highlights the vulnerability of naturally fragmented short-range endemics to urban development	**Neve Kelly** Do repeat invasions have the same genetic signature: Using population genetics to inform management of an active invasion
11:35	**Camilla Whittington** Evolution of male pregnancy	**Lucy Ockert** From colonies to captivity: using genomics to inform conservation of little penguins	**Henry North** Bidirectional adaptive introgression of insecticide resistance between native and invasive species
11:50	**Claudia Crowther** Paying the Ultimate Price	**James Weppner** Using genetic data to understanding the impact of landscape on movement of the Southern Greater Glider	**Jonathan Wilson** Pangenomes and population genomics reveal more complexity at an already complex insecticide resistance locus
12:05	**Lisa Schwanz** Genetic and environmental influences on sex determination		**James Dorey** Weather, you want it or not? Extracting a new type of climate variable for eco-evolutionary enquiry

12:20–13:15 Lunch

	1 Menura (R107) **Macroevolution** Chair: Damien Esquerré	2 Morelia (R104) **Uncovering species and systematics – presented by Bush Blitz** Chair: Bryan Lessard	3 Amenia (R102) **Thermal biology and plasticity** Chair: Renee Firman
13:15	**Ziqi Shen** Evolution of Central Carbon Metabolism across the Tree of Life	**Andy Austin** The Decadal Plan for taxonomy and biosystematics	**Qian Hu** Developmental plasticity in response to incubation temperature varies with reproductive ecology in birds
13:30	**Anuj Shinde** Patterns of Species & Functional Diversity in Australian Frogs	**Helen Armstrong** Exploring the evolutionary history of the Cryptogonimidae	**Chenke Zang** Effects of thermal stress on cognition, stress hormones, and parental care in zebra finches
13:45	**Chenyue Yang** Macroevolution of flexibility in bird nest-building behaviour	**Jia Chang** A new *Serratia* taxon found in a Trombidiform mite shows genomic evidence of host-adapation but is phylogenetically distinct from *Serratia symbiotica*	**Joshua Hufton** Temperature and sex-dependent differential methylation in the Swedish sand lizard (*Lacerta agilis*)
14:00	**Eleanor Hay** Mutualistic microbes drive niche expansion yet constrain diversification	**Sebastian Hayden** A new species sheds light on a southern radiation of Australian burrowing scorpions	**Luisa Fitzpatrick** Senescence diverges across thermal environments in a wild reptile
14:15	**Alexandra McQueen** The evolutionary ecology of hatch timing in wild birds: effects of daylight across ecologically diverse species	**Volker Framenau** Cupboard spiders in the wrong cupboard: Australia *Steatoda* are not that	**Mylene Mariette** avian heat adaptation: an acoustic signal of heat alters embryonic blood brain barrier
14:30	**Andre Wanderley do Prado** Revising *Artoria* (Araneae: Lycosidae): uncovering the diversity of Australia's most speciose wolf spider genus	**Christoph Hoepel** The question of "paraphyletic species ": a case study in Tasmanian Mountain Shrimps (*Anaspides*, Malacostraca)	**Amanda Pettersen** Ultimate and proximate causes of variation in developmental thermal physiology in three-spined stickleback

14:45–15:15 Afternoon tea

	1 Menura (R107) **Morphological evolution** Chair: Emma Sherratt	2 Morelia (R104) **Uncovering species and systematics – presented by Bush Blitz** Chair: Bryan Lessard	3 Amenia (R102) **Behaviour** Chair: Martin Whiting
15:15	**Grace Anthes** Cortical cross-sectional geometry and implications of cortical heterogeneity in ecological predictions in primates	**Wesley Read** How many species do you see? (*Gehyra nana*)	**Manisha Koneru** Gloss as a Startling Visual Effect: A Study with Australian Magpies and Robotic Beetles
15:30	**Nicholas Joris Fleck** Frankenskink - Straightening 3D meshes to address questions in morphological evolution	**Saphira Bloom-Quinn** The epiphytic moss subfamily Macromitrioideae in Australia	**Kimberley Wong** Differences at every scale: Intraspecific variation in cognition in the green-head ant, *Rhytidoponera metallica*

	1 Menura (R107) **Morphological evolution** Chair: Emma Sherratt	2 Morelia (R104) **Uncovering species and systematics – presented by Bush Blitz** Chair: Bryan Lessard	3 Amenia (R102) **Behaviour** Chair: Martin Whiting
15:45	**Lochlan Paterson-Crisp** Understanding the unique teeth of shark toothed dolphins	**Steven Cooper** William (Bill) Humphreys - A lifetime of discovery	**Kieran Baughan** Locomotor diversity amongst marsupial gliders: implications for evolution, ecology and conservation
16:00	**Elizabeth Surovic** The water-to-land transition in Gobiidae: Morphological convergence and the evolution of terrestrial Bauplans	**Kelton Cheung** New South Wales Plant Tree of Life	**Martin Whiting** Dynamic visual signal evolution in Asian toad-headed agamas and its influence on brain size
16:15	**Shizhi Yao** How fish move on land: A comparative study of pectoral and caudal fin anatomy in aquatic and amphibious blennies and gobies.	**Daniel Huston** A fossil free-living nematode and mite from McGraths Flat, a Miocene Konservat-Lagerstätte in New South Wales, Australia	**Zhongqiu Li** Learning to Solve, Learning Not to Cooperate: Physical and Social Cognition in Azure-winged Magpies
16:30	**Ryan Dallas** The cranial morphology of the invasive red fox (*Vulpes vulpes*) in Southern and Eastern Australia	**Bruno Buzatto** A molecular phylogeny of Australian burrowing scorpions and their continental radiations	**Caitlin Creak** In a hole in the ground there lived a hobbit: Microhabitat association and burrow architecture in natural populations of Sydney funnel-web spiders
16:45	**Trevor Wilson** Floral evolution and morphological losses in Australia's endemic mints (Lamiaceae) Lamiaceae systematics flower	**Elena Kupriyanova** A paradox of *Ficopomatus*: a common but poorly known group of notorious estuarine biofoulers and bioinvaders	**Michael Kasumovic** Using a lizard videogame to explore personality in humans

17:00–18:00 Closing and prizes

18:00 CONFERENCE DINNER AND PARTY AT TEDDY'S, NORTH GONG HOTEL

Conference Committees 2026

AES Executive Committee 2026

President	Damien Esquerré
Vice-President	Ondi Crino
Treasurer	Alexander Skeels
Secretary	Erin Macartney
Vice-President Elect	Alistair Senior
ECR Representatives	Yong Zhi Foo, Kristoffer Wild, Tim Temizyürek
Social Media Team	Kim Wong, Aadhi Ramkumar
Public/Website Officer	Sarin 'Putter' Tiatragul
Ordinary Member	Simone Blomberg

SASB Council 2026

President	Nikolas Johnston
Vice-President	Perry Beasley-Hall
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Councilor	Bryan Lessard, David Juszkiewicz, Simon Tierney, Ethan Briggs, Mike Rix
Webmaster / Councilor	James Buxton