

Overall Conference Schedule			
Wed			
1700	2000	Monash Club	Welcome Drinks and Canapes at Monash Club
Thurs			
900	945	Learning and Teaching Building	Sign in & Coffee & Morning tea served
945	1000	Rosalind Franklin (G81)	Welcome to AES 2021 Zoom Link for Thursday Tag Team and 3 minute Talks
1000	1040	Rm G81	Tag team talk - Hodgins Lab Large haploblocks underlie rapid adaptation in an invasive weed Kathryn Hodgins, Paul Battlay, Jonathan Wilson, Diana Prapas
1040	1120	Rm G81	Tag team talk - McGaughran Lab Invasionomics Lab Ang McGaughran, Paige Matheson, Nicola Pyper
1120	1130		Break
1130	1230	Rm G81	3-minute talks with breaks for Q&A
1230	1400		Lunch break
1400	1515	Rm 1.32, 1.34 & 1.36	Afternoon session - 3 parallel sessions
1515	1530		afternoon break
1530	1645	Rm 1.32, 1.34 & 1.36	Afternoon session - 3 parallel sessions
Friday			
900	935	LTB Lobby	Coffee & Morning tea served
935	940	Rm G81	Welcome to Friday Zoom Link for Friday Tag Team and 3 Minute Talks
940	1020	Rm G81	Tag team talk - Rymer Lab Adaptive capacity to drought in eucalypts Paul Rymer, Victoria Pérez Martínez, Anne-Cecile Colin, John Whale, Vaibhav Dagg
1020	1100	Rm G81	Tag team talk - Ujvari Lab Coupling evolutionary and ecological perspectives to understand health and disease in humans, animals and ecosystems Beata Ujvari, Antoine Dujon, Anne-Lise Gerard, Georgina Bramwell, Nick MacDonald, Nishat Nini Urmi, Nynke Raven
1100	1110		Break
1110	1210	Rm G81	3-minute talks with breaks for Q&A
1210	1330	Rm G81	Lunch break
1330	1445	Rm 1.32, 1.34 & 1.36	Afternoon session - 3 parallel sessions
1445	1500		afternoon break
1515	1600	Rm 1.32, 1.34 & 1.36	Afternoon session - 3 parallel sessions
1700	1800		Make your way to Buses or into the city
1800	2300		Dinner and afterparty at La di da

Thursday Morning

Adaptation and Biogeography

Julian Beaman	Flinders University
Abigail Robinson	Monash University
Daniela Wilner	UNSW Sydney
Jung-Chun (Zaza) Kuo	U. Melbourne
Pietro Ridone	UNSW Sydney
Soleille Miller	UNSW Sydney
Atharva Bhide	University of Auckland

Q & A 10 mins

Alex Slavenko	University of Sheffield
Kawsar Khan	Macquarie University
Blake Wyber	U. Western Australia
Kelton Cheung	UNSW Sydney
Rachael Dudaniec	Macquarie University
Jennifer Evans	ANU
Jackson Young	University of Melbourne

Q & A 10 mins

Friday Morning

Genetics and Climate change

Janelle Ramos	UNSW Sydney
Imtiaz Islam	UNSW Sydney
Ana Vasconcelos	UNSW Sydney
Shannon Kaiser	Macquarie University
Yasmine McDonough	Monash University
Tom Keaney	U. Melbourne
Lorenzo Galletta	Deakin University

Q & A 10 mins

Madeleine de Jong	Monash University
Jake Martin	Monash University
Connor Bevan	Monash University
Patrice Pottier	UNSW Sydney
Samuel Lymbery	U. Western Australia
Sian Macdonald	U. Melbourne

Q & A 10 mins

3 MINUTE TALKS

Rosalind Franklin (Rm G81) [Zoom Link for Thursday Tag Team and 3 minute Talks](#) (zoom password is always 001859)

Warm tolerance in an Arctic seabird: legacy of an evolutionary past?

Manipulating breeding female quality reveals subtle helper effects in a cooperatively breeding bird

Incipient evolution of reproductive isolation in all-female populations of the facultative parthenogen *Megacrania batesii*

Do bees also count from left to right? Spatial-numerical association in honey-bees (*Apis mellifera*)

Spontaneous adaptation of ion selectivity in a bacterial flagellar motor

Insight into the genomics of asexual reproduction in natural populations of the Peppermint Stick Insect, *Megacrania batesii*

Determining what proportion of random DNA sequences are beneficial and detrimental.

Islands in the sea to islands in the sky: Evolution and biogeography of New Guinea's montane skinks

Female pre-reproductive coloration is an anti-harassment signal damselflies

Habitat complexity and sexual conflict in the seed beetle *Callosobruchus maculatus*

Analysis of mitochondrial DNA reveals significant genetic diversity in invasive Australian cane toads

Sex matters in the race to combat climate change

Testing explanations for population decline in an iconic Australian bird using novel application of genomics

The effect of Wolbachia on climate change vulnerability in *Drosophila pseudotakahashii*

Rosalind Franklin [Zoom Link for Friday Tag Team and 3 Minute Talks](#)

Ancestral reconstruction and synthesis of the flagellar rotor protein FliG

Exploring the adaptation of the bacterial flagellar motor using ancestral sequence reconstruction and synthetic microbiology.

Defence chemicals inherited by offspring of a stick-insect

Impacts of fire on the ecology of an invasive species, the cane toad

Balancing selection as a consequence of evolutionary rescue

Sexual selection and the selfish allele

The influence of parental pre-natal exposure to heat calls on cell stress response of offspring in a songbird.

The impact of increased heatwave intensity on male fertility in an Australian lizard

Sex and drugs: impacts of the pharmaceutical pollutant fluoxetine on female mate choice in the guppy, *Poecilia reticulata*

Variation in the thermal tolerance of Australian native bees across altitude and latitude.

Can developmental plasticity rescue ectotherms from rising temperatures?

The science of war: group combat in ants and video games

The effect of Spiroplasma on thermal tolerance in *Drosophila hydei*

THURS RM 132	Life history 1		10 MINUTE TALKS -
			Mary Anning (Rm 132) Zoom link for Mary Anning Thursday Afternoon
	1400-1415	Russell Bonduriansky UNSW	Somatic ageing involves cuticle necrosis and increased pigmentation in female Australian Leaf Insects (<i>Phyllium monteithi</i>)
	1415-1430	Tom Allison Monash University	Sex specific transgenerational effects of diet on offspring life history and physiology
	1430-1445	Amanda Pettersen U. Sydney	Lizard embryos maintain hatchling size despite greater developmental costs under fluctuating temperatures
	1445-1500	Lucinda Aulsebrook Monash University	Interactions between pharmaceutical pollution and temperature in <i>Daphnia magna</i>
	1500-1515	Amanda Franklin U. Melbourne	Australian jewel beetles vary in spectral sensitivity
			Coffee Break
	Biogeography and phylogenetics		
	1530-1545	Richard Edwards UNSW	DepthKopy: copy number prediction using single-copy long-read depth profiles
RM 134	1545-1600	Sarin Tiatragul ANU	Making heads and tails of the evolution of blindsnakes in Australia
	1600-1615	Vhon Oliver Garcia U. Queensland	Sea snakes slither through seascape structure: Comparative biogeography of <i>Hydrophis</i> group sea snakes
	1615-1630	Toby Kovacs U. Sydney	Molecular phylogenetics of the “cave cockroach” family Nocticolidae
	1630-1645	Renee Catullo U. Western Australia	Reproductive character displacement and incorrect taxonomy of Toadlets (<i>Uperoleia</i>) identified using landscape genomics and acoustic
	Selection 1		Maria Sibylla (Rm 134) Zoom Link for Maria Sibylla Thursday Afternoon
	1400-1415	Devi Stuart-Fox U. Melbourne	Environmental drivers of skin pigments in agamid lizards
	1415-1430	Katarina Stuart UNSW	A genetic perspective on rapid adaptation in the globally invasive European starling (<i>Sturnus vulgaris</i>)
	1430-1445	Lu-Yi Wang U. Melbourne	Body size and climate as drivers of sunlight reflectance in jewel beetles
	1445-1500	Cris Gallegos Monash University	Genomic variation and thermal adaptation of cryptic species in a marine climate change hotspot
	1500-1515	Jack Brand Monash University	Biological invasions as a selective filter driving behavioural divergence
Rm136			Coffee Break
	Life history 2		
	1530-1545	Upama Aich ANU	Does age matter? Effect of male age and mating history on reproduction
	1545-1600	Sam Ginther Monash University	Correlates of biological production across the Metazoa
	1600-1615	Avishikta Chakraborty Monash University	Understanding cryptic genetic variation in plasticity in response to combined environmental stress
	1615-1630	George Jarvis Monash University	Macroevolutionary patterns in marine hermaphroditism
	1630-1645	Ivan Vinogradov ANU	Self-control: how does age, sex, and boldness affect it?
	Reproduction 1		Barbara McClintock (Rm 136) Zoom Link for Barbara McClintock Thrusday afternoon password: 001859
	1400-1415	Dustin Marshall Monash University	What role do larger mothers play in population replenishment?
	1415-1430	Ashley Potter Monash University	Drivers of sperm metabolism within and among species
	1430-1445	Meng-Han Chung ANU	Evidence that costs of ejaculation are minor relative to mating effort
	1445-1500	Zhuzhi Zhang ANU	How does access to water at different life stages affect male investment in reproduction and survival?
	1500-1515	Lauren Harrison ANU	How do losers (and winners) invest in sex?
			Coffee Break

	Selection 2		
1530-1545	Mylene Mariette	Deakin University	Acoustic developmental programming of individual responses to heat in an arid-adapted bird
1545-1600	Laura Ospina-Rozo	U. Melbourne	Diverse optical effects in Christmas beetles: investigating how and why
1600-1615	Marco Camaiti	Monash University	Untangling the ecomorphology of limb reduction: how substrate characteristics select for specific body proportions in skinks
1615-1630	Erin Macartney	UNSW	Environmental enrichment mitigates the effects of stress on cognitive performance: conducting a meta-analysis of interactive effects
1630-1645	Tara-Lyn Camilleri-Carter	Monash University	All the better to eat you with: Remarkable adaptations in the canine teeth of mammalian carnivores
FRIDAY			
RM 132	Selection 3		Mary Anning Zoom Link for Mary Anning Friday Afternoon
1330-1345	Alexander Mikheyev	ANU	Is it venomous? Revisiting vertebrate venoms
1345-1400	Fonti Kar	UNSW	Evolutionary potential and developmental plasticity of growth
1400-1415	Mitchell Hodgson	University of Sydney	Variability in climatic extremes drive thermal limits across a species range
1415-1430	Perran Ross	U. Melbourne	Evolutionary changes in mosquitoes and Wolbachia: implications for dengue control
1430-1445	Giovanni Polverino	U. Western Australia	Background matching explains repeatable individual variation in defence strategies
	Reproduction 2		
1500-1515	Alistair Evans	Monash University	Evidence that costs of ejaculation are minor relative to mating effort
1515-1530	Tahlia Pollock	Monash University	No evidence for phenotypic condition-dependent ejaculate allocation responses to sperm competition in the seed beetle <i>Callosobruchus</i>
1530-1545	Jessie Tanner	U. Western Australia	Diversification of baculum (os penis) shape in Australasian rodents
1545-1600	Emily Richardson	Monash University	Knowledge gaps and life histories: a lack of longitude
RM134	Insights from Genome Sequencing		Maria Sibylla Zoom Link for Maria Sibylla Friday Afternoon
1330-1345	Filip Ruzicka	Monash University	Evolution on the X chromosome: theory meets data, in humans and flies
1345-1400	Prasangi De Silva	Monash University	Genome assembly and comparative analysis of Australian native grass species reveals a recent whole genome duplication and biased
1400-1415	Oliver Stuart	ANU	Genome structure and inheritance in Australia's most endangered insect, <i>Dryococelus australis</i> (Phasmatodea)
1415-1430	Iva Popovic	U. Queensland	Cryptic diversity and co-structuring of genetic variation in a foundational coral and its endosymbionts across the Great Barrier Reef
1430-1445	Juan Garces	ANU	Flying Insects as a source of environmental sampling
	Sociality		
1500-1515	Mariana Velasque	Monash University	How to create a working-class: uncovering the evolution of eusociality using <i>Drosophila melanogaster</i>
1515-1530	Thomas Hagan	U. Sydney	The evolution of the sex locus in invasive populations of <i>Apis cerana</i>
1530-1545	James Makinson	Western Sydney U.	Tetragonula in the Top End: The foraging ecology, nest site preferences and potential cryptic species of stingless bees in the Northern T
1545-1600	Guy Cooper	University of Oxford	The consequences of group structure and efficiency benefits for the evolution of division of labour
RM 136	Climate change and temperature		Barbara McClintock Zoom Link for Barbara McClintock Friday Afternoon
1330-1345	Collin Ahrens	UNSW	Genomic constraints of drought adaptation
1345-1400	Matthew Symonds	Deakin University	Adapting to warmer climates: changes in the size and shape of Australia's shorebirds over the past half-century.
1400-1415	Carmen da Silva	Monash University	Predicting adaptive responses of native bees to climate change

1415-1430	Jake Brown	U. Melbourne	Investigating transgenerational effects of climate change on two <i>Drosophila</i> species
1430-1445	Cris Gallegos	Monash University	Genomic variation and thermal adaptation of cryptic species in a marine climate change hotspot
			Coffee Break
			Mitochondria and selfish elements
1500-1515	Aysha Sezmis	Monash University	Horizontal Gene Transfer in Experimental Populations of <i>Acinetobacter baylyi</i>
1515-1530	Brooke Zanco	Monash University	Selection for biparental inheritance of mitochondria under hybridisation and mitonuclear fitness interactions
1530-1545	Callum McDiarmid	Macquarie University	Does mito-nuclear incompatibility underlie reproductive isolation in hybrids of two subspecies of <i>Poephila acuticauda</i> ?
1545-1600	Hector Pacheco-Fuentes	Macquarie University	The consequences of experimental heat waves on mitochondrial metabolism in the Zebra Finch (<i>Taeniopygia guttata</i>)

Ten Minute Talk Speakers: please deliver your talks, on a usb, to your sessions' room 15 minutes before the afternoon session starts (near the end of the lunch break)