



Research School of Biology HDR Conference

Thursday 24th November 2016

Research Themes:
Host-microbe Interactions
Evolution & Genetics
Computational Biology
Membrane Transport & Enzyme Biochemistry
Ecology
Photosynthesis & PEB
Cell & Developmental Biology

8:30 - 8:50	Registration in Linneaus Drop-in Centre (Bldg 134)		
8:50 - 9:00	Welcome Address in Linneaus Drop-in Centre (Bldg 134) Allen Rodrigo, Director of RSB		
9:10 - 10:30	CONCURRENT SESSIONS		
	Ecology & Evolution Gould Seminar Room (Bldg 116) Session Chair: Gavin Huttley IT Helper: Ian Brennan	Biomedical Science & Biochemistry Slatyer Seminar Room (Bldg 47) Session Chair: Giel van Dooren IT Helper: Pawan Parajuli	Plant Science Robertson Seminar Room (Bldg 46) Session Chair: Shinichi Asao IT Helper: Lingling Zhu
9:10	Identifying the limits to phylogenetic inference Yurong Tang (Huttley Lab)	Characterisation of <i>Plasmodium falciparum</i> pantothenate kinase Erick Tjhin (Saliba Lab)	
9:20	Diagnostic sequence motifs distinguish all point mutations Yicheng Zhu (Huttley Lab)	Can <i>T. gondii</i> synthesise vitamin B5 and is it essential for its survival? Vanessa Howieson (Saliba Lab)	Sniffing out new plant volatiles via SPME-GC/MS John Rivers (Pogson Lab)
9:30	Estimating the age of alleles and related parameters from empirical population data Helmut Simon (Huttley Lab)	Glutamine uptake in <i>Toxoplasma Parasites</i> Kathryn Parker (van Dooren Lab) **	Choose your own adventure: the journey of stomatal signals Estee Tee (Pogson Lab) **
9:40	Socially acquired circadian rhythm in the honeybee colony Jack Simpson (Foret Lab)	Characterising putative transporter proteins in apicomplexans Sanduni Hapuarachchi (van Dooren/Lehane/Krik Labs)	DNA methylation and stress responses in <i>Arabidopsis</i> Diep Ganguly (Pogson Lab) **
9:50	Simulating range evolution to investigate the geographic mode of speciation Alexander Skeels (Cardillo Lab)	The natural substrate specificity and normal physiological role of PfCRT Sarah Shafik (Martin Lab)	Enhancing carotenoid stability in cereals Jacinta Watkins (Pogson Lab) **
10:00	Modelling cooperation in social information use Cameron Turner (Magrath Lab)	Expression of MDR1 proteins in <i>Xenopus</i> oocytes Sashika Richards (Martin Lab)	Function of CRTISO like gene in <i>Cyanobacteria</i> cold responses Xiaofeng Xiong (Pogson Lab)
10:10	Diversity of <i>E. coli</i> within water catchments across Eastern Australia and the use of chemical and physical indicators for predicting <i>E. coli</i> diversity Samantha Burn (Gordon Lab)	Two distinct mechanisms of phospholipid flippase inactivation in platelet apoptosis and activation Weidong Jing (Broer Lab)	Metabolic responses of sunflower to potassium deficiency Jing Cui (Tcherkez Lab)
10:20	Phenotypic characteristics of <i>Escherichia coli</i> bloom strains Buddhie Nanayakkara (Gordon Lab)	Identification of novel inhibitors of the amino acid transporter <i>BOAT1</i>, a potential target to treat type 2 diabetes Qi Cheng (Broer Lab)	Plasmodesmata and C4 evolution in monocots Florence Danila (von Caemmerer Lab) **
10:30 - 11:00	Morning Tea in Linneaus Drop-in Centre (Bldg 134)		

Research Themes:

Computational Biology

Photosynthesis & PEB

Host-microbe Interactions

Membrane Transport & Enzyme Biochemistry

Cell & Developmental Biology

Evolution & Genetics

Ecology

11:00 - 12:40 CONCURRENT SESSIONS			
	Ecology & Evolution Gould Seminar Room (Bldg 116) Session Chair: Craig Moritz IT Helper: Jessica Fenker Antunes	Biomedical Science & Biochemistry Slatyer Seminar Room (Bldg 47) Session Chair: Maja Adamska IT Helper: Pamodha Somasiri	Plant Science Robertson Seminar Room (Bldg 46) Session Chair: Brendon Conlan IT Helper: Jacinta Watkins
11:00	The challenges of assessing phenotypic plasticity to water availability: Alpine plants and elevation gradients Sonya Geange (Nicotra Lab) **		
11:10	Are Australian alpine seeds short-lived? Annisa Satyanti (Nicotra Lab)		
11:20	Incorporating terrestrial invertebrates in biodiversity monitoring Stefanie Oberprieler (Moritz Lab)	Development of biomarkers for the protein restriction using Slc6a19 knock out mice Kiran Javed (Broer Lab)	Temperature changes: impacts on the abundance of mitochondrial electron transport components Fatimah Azzahra (Zara) Ahmad Rashid (Atkin Lab)
11:30	Do grapevine secondary metabolites provide resistance against scale insects? Kenneth Webster (Cooper Lab)	Generating a Constitutive Expression Cell Line for B⁰AT1 Nishank Shah (Broer/Corry Labs) *	Heat stress, acclimation and recovery: membranes and heat shock proteins Lingling Zhu (Atkin Lab)
11:40	Linking forage quality to population dynamics Jessie Au (Foley Lab)	Identifying the mechanism of action of novel antimalarial compounds Adelaide Dennis (Lehane/Kirk Labs) **	Tobacco Aquaporins: the search for CO₂ pores Annamaria De Rosa (Evans Lab)
11:50	Hot possums: getting intoxicated and uncoupling up Phillipa (Pip) Beale (Foley Lab)	Carrying on with the carriers Edwin Tjhin (van Dooren Lab)	Stomatal dynamics across vascular plant lineages Ross Deans (Farquhar Lab)
12:00	The effect of unseasonal disturbance on a tropical fish community Joshua (Josh) Van Lier (Fulton Lab)	Toxicity of Poly(acrylic acid) Elizabeth Whitty (Callaghan Lab)	The role of Trehalose 6 Phosphate in wheat grain Ross Dennis (Furbank Lab)
12:10	Climate change: the ultimate weight loss diet for birds? Nina McLean (van de Pol Lab)	Novel cancer immunotherapy CFA as a means of treating solid tumours in mice Erin Andrew (Fahrer Lab)	The role of SWEETs in phloem loading and unloading pathways of the C₄ model species <i>Setaria viridis</i> Lily Chen (Furbank Lab) *
12:20	Fear and learning on the Yarra: Predator awareness training in the helmeted honeyeater Thomas Rowell (Magrath Lab)	Setting sex boundaries in the malaria parasite Melanie Ridgway (Maier Lab)	Stabilising the flowering time of wheat Bonnie Flohr (Evans Lab)
12:30	Modelling refugia in the Australian monsoonal tropics Christiana McDonald-Spicer (Moritz Lab)	Trafficking and function of Maurer's clefts protein PFE60 in <i>Plasmodium falciparum</i> infected human red blood cells Meng Zhang (Maier/Rug Labs) **	Characteristics of cyanobacterial RuBisCO enzymes and their interactions with structural proteins Nghiem Nguyen (Price Lab)
12:40 - 2:00	Lunch in Linneaus Drop-in Centre (Bldg 134)		

2:00- 3:30

CONCURRENT SESSIONS

	Ecology & Evolution Gould Seminar Room (Bldg 116) Session Chair: Rod Peakall IT Helper: Phillipa Beale	Biomedical Science & Biochemistry Slatyer Seminar Room (Bldg 47) Session Chair: Denisse Leyton IT Helper: Kathryn Parker	Plant Science Robertson Seminar Room (Bldg 46) Session Chair: Diana Esperanza Ramirez-Garces IT Helper: Annamaria de Rosa
2:00	Fires, floods and ferals: genetic patterns of a native rodent in a disturbance-prone landscape Robyn Shaw (Peakall Lab)		
2:10	Drivers of avian diversity in a fire-prone landscape Zoe Reynolds (Cardillo Lab)		Functional characterisation of miR159-GAMYB pathway through evolution Zihui (Amber) Zheng (Millar Lab)
2:20	Cryptostylis orchids: the exception in sexual deception Alyssa Weinstein (Peakall Lab) **		Using wild genepool to improve drought tolerance in tomato Tuan Anh Nguyen (Masle Lab)
2:30	Divergence-with-gene flow in birds: genome differentiation in allopatry vs. parapatry through the speciation continuum Joshua Penalba (Moritz Lab) *		Components of immunity to <i>Parastagonospora nodorum</i> in wheat Adam Taranto (Solomon Lab)
2:40	Diversification of lizards in tropical savannas Jessica Fenker Antunes (Moritz Lab)		Debunking Trump's wall : why migration works Rémi Branco (Masle Lab)
2:50	Dissecting broad introgression using exon capture data in rainbow skinks across the Kimberley (Australia) Ana Caterina Afonso Silva (Moritz Lab)	Membrane remodelors: Host cell modifications in the malaria parasite Mrinalini Pratap (Maier Lab)	CEP3 peptides negatively regulate root tip growth in <i>Arabidopsis thaliana</i> Kelly Chapman (Djordjevic Lab)
3:00	How to succeed in Australia: Radiation and diversification of reptiles Ian Brennan (Keogh Lab)	Topological analysis of O-acetyltransferase B(<i>OacB</i>) and study of function of <i>oacB</i> and four novel genes of Sf101 bacteriophage in <i>S.flexneri</i> virulence Munazza Rajput (Verma Lab)	Identify CRA2 in <i>Medicago truncatula</i> as CEP peptide receptor by biochemical and genetic approaches Han Chung Lee (Djordjevic Lab)
3:10	Catching them in the act - a closer look at mating behaviour in thynnine wasps Thomas (Tom) Semple (Peakall Lab)	Bacteriophage acquired violence study in <i>Shigella flexneri</i> 1c strains Pawan Parajuli (Verma Lab)	Peptide hormone signalling: plant nutrient traffic control Michael Taleski (Djordjevic Lab)
3:20	Morphology's whisper: genera of Australian Bombyliini (Diptera, Bombyliidae, Bombyliinae) Xuankun Li (Rowell Lab)	The use of <i>Caenorhabditis elegans</i> as a potential animal model for shigellosis Pamodha Somasiri (Verma Lab)	The role of CEPs in the regulation of root secondary organs in <i>Medicago truncatula</i>. Ariel Sylvia Louise Ivanovici (Djordjevic Lab)

3:30 - 4:00

Afternoon Tea in Linneaus Drop-in Centre (Bldg 134)

4:10– 5:30

CONCURRENT SESSIONS

	Ecology & Evolution Gould Seminar Room (Bldg 116) Session Chair: Megan Head IT Helper: Alyssa Weinstein	Biomedical Science & Biochemistry Slatyer Seminar Room (Bldg 47)	Plant Science Robertson Seminar Room (Bldg 46) Session Chair: Hoa Nguyen IT Helper: Estee Tee
4:10			Sequencing individual nuclei of the dikaryotic fungus <i>Puccinia striiformis</i> Ramawater Nagar (Rathjen Lab)
4:20	I wanna go home! Zoltan Kocsi (Zeil Lab)		Deworming plants with flavonoids Sabrina Chin (Mathesius Lab)
4:30	Specificity of mycorrhizal fungi in two closely related <i>Caladenia</i> species Fitria Oktalira (Linde Lab)		Examining the roles of sesquiterpene synthases in fungal diseases Chen Wang (Solomon Lab)
4:40	Those indomitable galls Michaela Purcell (Rowell Lab)		Development and utilization of CRISPR/Cas9 in <i>Zymoseptoria tritici</i> Haseena Khan (Solomon Lab)
4:50	Towards the systematic revision of the Australian bristle fly genus <i>Rutilia</i> Robineau-Desvoidy, 1830 (Diptera: Tachinidae) James Lumbers (Rowell Lab)		An alternatively spliced transcription factor Con7 is required for Tox3 expression in <i>Parastagonospora nodorum</i> Shao-Yu Lin (Solomon Lab)
5:00	The piRNA in honeybees Weiwen (Raymond) Wang (Foret Lab)		Some like it hot-but how does Rubisco Activase do it? Emmanuel Young (Whitney Lab)
5:10	Discovering the molecular basis of resistance in Australian Myrtaceae to the exotic pathogen myrtle rust Ji-Fan (Sarah) Hsieh (Foley Lab)		The journey to tobacco chloroplasts Ding Yuan (Whitney Lab)
5:20	Transcriptional control by ZIC genes Koula Diamond (Arnell Lab)		GABA regulates metabolism and reproduction in the wheat pathogen, <i>Parastagonospora nodorum</i> Oliver Mead (Solomon Lab)
5:30 - 5:50	Poster Session in Linneaus Drop-in Centre (Bldg 134) * next to presenter's name indicates they will have a poster on display **next to presenter's name indicates they will be giving a presentation on their poster in the poster session		
5:50 onwards	Conference After Party in Linneaus Drop-in Centre (Bldg 134) Includes drinks, free Crust & Turkish pizza and live music		