



## Congratulations

**Benjamin Schwessinger** (PS) met with the ACT Chief Minister Andrew Barr as part of his ACT Emerging Scientist of the Year 2022 award ceremony. They discussed biology and plant science. Andrew Barr shared his insight into plant immunity to pathogen via resistance genes. He was also well informed about CEAT and all the plant science work going on at RSB. Good times had all around.



Congratulations **Emily Roycroft** (Moritz Group, E&E) on being awarded the Society of Australian Systematic Biologists (SASB) 2022 Early Career Research Excellence Award for significant contributions to the field of systematic biology in Australia. This prestigious honorific award recognises her significant contribution to the field of Taxonomy and Systematics in Australia.



**Carlos Pavon Vazquez** (Keogh Group, E&E) won the best RSBs PhD thesis prize for his work *From Genes to Communities: An Integrative Approach to the Evolution of Varanidae*.



**Erin Hill** (Solomon Group, PS) won the poster prize at the British Society of Plant Pathogens Conference in Newcastle UK. The title of the poster was *Developing molecular tools to investigate Zymoseptoria tritici extra-cellular vesicles in vitro and during infection of wheat*.



(Erin Hill pictured with the President of BSPP, Prof David B. Collinge)

## Grants awarded

**Gavin Huttley** (E&E) was awarded a philanthropic grant from the Chan Zuckerberg Initiative DAF, a fund of the Silicon Valley Community Foundation. \$325k



**Yun Hsiao** (Rowell Group, E&E) has been awarded the Vice-Chancellor's HDR Travel Grant.

## PhDs submitted

**Mahin Chavoshi Jolfaei** (Rowell Group, E&E) *Molecular phylogeny, generic delineation, and historical*

**Jorin Diemer** (Kirk Group, BSB) *A mathematical model for ion homeostasis in the malaria parasite, Plasmodium falciparum*

**Jenni Hayward** (van Dooren Group, BSB) *Elucidating and Exploiting the Mitochondrial Electron Transport Chain of Apicomplexan Parasites*

## PhDs awarded

**Tomas Fuenzalida Gasman** (Ball Group, PS) *Plant hydration dynamics: measurement and uptake pathways*

**Lauren Harrison** (Jennions Group, E&E) *Sex and conflict: How competition shapes reproduction, behaviour and life-histories in various animals*

**Ariel Ivanovici** (Djordjevic Group, PS) *Signals and PerCEption: diverse roles for C-terminally encoded peptides in symbiosis, root system gravitropism, and pathogen response in Medicago truncatula and Arabidopsis thaliana*

**Sashika Richards** (Whitney Group, PS) *Structure-function studies of multidrug resistance transporters of the malaria parasite*

**Kalya Subasinghe** (Langmore Group, E&E) *Avian morphometrics and climate change*

## Welcome

Welcome PhD student **Jesús Ruiz Flores** (Brock Group, BSB) who has moved from Mexico city to start a project in membrane protein structural biology and drug discovery.

Welcome new Postdocs **Hannah Calich** and **Xiaohan Xu** as a Research Assistant (both Sequeira Group, E&E). There are also two Sequeira Group members currently based in Perth who are visiting this month - **Michelle Van Compernelle** and **Michael Taylor**.

Welcome **Birhanu Jemere**, a new PhD student (Fahrer Group, BSB). Birhanu joins us from the University of Gondar in Ethiopia, but most recently has been studying in Lyon, France for the Erasmus Mundus Joint Master in Vaccinology. Birhanu will be working on cancer immunotherapy for his Ph.D.

## Farewell

We are sorry to see **Eng Kee (Kikki) Au** (Price Group, PS) leave for a continuing job in the JCSMR administration team. Kikki has been an amazing member of the Price Group and the RIPE team for over seven years and has been responsible for tobacco tissue culture, GMO plant analysis and ordering. We wish her the best of luck in her new position and thank her for all the great work she has done, and her cheery disposition.



## Octoberfest

The RSB community came together to celebrate October in droves and in style with hundreds of German sausages, vegan sticks and halal meat. The thirst was quenched with beer and soft drinks a plenty while listening to German music. The RSB community would like to thank all the dedicated and innovative organisers and volunteers who not only decorated the tea room but cooked a scrumptious meal and entertained us with a quiz, costume contest and music. It was an amazing evening.



## Kioloa welcomes us back

Question: What do you get when you combine 32 PhD students, four Academics, Jack Egerton, Sarah Shafik, the RSB Director, videographer Myles Roberts, sunny warm weather, surf, hiking, rock pools, chocolate, community spirit and fun activities with prizes?

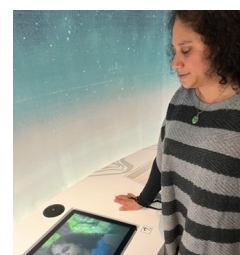
Answer: A bloody good time (barring a few leaches).

## In the media

**Rod Peakall** (E&E) was interviewed in *Current Biology Q & A* and talked about what made him interested in biology and his subsequent research.

**Caitlin Byrt** (PS) discussed a study into growing plants in space on [ABC News](#) and an article on [ABC news webpage](#) and the first steps for Australian biologists as study begins to grow durable and sustainable plants in space. This work generated 270 media items across TV, radio, print and online.

**Jennie Mallela** (E&E) features at the National Museum's new gallery 'Great Southern Land'. Visitors can explore stunning objects and rich multi-sensory experiences as they walk through majestic bunya pine sculptures and interact with the 3D animated platypus.



## Papers

Almonte AA, Cavic G, Neeman T, Fahrer AM *et al.* Gut microbiome-depleting antibiotic regimens are not tolerated by all mouse strains: learn from (our) bitter experience. *Journal for Immunotherapy of Cancer*.

Andrew SC, Arnold PA, Simonsen AK, Briceño VF. Consistently high heat tolerance acclimation in response to a simulated heatwave across species from the broadly distributed *Acacia* genus. *Functional Plant Biology*. <https://doi.org/10.1071/FP22173>

Crous PW, Boers J, Holdom D, Linde C *et al.* Fungal Planet description sheets: 1383–1435. *Persoonia - Molecular Phylogeny and Evolution of Fungi*. <https://doi.org/10.3767/persoonia.2022.48.08>

Gardner JL, Clayton M, Bonnet, T *et al.* The effects of temperature extremes on survival in two semi-arid Australian bird communities over three decades, with predictions to 2104. *Global Ecology and Biogeography*. <https://doi.org/10.1111/geb.13591>

Irinyi L, Roper M, Malik R & Meyer W. In silico environmental sampling of emerging fungal pathogens via big data analysis. *Fungal Ecology*.

Kamali N, Abadi ATB, Rahimi F *et al.* Identification of *Streptococcus gallolyticus* in tumor samples of Iranian patients diagnosed with colorectal cancer. *BMC Research Notes*. <https://doi.org/10.1186/s13104-022-06207-9>.

Krauss KW, Lovelock CE, Chen L, Ball MC *et al.* Mangroves provide blue carbon ecological value at a low freshwater cost. *Scientific Reports*. <https://doi.org/10.1038/s41598-022-21514-8>

Normark BB, Normark RD & Gullan PJ. Three new Australian species of the armoured scale genus *Aspidiotus* Bouche, 1833 (Hemiptera: Diaspididae: Aspidiotini), including an emerging pest of cycads. *Australian Entomologist*.

Qiu DY, Pei JXV, Rosling JEO, Li DD, Xue Y, Tanner JD, Aw YTV, Aw JYH, Hasemer H, Dennis ASM, Ridgway MC, Corry B, van Dooren GG, Kirk K, Lehane AM *et al.* A G358S mutation in the *Plasmodium falciparum* Na<sup>+</sup> pump PfATP4 confers clinically-relevant resistance to cipargamin. *Nature Communications*. <https://doi.org/10.1038/s41467-022-33403-9>.

Roycroft E, Fabre P-H, MacDonald AJ, Moritz C *et al.* New Guinea uplift opens ecological opportunity across a continent. *Current Biology*. <https://doi.org/10.1016/j.cub.2022.08.021>

von Takach B, Ranjard L, Burrridge CP, MacDonald AJ *et al.* Population genomics of a predatory mammal reveals patterns of decline and impacts of exposure to toxic toads. *Molecular Ecology*. <https://doi.org/10.1111/mec.16680>

Westerband A, Wright I, Maire V, Atkin OK, Bloomfield KJ, Cernusak L *et al.* Coordination of photosynthetic traits across soil and climate gradients. *Global Change Biology*. <https://doi.org/10.1111/gcb.16501>