

# Research School of Biology Newsletter

Issue 151 | August 2023

## From the Director

For this month's newsletter I'm really pleased to highlight very positive news on multiple fronts. RSB continues to excel in highly competitive ARC schemes. Last month we celebrated the awards of an ARC Training Centre (Solomon et al.) and a Future Fellowship (Way). Now we have news that 3 of our 5 applicants for ARC DECRA postdocs were successful (details below). I know the sample size is small – but I think we can be pleased with the 60% success rate – compared to 30% for ANU as a whole and 20% across all universities

In other good news, those of us with ANU-managed computers (Macs and Windows) will finally be able to apply to access the Privileged Access Management (PAM) system, and so install software updates etc. This has been a long-running saga with a lot of effort devoted to solving the issue by Sharyn Wragg, the IT user group and several academics. More information on how to get registered for PAM access will be provided in the coming days.

Each of these positive developments rests on the efforts of our staff - and here I want to emphasise the key role of RSB (& CoS) professional staff in helping us achieve our goals. Underpinning our success with the ARC (& other competitive schemes) is the commitment of the CoS Research Management team, along with peer mentoring from academics, ensuring that we put forward the best possible proposals. To enable academics to access the PAM system, our RSB IT support team has put in a huge effort. My thanks to all concerned. And to complete my lauding of professional staff, I want to thank Terri Richardson for a job very well done. As the hyper-efficient EAO to Directors (myself, Scott Keogh, Alan Rodrigo) and the primary organiser of events and this RSB newsletter. Terri has also contributed a lot to the positive school environment, including our recovery from the Covid lockdowns. She and her husband have now retired to the coast and I wish them all the best.

On other matters, via RSB Exec and then discussions at the Q3 Faculty meeting, we have been developing an approach to estimate and compare workloads across teaching and service – as is likely to be required under the new Enterprise Agreement. The point here is not to micromanage what academics do – but rather to ensure that all have reasonable opportunity to pursue their interests. I also note that the draft EA has very sensible provisions towards work-life balance. This and more from RSB Exec can be found on the RSB intranet – here.

## **Congratulations**

The 2023 ACT Young Tall Poppy Award winner - Florence Danila, (PS), will give a presentation of her work on plasmodesmata at the Shine Dome in September.

HDR Supervisor for the Month of July 2023 awarded to Alex Maier (BSB)



Minh Bui (CECC) and Robert Lanfear (E&E) were awarded the inaugural 2023 Eureka Prize for Excellence in Research Software. This is well deserved recognition of their hard work on research software that is used around the world (IQTree2).

## **Grants awarded**

**Peter Solomon** (PS) received an ARC grant to establish the ARC Industrial Transformation Training Centre in Plant Biosecurity, \$5M.

Emily Roycroft (Moritz Group, E&E), Diep Ganguly (PS), Mirindi Eric Dusenge (PS) were awarded DECRA grants in the ARC DE24 funding round.

## PhDs awarded

**Cal Bryant** (Ball Group, PS) Exploring drought resilience in Australian tree species

### Welcome

Vienna Harkness joins the Central Admin Team as Executive Administration Officer replacing Terri. Join us in making her welcome to the RSB.

Khawar Majeed joins the (Schwessinger Group, PS) as a visiting PhD student, working with the International Research Support Initiative Programme (IRSIP), funded by Higher Education Commission (HEC) of Pakistan. He will jointly work on the genomics of Pakistan wheat stripe rust population and more.

Sarah Mueller has joined the (Furlong Group, BSB) as a Postdoctoral Fellow. Sarah completed her PhD at Griffith University in Brisbane and will now be working with Emily researching bacterial redox systems and virulence factors.

Adele Sinclair has joined the ARC Industrial Transformation Training Centre in Plant Biosecurity as the interim Chief Operating Officer (PS).

#### **Farewell**

Congratulations and farewell to Isobel Magrath (Byrt Group,

PS) who departs this September to travel to the UK to pursue her PhD studies at The University of Cambridge. Isobel completed her Honours with the Byrt and Price labs then continued in a research role with the Byrt lab contributing to research related to advancing aquaporin separation technologies and studying aquaporin functions in plant cells.



Isobel is a treasured lab team member and will be missed!

**Terri Richardson** (EAO) retired from the ANU this month. She will be missed, not least because of her fantastic organising of the end of year party, which she will attend again this year. We wish her all the best in her next adventure.

#### News

As part of a collaborative Honours project with the ANU School of Art and Design (SoAD), RSES and RSB, researcher Beth O'Sullivan, an Honours student at the SoAD is looking for an environmental-friendly solution to coral reef restoration practices which often use concrete. Find more information here.

New PhD student representatives for PS. Marvin Jin joins Jack Wess to form the dynamic duo who serve as a voice that represents you in the PS HDR realm of RSB.

## In the Media

Caitlin Byrt (PS), Neelam Gogoi (Pogson Group, PS) and Julie Leroux (Pogson Group, PS), hosted Emily Brissenden, ARC's Senior Director Strategic Comminications. The meeting is published in the CSIRO Double Helix magazine https://blog.



doublehelix.csiro.au/pioneering-the-future-of-food/

City News reported on the genetic study of the Australian Pookila by **Emily Roycroft** (Moritz Group, E&E). The study tracks the decline of the rodent species in recent decades.

The Canberra Weekly reported on the work of Minh Bui (CECC) and Robert Lanfear (E&E), who were winners of the inaugural 2023 Eureka Prize for Excellence in Research Software.

#### Outreach

RSB Parasitologists ran a parasite-themed stall at Cooleman



Court, Weston Creek, as part of "Science in the Centres" during National Science Week in August. The stall, coordinated by Christina Spry (BSB) and Alex Maier (BSB), was set-up and manned by Kwong Sum Lam, Makenna Short and Sabina Morgan (Maier Group, BSB),

Erick Tjhin, Holly Yuan, Paremila Shanmuga Nathan and Asmita Deonath (Spry Group, BSB), Cookie Gao and Ruth Skrzypek (Spry & Callaghan Groups, BSB), Adele Lehane (BSB) and talented undergraduate parasitology students Alyssa Cahill, Isabella Stewart, Katya Strahan and Laura Thai. Guests to the stall got to the chance to see a range of parasite specimens and explore the wonders of parasites through parasite themed games and displays, all explained by these enthusiastic ANU parasitologists.

## **Students**

A small morning tea was had with the new Masters of

Science and Shandong students. Several students recently arrived from overseas and we introduced them to ANU academic and social services. Our BIOL8291 course brings together the new cohort and guides them through choosing research groups for their academic journey.



In addition to the established Masters of Sciences program, we have welcomed the Shandong program of students who are pursuing a dual degree.

## From the IDEA Committee

Links to two recently revised documents from the Inclusion, Diversity, Equity and Access (IDEA) Committee, are available below.

Guidelines for inclusive and accessible events

Quick Guide for inclusive and accessible events

## **Papers**

Alton LA, Novelo M, Beaman JE, Arnold PA *et al.* Exposure to ultraviolet-B radiation increases the susceptibility of mosquitoes to infection with dengue virus. *Global Change Biology*. https://doi.org/10.1111/gcb.16906

Braby MF, Yeates DK & Joseph L. Woodland birds and insect decline. *Emu-Austral Ornithology*. <a href="https://doi.org/10.1080/01584197.2023.2233758">https://doi.org/10.1080/01584197.2023.2233758</a>

Bromham, L, Yaxley K. Neighbours and relatives: accounting for spatial distribution when testing hypotheses in cultural evolution. *Evolutionary Human Sciences*.

Cayzer LW, Utteridge TMA, Chandler GT. Pittosporum (Pittosporaceae) in Malesia and Papuasia. *Australian Systematic Botany*. https://doi.org/10.1071/SB22007

Dusenge ME, Warren JM, Reich PB, Way D.A et al. Boreal conifers maintain carbon uptake with warming despite failure to track optimal temperatures. *Nature Communications*. <a href="https://doi.org/10.1038/s41467-023-40248-3">https://doi.org/10.1038/s41467-023-40248-3</a>

Hayward JA, Spry C, Saliba KJ, Maier AG, van Dooren GG et al. A screen of drug-like molecules identifies chemically diverse electron transport chain inhibitors in apicomplexan parasites. *PLOS Pathogens*. <a href="https://doi.org.10.1371/journal.ppat.1011517">https://doi.org.10.1371/journal.ppat.1011517</a>

McDougall F, Gordon D, Robins-Browne R et al. Characterisation of typical enteropathogenic Escherichia coli (tEPEC) lineages and novel bfpA variants detected in Australian fruit bats (Pteropus poliocephalus). Science of The Total Environment. <a href="https://doi.org/10.1016/j.scitotenv.2023.166336">https://doi.org/10.1016/j.scitotenv.2023.166336</a>

Mahmood MA, Mansoor S. A Prime Example of Dual Deception. *Gen Biotechnology*. <a href="https://doi.org/10.1089/genbio.2023.0036">https://doi.org/10.1089/genbio.2023.0036</a>

Mahmood MA, Naqvi RZ, Mansoor S, WeiTsing: A guard of the stele, *Molecular Plant*. <a href="https://doi.org/10.1016/j.molp.2023.07.006">https://doi.org/10.1016/j.molp.2023.07.006</a>

Ramirez-Esquivel F & Ravi S. Functional anatomy of the worker honeybee stinger (Apis mellifera). *iScience*. <a href="https://doi.org/10.1016/j.isci.2023.107103">https://doi.org/10.1016/j.isci.2023.107103</a>

Scheele BC, Heard GW, Cardillo M. et al. An invasive pathogen drives directional niche contractions in amphibians. *Nature Ecology & Evolution*. <a href="https://doi.org/10.1038/s41559-023-02155-0">https://doi.org/10.1038/s41559-023-02155-0</a>