



## From the Director

Dear colleagues:

Once more, we have completed a semester of high quality teaching, bar exams and with some field courses still to come. Here I want to thank all staff, academic (including our hard-working CSAs) & professional, for their enormous effort in delivering high quality courses. The ANU's undergraduate curriculum framework calls for courses that develop critical thinking and I am sure that we are delivering that in spades. At the same time, our small-group lab and field courses help students build skills in team-based problem solving which also helps students employ discipline-based knowledge to transdisciplinary problems.

This issue also includes positive results from the just-announced round of ARC Discovery Grants (i.e. DP24). While some applicants were disappointed, RSB achieved a high success rate with 4/13 (31%) RSB-led proposals being funded for a total of \$2.7M over 3 years. This success rate is well above the Go8 (17%) and ANU (24%) averages, which is testament to the huge effort put in by proponents themselves and their support networks including our great CoS RM team. For those that missed out, I'm sorry. As we all know, there is a lottery at the funding threshold and I hope you will persist. Please come and see me if you want to discuss the outcome.

For now, please read on....

## Congratulations

Well done to those from RSB who have just been awarded ARC Discovery Grants:

- **Peter Solomon (PS) and Simon Williams (PS)** - Characterisation of a novel disease immunity pathway in plants (\$595K)
- **Uli Mathesius (PS), Ute Roessner (PS) and Alex Johnson** - Improving grain legume seeds for future climates (\$852K)
- **Adrienne Nicotra (E&E), Dani Way (PS), Andrea Leigh, Daniel Falster, Lydia Guja & Enrico Rezende** - What determines plant sensitivity to heat?: Individual to lifetime impacts (\$631K)
- **Alex Maier (BSB), Todd Mitchell, Benjamin Mordmueller** - Targeting the host lipid environment to disrupt malaria transmission (\$664K).
- **Justin Welbergen, Anastasia Dazliell, Rob Magrath (E&E), Joah Madden & Karan Odom** - Vocal mimicry in songbirds (\$485K).



**Aude Fahrer (BSB)** was awarded the College of Science Academic Champion Award for 2023 in the ANU Academic Advancement Awards.

Congratulations to **Dr. Andrew Almonte** (Fahrer Group, BSB) whose PhD has just been passed. Andrew received glowing comments from the examiners. e.g.: 'The thesis is an outstanding example of documentation of scientific effort, results and personal scientific development by the candidate...The work and the thesis has already had a positive influence on the science that will come out of my lab in the future, and I thank the candidate for the considerable effort documented in this thesis and its now further positive influence on me and my lab's research.'



Andrew will start his postdoc in a world-leading cancer immunotherapy lab in Paris in January. He will be coming back to Canberra in December to graduate. Make sure to join up with him to celebrate!

Congratulations to **Alexander Maier (BSB)** for securing a Research Contract with the Commonwealth Department of Health worth \$14,000.

Well done to **Robyn Shaw (Moritz Group, E&E)** who was selected for a 2 year, independent postdoctoral fellow position in the Institute for Applied Ecology at the University of Canberra.

## Welcome

**Olga M. Azevedo** has joined the Sequeira Group (E&E) as a PhD student and her research aims to understand the links between marine megafauna in Shark Bay.

**Joanna Melonek** has recently joined as an ARC Future Fellow/Group Leader in the Division of Plant Sciences at the Research School of Biology. She completed her Master's degree in Poznan, Poland and completed her PhD at the Christian-Albrechts University in Kiel, Germany. In 2012, Joanna relocated to Perth, where she worked for more than a decade in the ARC Centre of Excellence in Plant Energy Biology at the University of Western Australia, working closely alongside Ian Small.



Joanna's research is centred around molecular biology of plant mitochondria, with a specific emphasis on a unique clade within the family of RNA-binding proteins known as pentatricopeptide repeat proteins (PPRs), specifically those referred to as Restorer-of-fertility. Her ARC Future Fellowship will focus on around a newly discovered group within the mitochondrial transcription termination factors family. These were only recently found to play a crucial role in fertility restoration in cereals.

## Farewell

Farewell to **Ayesha Akram (Australian Plant Phenomics Facility)** who is leaving APPF to spend more time with her new family. We wish Ayesha all the best on this exciting

journey outside of work and hope we will cross paths again in the future.

## News

In September, the **Sequeira Group** (E&E) travelled to Gathaagudu (Shark Bay, Western Australia) on a very special mission: to satellite tag dugongs! Dugongs are classified as *Vulnerable* on the IUCN Red List but they are an ecologically, economically, and culturally significant species.



This fieldtrip by the Sequeira Group, done in collaboration with the Malgana Peoples – the traditional owners of Gathaagudu, and the Government of Western Australia's Department of Biodiversity, Conservation and Attractions focused on tagging six adult dugongs. The field trip was a great success, with all six tags being safely deployed, and now transmitting positions on the whereabouts of the tagged dugongs!

They learned that some dugongs crossed from the eastern to the western embayment and where some of their preferred feeding areas might be! This field trip was part of the Gathaagudu Animal Tracking (GAT) Project, led by Assoc. Prof. **Ana Sequeira** (E&E), and which is focused on understanding movements of marine megafauna such as dugongs, turtles, and sharks, within the bay and how environmental change might affect their patterns.

APPF has two new instruments that users can book from now on, a LICOR-600 leaf fluorometer/porometer and a WALZ-Hexagon Imaging PAM.



LICOR-600 Leaf fluorometer/porometer

The LICOR-600 is a handheld instrument that can measure both, stomatal conductance and chlorophyll fluorescence, of the same leaf area at the same time. It is easy to use and delivers fast and accurate measurements in a compact device.



WALZ Hexagon PAM

The WALZ Hexagon Imaging PAM is the newest WALZ Imaging PAM on the market and represents the largest WALZ Imaging system. It is suitable to measure chlorophyll fluorescence of potted plants, seedlings in trays, individual leaves, well plates and many more. With 20 x 24 cm the imaging area is four times as large as the area of the WALZ Imaging MAXI-PAM. In addition the instrument is equipped with a far-red light source and LED panels have been designed for optimal illumination of the sample.

Instrument bookings can be made through Resource Booker or by contacting the APPF team [appf@anu.edu.au](mailto:appf@anu.edu.au).

## Oktoberfest

For the second time, the RSB community came together in droves to celebrate October with hundreds of vegan, halal, and original German bratwursts. The thirst was quenched with beer specialties and non-alcoholic beverages galore while listening to German music. The RSB community would like to thank all the dedicated organisers and volunteers who not only decorated the tea room, but also cooked a scrumptious meal and provided kids entertainment.



## Papers

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