



# Research School of Biology Newsletter

### Issue 147 | April 2023

# Congratulations

Congratulations to **Helana Trantino** (Williams Group, PS) Honours student was the recipient of an AINSE Honours Scholarship.

Congratulations to all 44 PhD students who presented at the April 2023 RSB HDR student conference. The attendance was amazing and the short-format talks again provided a highly engaging showcase of the diverse and high caliber research being undertaken across the School. Thank you to the student organizers of the event, **Audrey Prasetya**, **Melissa von Moger** (both Moritz Group, E&E) **Skye Young**, (Jackson Group, BSB), **Fatema Akhter** (Head Group, E&E), **Callum Bryant** (Ball Group, PS) and **Elaine Tao** (Corry Group, BSB) – a truly superb effort putting together the entire event.

Thanks also go to Hesam Jahromi and Danielle Mass from BTLC, the session Chairs Weliton Menario Costa, (Borevitz Group, PS) Ruitao Jin (Corry Group, BSB), Zachary Brown (Nicotra Group, E&E), Joe Kaczmarski (Jackson Group, BSB), Kristoffer Wild (Noble Group, E&E) and Yuzhen Fan (Way Group, PS), the adjudicators (too many to name), Celeste Linde (E&E) and Giel van Dooren (BSB) for their help to ensure the event was a success.

#### The winners were:

The runner up awards (worth \$250) went to Isabel Zeil-Rolfe (Linde Group, E&E), Alice Shin (Brock Group, BSB) and Reshma Roy (Millar Group, PS)

The Hirota Naora best presentation awards (worth \$500) were awarded to YC Lin (Corry Group, BSB) Uncovering the secret behind Piezo1's dual personalities, Callum Bryant (Ball Group, PS) Elevation-dependent patterns of snow gum forest dieback, Ivan Vinogradov (Jennions Group, E&E) How intelligence predicts fishy love affairs.



Pictured L to R: Celeste Linde, Craig Moritz, Elaine Tao, Audrey Prasetya, Cal Bryant, Ivan Vinogradov and Spencer Whitney

## PhDs awarded

**Kimberley Hunnam** (Jennions Group, E&E) Dual Award (ANU/CDU) CDU supervisor Natasha Stacey

Mahin Sadat Chavoshi Jolfaei (Moritz Group, E&E)

## Welcome

Welcome to **Muhammad Arslan Mahmood** (Millar Group, PS) as a PhD student, working with the ARC Future Crops Development Centre. Muhammad completed his MPhil and Bachelors studies in Pakistan before coming to Australia. His work will explore the resistance mechanism in canola against the Blackleg disease.

Welcome to **Brad Stevens** who has joined our IT Services Team as an IT Services Officer.



Welcome to Karyn O'Brien who has joined

our Purchasing and Store team. Karyn is the Store Assistant filling in for Lachlan Sweeting while he is on parental leave.

### Papers

Arnold PA, Cassey P. & White CR. Morphological shifts in response to spatial sorting on dispersal behaviour in red flour beetles across multiple generations. *Journal of Zoology*. <u>https://doi.org/10.1111/jzo.13062</u>

Cardillo M. Phylogenetic diversity in conservation: a brief history, critical overview, and challenges to progress. *Cambridge Prisms: Extinction*. <u>https://doi.org/10.1017/</u> <u>ext.2023.8</u>

Cardillo M, Skeels A & Dinnage R. Priorities for conserving the world's terrestrial mammals based on over-the-horizon extinction risk. *Current Biology*. <u>https://doi.org/10.1016/j.</u> <u>cub.2023.02.063</u>

Chan AHY, Ho TCS, Fathoni I, Saliba KJ *et al.* Inhibition of thiamine diphosphate-dependent enzymes by triazole-based thiamine analogues. *ACS Medicinal Chemistry Letters.* <u>https://</u>doi.org/10.1021/acsmedchemlett.3c00047

Fornes O, Jia A, Kuehn HS, Casarotto MG *et al.* A multimorphic mutation in IRF4 causes human autosomal dominant combined immunodeficiency. *Science immunology.* <u>https://</u>2174/0929867330666230330092725. doi.org/10.1126/sciimmunol.ade7953.

Furbank R, Kelly S, von Caemmerer S. Photosynthesis and food security: the evolving story of C4 rice. *Photosynthesis Research*. <u>https://doi.org/10.1007/s11120-023-01014-0</u>

Ivanovici A, Laffont C, Larrainzar E, Djordjevic MA *et al.* The Medicago SymCEP7 hormone increases nodule number via shoots without compromising lateral root number. *Plant Physiology* <u>https://doi.org/10.1093/plphys/kiad012</u>

Rahimi F& Abadi ATB. ChatGPT and publication ethics. *Archives of Medical Research*. <u>https://doi.org/10.1016/j.</u> <u>arcmed.2023.03.004</u>. Rani A, Zhao Y, Yan Q, Hocart CH *et al*. On the Chemical Purity and Oxygen Isotopic Composition of N-Cellulose Extractable from Higher Plants and the Implications for Climate, Metabolic, and Physiological Studies. *Analytical Chemistry*. <u>https://doi.org/10.1021/acs.analchem.2c04384</u>

Song SY, Jin RT, Chen YF *et al*. The functional evolution of architecturally different plant geranyl diphosphate synthases from geranylgeranyl diphosphate synthase. *The Plant Cell*. <u>https://doi.org/10.1093/plcell/koad083.</u>

Taleski M, Chapman K, Novák O, Djordjevic MA et al. CEP peptide and cytokinin pathways converge on CEPD glutaredoxins to inhibit root growth. *Nature Communications*. <u>https://doi.org/10.1038/</u> <u>s41467-023-37282-6</u>

Wong GY, Millar AA. Target landscape of conserved plant microRNAs and the complexities of their ancient microRNA binding-sites. *Plant and Cell Physiology*. <u>https://doi.org/10.1093/pcp/pcad019</u>

Xie Z, Yu Z, Li Y, Mathesius et al. Rhizosphere-induced shift in the composition of bacterial community favors mineralization of crop residue nitrogen. Plant and Soil. <u>http://dx.doi.org/10.21203/rs.3.rs-1791636/v1</u>

Yang Y, Scahez-Tojar A, O'Dea RE, Noble DWA, Jennions MD et al. Publication bias impacts on effect size, statistical power, and magnitude (Type M) and sign (Type S) errors in ecology and evolutionary biology. *BMC Biology*. <u>https://doi.</u> org/10.1186/s12915-022-01485-y

Yu L, Ghani MKA, Aghemo A, Rahimi F *et al.* SARS-CoV-2 infection, inflammation, immunonutrition, and pathogenesis of COVID-19. *Current Medicinal Chemistry.* https://doi.org/10.2174/0929867330666230330092725.