



Congratulations

As we mentioned in the last newsletter Lindell Bromham (E&E) and Xia Hua (MSI) were shortlisted for the Eureka Prize for excellence in interdisciplinary scientific research.

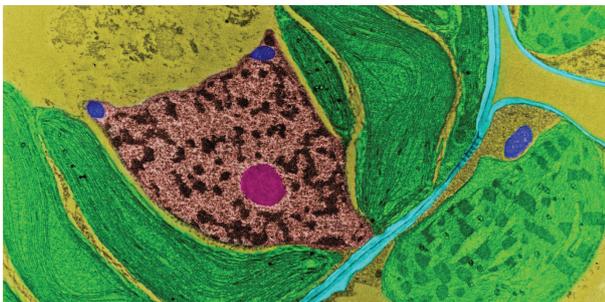


The good news is Lindell and Xia won the prize, a win they share with colleagues from the University of Queensland, and the Karungkarni Art and Culture Aboriginal Corporation. Many congratulations Lindell and Xia, well deserved!



Stephen Fairweather (van Dooren Group, BSB) joins a list of successful candidates to be awarded a spot in the Science in Public's Fresh Science Program. 178 nominations were received from around the country. Fresh Science is a national competition helping early career researchers find and then share, their stories of discovery. Science in Public is helping scientists get their research into the public space. More information can be found here.

Florence Danila (von Caemmerer/Furbank Groups, PS) won first prize in this year's CAM image competition. Her entry entitled Rudolph in the Bush is a false-coloured transmission electron micrograph of a C4 corn leaf showing dimorphic chloroplasts (green)-granal chloroplasts in the mesophyll cell and agranal chloroplasts in the bundle sheath cell. The distinct



nucleus (brown), which housed the chromatin (black) and nucleolus (magenta), can be seen at the centre of the bundle sheath cell. Plasmodesmata, which connect the two cells symplasmically, are present as vertical lines traversing the cell wall interface (light blue). Thin dark line in the middle of the cell wall interface indicates suberised bundle sheath cell wall. Mitochondria, which are typically associated with chloroplasts and nucleus, are coloured in dark blue.

Director's Seminar Series

This month Lindell Bromham (E&E) will be presenting a seminar 'Interdisciplinary adventures in language evolution: exploring the past, present and future of language diversity'. In this talk, Lindell will describe interdisciplinary collaborations between linguists and evolutionary biologists that have allowed us to develop new ways of asking interesting questions about language change, including: What influences individual's mix of language variants? How do the frequency of language variants change over time? Do smaller or larger populations have faster rates of language change? What factors generate global patterns of language diversity? What are the drivers of language loss? The seminar will be on November 8 at 12.30pm via webinar, check RSB events page for details.

PhDs submitted

- Upama Aich (Jennions Group, E&E) *The effects of age and mating history on male reproductive success.*
- Yi-Yang (Alex) Chen (Jennions Group, E&E) *The nature and significance of 'macroalgae-epifauna-invertivorous fish' trophic links within a macroalgal-dominated reef ecosystem.*
- Ding Yuan (Whitney Group, PS) *Bioengineering monocot crop Rubisco in tobacco chloroplasts.*
- Yu Zhou (Whitney Group, PS) *Exploring the evolutionary protein landscape of red Rubisco towards improving plant photosynthesis.*
- Yiheng Hu (Rathjen Group, PS) *Pathogen detection and microbial community compositions during fungal infections.*

PhDs awarded

- Shukhrat Shokirov (Borevitz Group, E&E) *Using multi-platform LiDAR to assess vegetation structure for woodland forest fauna.*
- Weliton Menario Costa (Kruuk Group, E&E) *Personality, social environment, and maternal-level effects: insights from a wild kangaroo population.*



Farewell

Susan Howitt (BSB/BTLC) is stepping down as Associate Director, Education and Head of Biology Teaching and Learning. Susan completed her PhD at the ANU and in 1996 was appointed an ongoing position within the University. Susan then became Head of BTLC in 2018. Lucky for RSB, Susan will be staying on as Emeritus Professor and will continue teaching.

New appointments

Maja Adamska (BSB) who has been appointed the new Associate Director, Education and Head of Biology Teaching and Learning. Maja arrived at the ANU as a senior lecturer in 2015 and subsequently became an Associate Professor and ARC Future Fellow in 2017. We wish Maja all the best in her new role.



Outreach

The ANU National Indigenous Summer School (NISS) is running virtually this year so that students from all over Australia can attend without the uncertainties that travelling to Canberra currently presents. The NISS offers a mixture of both academic and social activities designed to introduce students to what life might be like as an undergraduate at University. Barry Pogson (PS) and Uli Mathesius (PS) have volunteered to represent RSB this year, currently preparing some on-line activities for the students to participate in over zoom in early December. Their academic session centres around investigating the colours we see in plants and is being run as a multidisciplinary session with Rebecca Mayo, from the School of Art and Design. [Here](#) is a video of the last session held on campus in 2019.

News

Paul Cooper (E&E) presented a webinar on his work on scale insects and their effects on grapevines titled 'Advances in scale control' on behalf of the Australian Wine Research Institute. You can watch Paul's presentation [here](#).

Summer Research Internships

RSB will welcome eighteen Summer Research interns commencing their 9 weeks internship in November. They will be working in different labs within the School and if anyone is running workshops or seminars that may be of interest to them please let BTLIC know.

Grants Awarded

Ulrike Mathesius (PS) is a PI on the Marsden Foundation Endeavour Smart Ideas grant 'Enhancing legume nitrogen fixation to reduce fertiliser use', NZ\$1m.

Papers

Aich U, Bonnet T, Head ML & Jennions MD. Disentangling the effects of male age and mating history: contrasting effects of mating history on pre-copulatory mating behaviour and paternity success. *Evolution*. <https://doi.org/10.1111/evo.14371>

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Chen Y-Y, Edgar GJ & Fox RJ. The nature and ecological significance of epifaunal communities within marine ecosystems. *Oceanography and Marine Biology: An Annual Review*. <https://doi.org/10.1201/9781003138846-9>

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