



NEWS

Rachael Remington appointed to Teaching Intensive position

Rachael Remington has been appointed to the full-time teaching intensive Academic Level B position. Rachael will convene and contribute to both undergraduate and post graduate biology courses, including convening the Masters of Science (Biological Sciences) program.



Ecology field course at Kioloa

The ecology 2131/6004 field course, led by **Patrick Meir** (PS) and **Megan Head** (E&E), was held at the ANU Kioloa campus this month.

The aim was to learn to measure, quantify and interpret flora and fauna along a biophysical gradient from foredune to forest. Our group of 50 worked hard for two full days collecting datasets to work on later in the semester. There were additional lectures and demonstrations of wildlife photography and the uses of drones for vegetation survey. The sun shone during the day, and even after dark the sampling continued! Well done and many thanks to the KCC and RSB staff, post docs, PhD students and the whole of the 2131/6004 class who all worked so well together to make it such an enjoyable weekend. - Patrick Meir (PS). The following RSB people helped with the trip: **Sam Jahromi** (BTLC), **James Davies** (Technical Officer, Operations), **Sonya**



RSB Store staff Rose Holm (Purchasing Co-ordinator), Sharon Satlabanis (Purchasing Assistant) and Martin Gardner (Purchasing Officer) paused briefly for a photo, during their move back into their former location by the loading dock in the RN Robertson building 46. Image Sharyn Wragg. (See: News Item)

Geange (Nicotra group, E&E), **Ross Deans** (Farquhar group, PS), **Thomas Semple** (Peakall group, E&E), **Oliver Binks** (Meir group, PS), **Meisha Holloway-Phillips** (Farquhar group, PS), **Tim Brown** (Borevitz group, PS), **Patrick Meir** (PS) and **Megan Head** (E&E).



Sampling in the dunes, at Kioloa during the Biol 2131/6004 field course.

RSB Stores have moved back to Robertson

After a year and a half over at the Research School of Chemistry store, RSB stores have moved back into their old location next to the loading dock in the RN Robertson building (46) (see main photo).

RN Robertson refurbishment update

Nearly all the Ecology and Evolution, and Plant Sciences groups have moved into their new accommodation in the RN Robertson building. Artwork is being hung, the Eucalyptus room is being used for seminars, and the Robertson tea room has already been used for several functions, including a school barbecue to celebrate the opening of the building.



Scaffolding in place for the re-hanging of 'Polynesia', painted by John Coburn in 1968 and acquired by the ANU in the same year. Image Scott Keogh.



Another great biology field trip - staff and students relax in the sun at Kioloa, during the field course for Biology 2131/6004.

Women in Life Sciences Luncheon

The annual NSW Women in Life Sciences Luncheon hosted by AusBiotech is an

DECRA Fellow profile: Jennie Mallela (Jennions group, E&E)



Research Background

I became interested in research as a first year undergraduate student at the University of Leeds in the UK whilst studying Environmental Biogeo Science. Every year we had multiple opportunities to conduct independent, mini research projects and I found I gravitated towards those which led me into the field and subsequently the lab. It was great, I had access to world class facilities and academics across four different departments and we were able to conduct curiosity driven projects of our own design. I haven't looked back since. I've been fortunate to combine my love for research, fieldwork and travel. I've worked in East Africa, where I built and lived in a mangrove hut for 18 months, assessing threatened species in Marine Parks. I've assessed the biodiversity of 2nd World War shipwrecks in Scapa Flow (Scotland), I've tracked eels across river catchments in Ireland, worked at Max Planck in Germany where we used stable isotopes to answer ecological questions, and assessed environmental impacts on coral reefs from the Caribbean to the Great Barrier Reef.

Current research interests

I was fortunate to be awarded an ARC DECRA to study the impacts of climate change and pollution on coral reefs. I currently conduct multidisciplinary research combining ecological, biological and geochemical research techniques to understand how environmental disturbance will impact reef function and health in the future.

What do you enjoy most about research?

I enjoy working on real world problems and conducting research that may one day input into potential solutions for ecosystem and species conservation. I enjoy interacting with, and learning from, a range of collaborators who have very different skills to me. I love that I still manage to combine research, fieldwork and travel.

initiative that fosters a supportive community for women who work in the life sciences and inspires women to pursue professional goals and build their own success stories. This year AusBiotech launched the 'Big Sisters' program, which invited women advanced in their careers in the sector to sponsor a student to attend the event, as a means to provide support and encouragement to women in the early stages of their career in life sciences. **Hannah Drieberg**, **Suyan Yee** and **Estee Tee** from the Pogson lab (PS) were selected to be 'Little Sisters' of the program, and attended the luncheon on Friday the 9th of March.



Estee Tee, Hannah Drieberg and Suyan Yee at the Women in Life Sciences lunch.

The two speakers of the event, Liz and Jen Harry, (sisters both in life and Life Science) shared this sentiment: "Women in positions of power should help pull other women up and encourage all other women to be confident, and to be bold". This was not just an event to teach about reaching a position in the work force for women, but about drawing up others, working together with other women and men to create equity in the work place, and to create a support network that everyone can draw on for insight and use as a sounding board. As young students at the beginning of our career, it highlighted some of the things that the older generation of women had to go through to be successful and to get to where they currently are now; because of the previous generation's efforts, we're slightly closer to bridging the gap.

New APPF logo and website



Australian Plant Phenomics Facility

The Australian Plant Phenomics Facility (APPF) has a new website, which will be a useful resource for plant phenomics

knowledge as well as a community portal for sharing plant science news, events, webinars, training courses and expertise - your input is welcome. New content will be added regularly, and the blogs can now be found under 'News'. They also have a new logo - if you need a copy for acknowledgements of facility use, please contact **Aly Weirman** (Borevitz group, PS).

New RSB video

RSB has a new recruitment video, starring a cast of many from the school, including **Erin Andrew** (Fahrer group, BSB), **Zara Rashid** (Atkin group, PS), undergraduate biology student **Krish Sanghvi**, RSB alum **Danswell Starrs**, and Director **Allen Rodrigo**. It was produced by College of Science Deputy Communication Manager **Jimmy Walsh** and features permanently on the RSB webpage. You can watch it [here](#).

Outreach news

On March 24th **Kai Chan** (Pogson group, PS) gave a keynote speech as ACT Scientist of the Year at CONSEAECT 2018; the annual conference of the Science Educators' Association of the ACT. Kai spoke about how different teaching and learning models have influenced his career as a plant biologist, and his current teaching practices at ANU.

Grants

Kai Xun Chan (Pogson group, PS) and **Barry Pogson** (PS) have received a second round of funding (\$25,000) from the ANU-UC Connect Ventures' Discovery Translational Fund to continue their work on developing novel agrochemicals that can enhance drought tolerance in plants.

Awards

Ben Long (Price and Badger groups, PS) received the **Michael D Gale travel award** for the Plant and Animal Genome Conference.

IN THE MEDIA

Adrienne Nicotra (E&E) was a speaker at the World Economic Forum in Davos this year. You can watch her presentation, 'Employing genomics to track ecosystems' response to a changing climate', [here](#).

Bill Foley (E&E) was interviewed about Konzo for the radio show **Another World**, on Eastside Radio in Sydney.

Adrienne Nicotra (E&E) and **Cathy Franzi** appeared on ABC Gardening Australia, on 9 March 2018. Watch the episode [here](#) - the story about Adrienne and Cathy begins at about 31.17.

Paul Cooper (E&E) was interviewed by the *Canberra Times* for an article about increasing numbers of cockroaches being found inside houses in Canberra, during wet and stormy weather.

Andras Keszei (BTLC) was interviewed on a College of Science Facebook Live video, talking about first year biology practical classes. You can see the video on the [Science at ANU Facebook page](#).

WELCOME

Chris Gauthier-Coles began his PhD in the Mathesius group (PS) in February. He will be working on signals that allow legumes to form nitrogen fixing nodules with rhizobia.



Lauren Harrison has begun her PhD in the Head group and the Jennions group (both E&E). She will be looking at the effect of cognitive ability (maze solving, associative learning and the like) on the reproductive success and survival of mosquitofish.



Tomás Fuenzalida has arrived from Chile to begin studies toward a PhD in Plant Sciences. He will be working with **Marilyn Ball** (PS) on an ARC-funded project aimed at understanding the role of Top-Down-Rehydration in drought tolerance of mangroves.



The Atkin group (PS) welcomes a new PhD student - **Yuzhen Fan**. Yuzhen did her Honours on respiration in C4 plants at the ANU, and will now explore the fascinating world of mitochondrial function in C4 plants as part of her PhD project.



Cassie Taylor is moving to Canberra from the University of Queensland to take up a PhD on the evolution of elaborate nestling signalling in estrildid finches. She will be working in the Langmore



group (E&E).

Welcome to new PhD students,



Ayesha Akram, (left) who completed an MPhil in Biotechnology at the University of Agriculture, Faisalabad, Pakistan, and **Sharmin Akter Rima**, (below left) who completed an MSc in Genetics and Plant Breeding at Bangladesh Agricultural University, Mymensingh,



Bangladesh. Both will be working in the Jones group (PS); Ayesha on the molecular interaction between flax and the flax rust fungus *Melampsora lini*, and Sharmin on the molecular interaction between tomato and the fusarium wilt fungus *Fusarium oxysporum* f. sp. *lycopersici*.

Imelda Forteza has begun her PhD project, working on microbiomes and combining wet and dry lab work. She will be supervised by **Allen Rodrigo** (CBBU).



Cüneyt Caglar has begun his PhD in the Adamska group (BSB). He will investigate sponge and coral regeneration.



The Evans group (PS) welcomes **Yuki Nakamura**, who is doing a Masters at Tohoku University under the supervision of Dr Hikosaka. She is here for 3 months on a Co-Labs exchange program and will be working on the effect of growth temperature on Rubisco in wheat.

PHDS SUBMITTED

Bonnie Flohr (Evans group, E&E) 'Stabilising the flowering time of wheat in response to autumn rainfall decline'.
Sara Milward (Whitney group, PS) 'Interrogating plant Rubisco-Rca interactions'.

PHDS AWARDED

Bokyung Choi (Linde group, E&E) 'Systematics and evolution of *Melaleuca sensu lato* (Myrtaceae)'.
Hannah Osborn (von Caemmerer group, PS) 'Understanding CO₂ diffusion in C₄ plants: an investigation of CO₂ permeable aquaporins and carbonic anhydrase in the C₄ grass *Setaria viridis*'.
Joshua Penalba (Moritz group, E&E)

'Speciation genomics in Australian Meliphagoid birds'.

PAPERS ACCEPTED

Bröer S, Amino acid transporters as disease modifiers and drug targets, *SLAS Discovery*.

Danila FR, Quick WP, White RG, Kelly S, von Caemmerer S, Furbank RT, Multiple mechanisms for enhanced plasmodesmata density in disparate subtypes of C4 grasses, *Journal of Experimental Botany*.

Dawson Pell FSE, Potvin DA, Ratnayake CP, Fernández-Juricic E, Magrath RD, Radford AN, Birds orient their heads appropriately in response to functionally referential alarm calls of heterospecifics, *Animal Behaviour*.

Dong W, Todd A, Bröer A, Hulme S, Bröer S, Billups B, PKC-mediated modulation of astrocyte SNAT3 glutamine transporter function at synapses in situ, *International Journal of Molecular Sciences*.

Iglesias Carrasco M, Jennions MD, Zajitschek S, Head ML, Are females in good condition better able to cope with costly males? *Behavioral Ecology*.

Litthauer S, Chan KX, Jones M, The Accumulation of 3'-Phosphoadenosine 5'-Phosphate Delays Circadian Period, *Plant Physiology*.

Ng JLP, Mathesius U, Acropetal auxin transport inhibition is involved in indeterminate but not determinate nodule formation, *Frontiers in Plant Science*.

Phua SY, Pornsiriwong W, Chan KX, Estavillo GM, Pogson BJ, Development of strategies for genetic manipulation and fine-tuning of a chloroplast retrograde signal, 3'-phosphoadenosine 5'-phosphate, *Plant Direct*.

Rahimi F, Aptamers selected for recognizing Amyloid β -protein - a case for cautious optimism, *International Journal of Molecular Sciences*.

Silva-Perez V, Molero G, Serbin SP, Condon AG, Reynolds MP, Furbank RT, Evans JR, Hyperspectral reflectance as a tool to measure biochemical and physiological traits in wheat, *Journal of Experimental Botany*.

Sun F, Roderick ML, Farquhar GD, Rainfall statistics, stationarity and climate change, *Proceedings of the National Academy of Sciences of the USA*.