



Congratulations

RSB researcher wins ARC Future Fellowship

Congratulations to Sally Potter (Moritz Group, E&E) on being awarded an ARC Future Fellowship to explore "The role of genome reorganization in adaptation and speciation". This will build on Sally's long-standing research on evolution and diversity of Australian fauna, mammals in particular. After 10 (!) years in RSB-E&E, Sally will move to Biological Sciences at Macquarie University to take up the fellowship - but assures us that she will remain connected with RSB.



Susan Howitt takes on a new national role

Eschewing "retirement", Susan Howitt has been appointed as Director of the Australian Deans of Science Teaching and Learning Centre. Her experience and achievements in leading RSB's BTLC will now play out on a national stage, connecting science teaching innovation across universities.



Congratulations PhD student **Yie Chang Lin** (Corry Group, BSB) who won the ANU Visualise Your Thesis Competition. She put together this cool [60s video](#) with no assistance that very neatly captures her work.

Director's Seminar series is back!



We have recommenced the Director's seminars, after a long break, with the first presentation from Professor Aude Fahrer. The seminar was excellent and received a lot of positive feedback. Aude spoke about her research in cancer immunotherapy treatment. As a result of the research Aude has recently published 'Simple and effective bacterial-based intratumoural cancer immunotherapy' in the *Journal for Immunotherapy of Cancer*. A thank you afternoon tea planned for donors of this research will be rescheduled when the ANU reopens. Congratulations to Aude and her team.

The next Director's Seminar will be Professor Stefan Broer talking about 'Understanding amino acid transport and homeostasis in mammalian cells through quantitative modelling' on Wednesday 15 September at 12.30pm.

PhDs submitted

Ariel Ivanovici (Djordjevic Group, PS) *Signals and perCEPTION: diverse roles for C-Terminally Encoded Peptides in symbiosis, root system gravitropism, and pathogen response in Medicago truncatula and Arabidopsis thaliana.*

Helmut Simon (Huttley Group, E&E) *Mutation, Polymorphism and Population Genetic Inference.*

Sally-Anne Buck (Whitney Group, PS) *The chaperone mediated assembly of Rubisco and its SynBio potential.*

Zoltan Kocsi (Zeil Group, E&E) *Using reconstructed visual reality in ant navigation research.*

PhDs approved

Mahboobeh Behruznia (Gordon Group, E&E) *Genetic Structure of Escherichia coli strains Isolated from Septic Tanks in the Canberra Region, Australia.*

Nghiem Nguyan (Price Group, PS) *Examining the interactions of cyanobacterial Rubisco.*

Diego Márquez Antivilo (Farquhar Group, PS) *Dynamics of water and carbon dioxide gas exchange on the adaxial and abaxial surfaces of leaves.*

Carlos Pavon Vazquez (Keogh Group, E&E) *From Genes to Communities: An Integrative Approach to the Evolution of Varanidae.*

Lauren Ashman (Rowell Group, E&E) *Phylogeny and systematics of the longhorn beetle genus Rhytiphora (Coleoptera: Cerambycidae).*

Grants awarded

Private Practice Fund 2021. *Assessment of antibody response to COVID-19 vaccination in people with solid tumours.* \$59,999k
George Cavic, Andrew Almonte, Aude Fahrer (all BSB).

News

Recruitment of new Group Leaders in RSB

Having been through substantial change in our staffing over the past 12 months, we are now recruiting new Group Leaders to support priority areas and to improve diversity of our academic staff. Next week (Sept 6-10 inclusive) we have seminars from 12 really strong candidates for our three open positions and there will be opportunity for staff and students to meet with them and to provide feedback via identified liaisons:

- Spencer Whitney - for Position 1 Women-only, photosynthesis
 - Susan Howitt - for Position 2 Women-only, membrane or host-microbe biology
 - Dan Noble or Rob Lanfear - for Position 3 Open
- Please engage - we strongly encourage input from all three divisions for each of the three positions.

Australian Society for Parasitology annual conference

RSB was well represented at this conference with students from Saliba, Maier and van Dooren groups all presenting their

research. **Soraya Zwahlen** (van Dooren Group, BSB) was awarded the prize for the best three-minute talk at the conference, and a princely sum of \$400 (that's \$133 per minute, or \$70M if she were to speak non-stop for a year). **Jenni Hayward** (van Dooren Group, BSB) received a special commendation for her talk in the 15-minute category, which came with a pair of ski goggles - incentive for her to learn how to ski!

Farewell

Paul Tapueluelu, IT Services Officer, is leaving RSB, taking up a full time position with another employer. We will miss you Paul and thank you for all your IT support.



Pawan Parajuli completed his PhD in the Verma Group (BSB) in 2020 and was a postdoc in the Leyton Group (BSB). He has taken up a three-year CSIRO Early Research Career Postdoctoral Fellowship based at the Australian Centre for Disease Preparedness (ACDP), Geelong starting September 2021.

In the media

Ying Luo (Keogh Group, E&E) was a guest on ABC Radio National talkback as part of their "micro-nature" segment. The program discusses something small and nature related. Ying discussed her PhD research on micro-moths. Ying was also a guest on ABC Radio National "Off Track" which is a nature themed podcast hosted by Dr Ann Jones. The episode was titled "[In the honour of moths](#)".



Upama Aich's (Jennions & Head Groups, E&E) study about the effect of age on male reproduction was featured in [ANU media](#) as well as [National Tribune](#), [Scimex](#), [Phys.org](#).

Aude Fahrer was a guest on ABC666 radio morning show with Lish Fejer discussing rapid CoVID testing.

Welcome

Daniela Cihalova has joined RSB as a Senior Technical Services Officer. Daniela was previously a Research Officer in the Maier Group.



Elizabeth McLennan, who has come to us from the School of Biological Sciences at UQ, joined RSB as a Technical Services Officer in BSB.

Yosha Pathmaperuma, Honours student (Brock Group, BSB), working on a new nanobody platform for the development of a novel biosensor.



My lockdown

I am **Shukla Promite**, a fresh PhD student in Joseph Brock's Group. After coming to the ACT from Sydney I had to do the mandatory home isolation and now again as the situation is getting out of hand and we are all in lock down. I am keeping busy with studying and literature reviewing. My supervisor is super supportive and he always tries to keep us engaged with projects that we can do from home. Moreover, knitting is my recent favourite past time, I knitted two woolen scarves in this lockdown! These are helping me in this winter! I hope we will soon come back again to our lab and enjoy our daily cuppa!

Bookclub

Keep in touch with your colleagues during the lockdown via the RSB book club which meets on the last Friday of each month at 1pm, at the moment it's via zoom. On the 24th September we will talk about *The Langoliers*, by Stephen King. [Cassandra Taylor](#) will send out a zoom invite on the day so please e-mail Cassandra if you would like to be on the list. *The Langoliers* is a thriller sci-fi short story. On the 29th October we will talk about *The Emperor's Soul*, by Brandon Sanderson. *The Emperor's Soul* is a fantasy that won the 2013 Hugo for best novella.

Papers

Carroll CSE, Andrew ER, Malik L, Almonte AA, Neeman T, Fahrer AM *et al.* Simple and effective bacterial-based intratumoural cancer immunotherapy. *Immunotherapy Cancer*.

Fairweather SJ, Rajendran E, Blume M, Javed K, Steinhöfel B, Kirk K, Bröer S, van Dooren GG *et al.* Coordinated action of multiple transporters in the acquisition of essential cationic amino acids by the intracellular parasite *Toxoplasma gondii*. *PLoS Pathogens*. <https://doi.org/10.1101/2021.06.25.450001>.

Neville SL, Sjöhamn J, Watts JA, Fairweather SJ *et al.* The structural basis of bacterial manganese import. *Science Advances*. <https://doi.org/10.1126/sciadv.abg3980>.

Qiao Y, Miao S, Jin J, Mathesius U, Tang C. Differential responses of the sunn4 and rdn1-1 super-nodulation mutants of *Medicago truncatula* to elevated atmospheric CO₂. *Annals of Botany*. <https://doi.org/10.1093/aob/mcab098>

Rajendran E, Clark M, Goulart C, Steinhöfel B, Tjhin ET, Gross S, Smith NC, Kirk K & van Dooren GG. Substate-mediated regulation of the arginine transporter of *Toxoplasma gondii*. *PLoS Pathogens*. <https://doi.org/10.1371/journal.ppat.1009816>.

Tredenick EC, Farquhar GD. Dynamics of moisture diffusion and adsorption in plant cuticles including the role of cellulose. *Nature Communications*. <https://www.nature.com/articles/s41467-021-25225-y>

Wijerathna-Yapa A, Signorelli S, Fenske R, Ganguly D, Pogson BJ *et al.* Autophagy mutants show delayed chloroplast development during de-etiolation in carbon limiting conditions. *The Plant Journal*. <https://doi.org/10.1111/tpj.15452>