



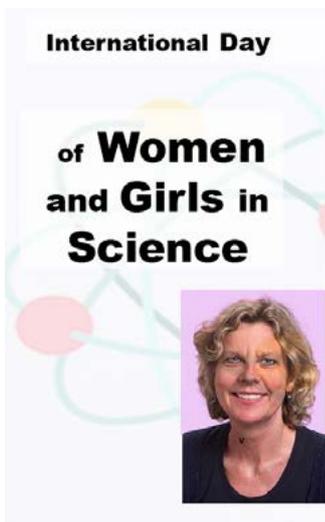
## THANK YOU

This summer RSB was repeatedly forced to close its doors due to toxic bushfire smoke and hail storm damage. While many of us stayed home, key members of RSB were responsible for our safe return. We thank the many people who helped. In particular: the Building Services Team: Matt Sutton, Julius Rucska, Steven Zabar. Steve Dempsey, Christine Larsen, Darren Marsh, Gavin Pritchard and Jenny Rath in the Plant Services Team who had to return to the Research and Teaching Greenhouses and the Controlled Environment Facility (CEF) after the hail storm. They had the sad task of rapidly assessing damage to the greenhouses, and in conjunction with research teams, relocating plants and disposing of damaged stock. Thank you Sarah Talbot, Ben Durant, Corin Pennock and Michelle Stephens in the Technical Services Team who were responsible for animal welfare.



Image: Darren Marsh.

Jeremy Weinman (Compliance Coordinator) and Scott Keogh (Interim RSB Director) also were responsible for ensuring our safe return to work. Stories of how Rose-anne Holm's (RSB Stores) gaffer tape saved the day enabling rapid temporary fixes to keep the low pressure systems in Linnaeus viable will go down in history. A big thank you to everyone who pitched in this summer.



To celebrate the International Day of Women and Girls in Science we profiled nine women working in science across RSB. These profiles can be viewed in full on our RSB web page (<https://biology.anu.edu.au/>) Image: Sharyn Wragg.

## NEWS

**Karen Ford provides bushfire respite for koalas.** Dr Karen Ford (E&E), an expert in koala nutrition, has been looking after bushfire affected koalas in the purpose built pens at ANU. Habitat loss and burn injuries have resulted in 25 koalas currently in residence at ANU at the "5-star Koala hotel". Karen, with help from her team, is spending 8 to 10 hours a day looking after the Koalas, monitoring their diet, behaviour and health before they can be handed over to expert animal carers.

**Four Highly Cited researchers in RSB.** Congratulations to **Barry Pogson** and **Patrick Meir** (PS), **Craig Moritz** (E&E) and **Stefan Bröer** (BSB) for being recognised in the 2019 Clarivate Highly Cited Research List in December 2019.

### Congratulations



Michael Jennions (E&E) is the new head of E&E. In Mike's words: " *I am grateful for the opportunity to promote the kind of biology that we all love – an ecological and evolutionary emphasis to understand the diversity of life. I will do my best to help you achieve both your research goals and to enjoy your life at E&E. We spend a lot of our lives here, and that is why it is so important that everyone feels welcome, supported and valued as part*

*of our community.*" **Thank you** to Scott for the effort he has put in over the last 8 years as head of E&E.

ANU Chancellor, **Julie Bishop** was given a tour of the RSB compound after the hail storm and a chance to interact with our Koala team and other leaders in RSB.



Image: Strategic Communications & Public Affairs, ANU.

**RSB welcomes our newest PhDs**  
Welcome to our new PhD cohort:

**Andy Bachler** (E&E) has started his PhD in the Stone group. They will be developing a pangenome approach to investigate pesticide resistance in the megapest *Helicoverpa armigera*.



**Daniel Yu** (PS) has started his PhD in the Williams group. He will be investigating how Secreted in Xylem (SIX) effectors from *Fusarium oxysporum* cause disease

in Tomato using structural biology approaches.



**Salome Wilson** has started her PhD in the Schwessinger group (PS), where she will be investigating interactions between wheat and rust fungus to identify potential sources of pathogen

resistance.

**Ivan Vinogradov** has started his PhD with Rebecca Fox and Michael Jennions (E&E). Ivan's first project will be investigating sex differences in cognitive ability and ageing in fish.



**Audrey Prasetya** has started her PhD in the Moritz lab, co-supervised by Leo Joseph (Aust. National Wildlife Collection, CSIRO). She is investigating the historical biogeography and speciation of avian species in the Indo-Australian Archipelago.



**Murray Rose Lane** is doing her PhD in the Foley Lab (E&E) under the supervision of Kara Youngentob and Karen Ford. She will be looking at the nutrition of eucalypt regrowth post-fire for Koala populations and the potential to release fire-affected individuals and monitor their survival with radio tracking.



**Melissa Von Moger** has started her PhD in the Moritz lab (E&E). Her project aims to enhance the conservation of Australia's threatened mammals by investigating the genomics of island populations.



### Welcome to our new cohort of Honours and Masters students.

The **Masters students** are: Hongyu Duan (PS Schwessinger group), Chia Ju (Sherry) Lin (E&E, Mikheyev group), Jiansi Long (BSB, Leyton), Ke Lu (PS, Millar group), Zhenyan Luo (PS, Schwessinger group), Pan Di (BSB, Adamska), Siwanon Paphatmethin (E&E Keogh group/ Zwick (CSIRO)), Saishyam Ramesh (BSB, Maier group), Parul Saini (BSB, Callaghan group).

Our new **honours students** are: Mustafa Albekaa (PS, Schwessinger group), Isabel Barter (BSB, Spry (Saliba) group), Josiah Bones (BSB, Corry group), Benjamin Carman (E&E, Gordon group), Emma Crean (PS, Williams group), Jemimah Hamilton (PS, Schwessinger group), Athanasia Hatzis (E&E, Moritz), Claire Howard-Bryan (E&E, Mikheyev group), Heather Johnston (E&E, Moritz group), Xiaoxu (Rosie) Zang (BSB, Leyton), Shane McInerney (BSB, Brock group), Laura Morgan (E&E, Ford/Foley), Matthew Mortimer (PS, Carmody group), Eoin Noble (E&E, Noble group), Tenzin Norzin (E&E, Nicotra), Kate O'Hara (E&E, Moritz group), Sacha Pulsford (PS, Price group), Tanya Skinner (PS, Whitney group), Gabrielle Smith (BSB, Adamska group), Felix Hwi Yong Smits (E&E, Nicotra group), Jarrod Daniel Sopniewski (E&E, Cardillo group), Ashley Tan (PS, Evans group), Chloe Ming Jeen Tan (E&E, Jennions group), Hanh Minh Vo (PS, Pogson group), Thomas Muxiang Wang (PS, Byrt group), Jack Wess (PS, Rathjen group), Hannah Wilson (PS, Solomon group), Bryn Young (BSB, Buyan group), Soraya Zwahlen (BSB, van Dooren group).

## IN THE MEDIA

### Hail damage to the RSB greenhouses

The Pogson, Nicotra and Byrt groups were in the news giving an update on how the January hail storm impacted their research. The interview can be viewed [here](#).

### RSB's Koala 5 star hotel has been in the news with Karen Ford and Kara Youngentob.

Their koala rescue story reached an audience of nearly a million people in Australia and had international coverage on German wires. You can see CNN coverage [here](#).



Image: ANU Koala fund

**Karen Ford** was interviewed for a special report on primetime CBS TV show 60 Minutes (USA) and the story picked up by Voice of America, and BuzzFeed USA.

The ANU Koala Conservation and Protection Fund has been established to

support this work. **Kara** has also been interviewed by the ABC.

Good news: Tidbinbilla Nature Reserve welcomed back Northern corroboree frogs and koalas that had been housed at ANU during the bushfires.

## OUTREACH



Image: Jennie Mallela

The Biology Teaching and Learning Centre (BTLC) ran a schools outreach day for 21 students from Forbes High School. Andras Keszei ran a DNA forensics and phenotyping practical lab with help from the BTLC team.

## PHDS SUBMITTED

Congratulations to Pawan Parajuli (BSB, Verma group) who submitted his PhD on a "Study of bacteriophage encoded glucosyltransferase (gtr) genes in *Shigella flexneri* serotype 1c"

## AWARDS

The Myrmecological News **Best Paper Award for 2019** went to: The learning walks of ants (Hymenoptera: Formicidae) by Jochen Zeil and Pauline N.Fleischmann

## PAPERS ACCEPTED

Aich, Jennions, Fox (2020) An experimental test of the role of male mating history on paternal effects in the livebearer fish, *Gambusia holbrooki*. *Biology Letters*

Bromham, Hua, Algy, Meakins (2020) Language endangerment: A multidimensional analysis of risk factors. *Journal of Language Evolution*

Bromham (2020) Comparability in evolutionary biology: the case of Darwin's barnacles. *Linguistic Typology*

Brouwer, Lyanne & Cockburn, Andrew & van de Pol, Martijn (2019) Integrating fitness components reveals that survival costs outweigh other benefits and costs of group living in two closely related species. *The American Naturalist*.

Busch (2020) Photorespiration in the context of Rubisco biochemistry, CO<sub>2</sub> diffusion, and metabolism. *The Plant Journal*.

Cooper, Ottewell, MacDonald, Adams, Byrne, Carthew, Eldridge, Li, Pope, Saint and Westerman (2018) Phylogeography of southern brown and golden bandicoots: implications for the taxonomy and distribution of endangered subspecies and species. *Australian Journal of Zoology*

Fenker, Jéssica & Domingos, Fabricius & Tedeschi, Leonardo & Rosauer, Dan & Werneck, Fernanda & Colli, Guarino & Ledo, Roger & Fonseca, Emanuel & Garda, Adrian & Tucker, Derek & Sites, Jr, Jack & Breitman, Maria & Soares, Flávia & Giugliano, Lilian & Moritz, Craig. (2020) Evolutionary history of Neotropical savannas geographically concentrates species, phylogenetic and functional diversity of lizards. *Journal of Biogeography*

FitzSimmons, Pittard, McIntyre, Jensen, Guinea, Hamann, Kennett, Leis, Limpus, Limpus, McCann, MacDonald, McFarlane, Parmenter, Pendoley, Prince, Scheltinga, Theissinger, Tucker, Waayers, Whiting, Whiting (2020) Phylogeography, genetic stocks, and conservation implications for an Australian endemic marine turtle. *Aquatic Conservation: Marine and Freshwater Ecosystems*

Geange, Holloway-Phillips, Briceño, & Nicotra (2020) *Aciphylla glacialis* mortality, growth and frost resistance: a field warming experiment. *Australian Journal of Botany*

Hagmayer, Camenisch Canale, Postma, Bonnet (2020) Limited mass-independent individual variation in resting metabolic rate in a wild population of snow voles (*Chionomys nivalis*). *Journal of Evolutionary Biology*

Kashani, Abadi, Rahimi, Frootan (2020) FadA-positive *Fusobacterium nucleatum* is prevalent in the biopsy specimens of Iranian patients with colorectal cancer. *New Microbes and New Infections*

Laver, Rebecca & Hernández-Morales, Cristian & Heinicke, Matthew & Gamble, Tony & Longoria, Kristin & Bauer, A. & Daza, Juan. (2019) The development of cephalic armor in the tokay gecko (Squamata: Gekkonidae: *Gekko gecko*). *Journal of Morphology*. 281.



Image: Jessica McLachlan

McLachlan & Magrath (2020) Speedy revelations: how alarm calls can convey rapid, reliable information about urgent danger. *Proc. R. Soc. B*.

Oliver, Prasetya, Leonardo, Fenker, & Ellis, Doughty, Moritz (2020) Cripsys and convergence: integrative taxonomic revision of the *Gehyra australis* group (Squamata: Gekkonidae) from northern Australia. *PeerJ*.

Peñalba, Deng, Fang, Joseph, Moritz, Cockburn (2019) Genome of an iconic Australian bird: High-quality assembly and linkage map of the superb fairy-wren (*Malurus cyaneus*). *Molecular Ecology Resources*.

Phillips, Böhman, Brown, Tomlinson, Peakall (2019) A specialised pollination system using nectar-seeking thynnine wasps in *Caladenia nobilis* (Orchidaceae). *Plant Biology*

Potter, Close, Taggart, Cooper, Eldridge (2014) Taxonomy of rock-wallabies, *Petrogale* (Marsupialia: Macropodidae). IV. Multifaceted study of the brachyotis group identifies additional taxa. *Australian Journal of Zoology*

Potter, Neaves, Lethbridge, Eldridge, (2020) Understanding Historical Demographic Processes to Inform Contemporary Conservation of an Arid zone Specialist: The Yellow-Footed Rock-Wallaby. *Genes*

Spagopoulou, Vega-Trejo, Head, Jennions (2020) Shifts in reproductive investment in response to competitors lowers male reproductive success. *The American Naturalist*

Qureshi, Suades, Matsuoka, Brock, McComas, Nji, Orellana, Claesson, Delemotte & Drew (2020) The molecular basis for sugar import in malaria parasites. *Nature*.

Rahimi, Abadi (2020) Present challenges besetting the Iranian academia. *Archives of Medical Research*

Tegtman, Magrath (2020) Discriminating between similar alarm calls of contrasting function. *Philosophical Transactions of the Royal Society, B*.

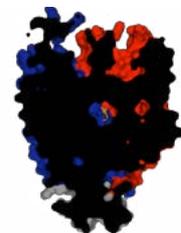


Image: Joseph Brock

Tiatragul, Hall, Warner (2020). Nestled in the city heat: urban nesting behavior enhances embryo development of an invasive lizard. *Journal of Urban Ecology*

Zheng, Wang, Jalajakumari, Blackman, Shen, Verma, Wang, Millar (2020). miR159 represses a constitutive pathogen defense response in tobacco. *Plant Physiology*

## WORKSHOPS

March 5: The Centre for Biodiversity Analysis (CBA) is running a workshop on Bayesian molecular clock-dating of phylogenies: fossils, genomes and uncertainty.

## DID YOU KNOW?

RSB has an image library that you can contribute to and access. This is a great school resource for photos and video footage and is managed by Sharyn Wragg

## RSB OUTREACH

RSB runs a series of schools outreach activities that are facilitated by BTLC. If you have a schools activity and would like to run it please contact us and we can add it to our School enrichment & outreach portfolio. See other opportunities here.

This newsletter is archived at [biology.anu.edu.au/news-events/newsletter](http://biology.anu.edu.au/news-events/newsletter).  
Layout: Jennie Mallela  
Editing: Scott Keogh & Jennie Mallela