

February 2022 edition HIGHLIGHTS

SRB 2021 AWARDEES

Congratulations to all SRB 2021 Award winners! Further details on pages 6-10

MEET OUR NEW ECR REP

Q & A with an outstanding reproductive biologist, Dr Ella Green

Inside this issue President's Report POC report 2021 Awards Meeting announcements ECR report Communications report

PRESIDENT REPORT



Society for **Reproductive Biology**



Brett Nixon

Dear SRB colleagues,

After an eventful 2021, I would like to welcome you to the New Year and send you all my very best wishes for the year ahead.

At the outset, I would like to offer my sincerest thanks to our outgoing President, Professor Moira O'Bryan, for the energy, enthusiasm and genuine commitment that she has brought to the office of the President of our SRB throughout her term. I am sure that Moira had no idea of the challenges she was signing on for 4 years ago when she became President-elect, but against a backdrop of unprecedented challenges, it is a true testament to her peerless leadership that she was able to steer the Society to a position where we have not just survived, but actually thrived. Indeed, I think it is extraordinary that over this time, our financial position has been strengthened, the bond of our relationships with our international sister societies of the SRF and SSR has grown and that we have expanded the breadth of our scientific program to benefit from the insights of laboratory science, agriculture, conservation biology, clinical medicine and industry, which made for an exceptional 2021 annual scientific meeting.

PRESIDENT REPORT



Society for **Reproductive Biology**

I know that Moira would be quick to point out that she has not achieved this alone, and I too would like to take this opportunity to extend my heartfelt gratitude to the entire SRB Council, each of whom have been faced with juggling endless challenges yet remained resolutely committed to serving our Society to the best of their ability. While my thanks is extended to everyone on Council, I would particularly like to acknowledge those current members who have recently completed their term:

- Mark Baker who has held the responsibility of coordinating our Newsletter
- Kelly Walton who, together with Lisa Akison, has driven our public relations and communication portfolios, and have greatly expanded our social media footprint
- Simon de Graaf who has been extremely active in fostering the involvement of our colleagues working in livestock research
- Jane Girling, our treasurer, who has been instrumental in securing our strong financial position despite the turbulence of the past few years
- Dulama Richani, our ECR representative, and Meaghan Griffiths, our student representative. Both Dulama and Meaghan have done a tremendous job of representing our ECR and student cohorts, colleagues who are the future of our Society
- John Schjenken who has completed his term as POC co-chair

PRESIDENT REPORT



I would also like to extend a warm welcome to our new Council members:

- Kelly Walton who is taking on the role of Treasurer
- Dagmar Wilhelm who will be our new Newsletter secretary
- Caitlin Wyrwoll who has kindly agreed to take on the role of our liaison with our Society journal Reproduction Fertility and Development and our Conference Secretary
- Taylor Pini who is joining Lisa Akison on our public relations and communication portfolio
- Ella Green who is our new ECR representative
- Azelle Hawdon our incoming student representative
- Geoffry De Iuliis who is now joining Tu'uhevaha Kaitu'u-Lino and Andrew Pask as the new co-chair of our Program Organising Committee

For as long as I can remember SRB has felt like a family to me, a Society in which I have always felt welcomed and inspired. It is my great honour to have the opportunity to serve each of you as the next President of SRB. I have my fingers crossed that my tenure will not be as turbulent as Moira's, but whatever comes I am looking forward to working alongside you to continue to build on the successes of our SRB.

Best wishes, Brett

SECRETARY REPORT



Society for **Reproductive** Biology

This year saw the positions of Treasurer and two ordinary Council members up for election. We are very excited to welcome Dr Kelly Walton as the Society's new Treasurer. We also extend a very warm welcome to Dr Caitlin Wrywoll (University of Western Australia) and Associate Professor Dagmar Wilhelm (University of Melbourne) who both join Council after their successful election nominations. Caitlin has transitioned into the role of Conference Secretary and Reproduction, Fertility and Development Liaison, while Dagmar has taken up the role of Newsletter Secretary. On behalf of the Society, we extend a very warm welcome to you both and look forward to working with you over the coming years.

We also extend a big congratulations to Dr Ella Green (University of Adelaide) who has joined Dr Jessica Dunleavy as our ECR representatives as well as Azelle Hawdon (Monash University) who has joined Shenae Cafe as our Student Representatives.

The Society is also very grateful to Professor Jeremy Thompson who will conclude his role of Public Officer for the Society in early 2022.

We are also indebted to those whose terms on Council have come to an end. These include Professor Moira O'Bryan who has completed her term as President and Dr Jane Girling who has completed her term as Treasurer. We also extend a huge thank you to Dr Mark Baker (Newsletter Secretary) and Dr John Schjenken (POC Co-chair), as well as Dr Dulama Richani (ECR Representative) and Meaghan Griffiths (Student Representative) for their enormous contribution to the Society, during their time on Council.

SECRETARY REPORT

continued



Society for **Reproductive Biology**

2021 – 2022 Council

EXECUTIVE MEMBERS

President	Brett Nixon
Secretary	David Sharkey
Treasurer	Kelly Walton

ORDINARY MEMBERS

Kylie Dunning	Membership Secretary
Geoffry De Iuliis	POC co-chair
Fiona Brownfoot	Awards and Sponsorship Secretary
Shaun Roman	Fellows & Life Members/ Plenary Lecturers Secretary
Lisa Akison	Communications Secretary
Dagmar Wilhelm	Newsletter Secretary
Caitlin Wrywoll	Conference Booth Secretary / RFD Liaison
Kelsey Pool	Exotic Species Liaison
Jessica Dunleavy	ECR Representative
Ella Green	ECR Representative
Shenae Cafe	Student Representative
Azelle Hawdon	Student Representative

CO-OPTED MEMBERS

Andrew Pask	POC co-chair
Tu'Uhe Kaiu'u-Lino	POC co-chair
Taylor Pini	Public Relations and Website Secretary
Jeremy Thompson	Public Officer

Well, that's all from me for the time being. I am really looking forward to seeing you all in beautiful Christchurch in November.

Best wishes, David Sharkey



David Sharkey

POC REPORT



Society for **Reproductive Biology**

Thank you to everyone for supporting the virtual meeting in 2021. It was extremely well attended, and most participants rated the SRB portions of the meeting as very good or excellent – thank you! We realise there can be challenges with a virtual platform, so we were happy to hear that you enjoyed the science and the various social functions that were available via spatial chat.

We would like to take this opportunity to thank our outgoing POC cochair, John Schjenken for his outstanding contributions over the past 3 years and welcome our newest member of the POC team to the fold, Dr Geoff De Iuliis.



We are excited to have already started planning for SRB2022 – which will be held in Christchurch, New Zealand from Sunday Nov 13th – 16th 2022. If you have any symposium or speaker suggestions, now is the time to get in touch – you can email us via (t.klino@unimelb.edu.au, ajpask@unimelb.edu.au or geoffry.deiuliis@newcastle.edu.au). Otherwise, we look forward to planning another exciting program for 2022 and cannot wait to seeing you all face to face in Christchurch!



POC: Andrew Pask, John Schjenken and Tu'uhevaha Kaitu'u-Lino



Society for **Reproductive Biology**

Congratulations to the Award Winners 2021

A huge congratulations to all of our SRB finalists and award winners for 2021. Despite lockdown and closure of state borders COVID19 could not stop the SRB conference and awards. In collaboration with our generous sponsors, we held the award sessions virtually. We had a fabulous array of applicants showcase the best reproductive science. Presentations focused on gametes through to the placenta and pregnancy, really displaying the breadth and depth of science in our specialty.

All of our award finalists did a fabulous job adapting to new technology and a new way to present with a virtual audience. These sessions were highly contested and very well attended. The presentations were outstanding, and we would like to congratulate all finalists. In particular, we would like to congratulate the SRB award winners of 2021:

Robinson Award for Excellence in Reproductive Biology Research Associate Professor Natalie Hannan, University of Melbourne

Natalie is a NHMRC Career Development Fellow and heads the Therapeutics Discovery and Vascular Function Laboratory. Her work is focused on understanding serious pregnancy complications from preterm birth to preeclampsia. She is developing novel treatments for these conditions. Natalie joins an elite group of SRB researchers who have won this award. We sincerely congratulate her for her outstanding contribution to reproductive science.

SRB AWARDS



esa

The Robinson Research Institute Award for Excellence in Reproductive Biology

Natalie Hannan

University of Melbourne; Mercy Hospital for Women & The Northern Hospital

> Supported by RUBINSON RESEARCH INSTITUTE

ANZBMS



ESA-SRB-ANZBMS 2021



Society for Reproductive **Biology**

Mercy Perinatal Mid-Career Women's Health Medal

Professor Pradeep Tanwar, University of Newcastle

Pradeep is an NHMRC RD Wright Biomedical Fellow and heads an internationally competitive research program in gynaecological disease. His work focuses on understanding vulvovaginal disease and the uterine endometrium. His findings have had direct implications on clinical trials. Pradeep is the inaugural winner of this award which was highly contested. We look forward to many more winners in the future.



Newcastle Reproduction Emerging Research Leader Award

Dr Reza Nosrati, Monash University

Reza's research focuses on developing microfluidic technologies for understanding human reproduction, in particular, sperm analysis and selection. Reza joins an elite group of SRB researchers who have received the Newcastle Award in recognition for their excellent work in reproductive biology. We congratulate him on this prestigious award.



Newcastle Reproduction Emerging Research Leader Award

Reza Nosrati

Microfluidics for Fertility





continued



Society for Reproductive Biology

The David Healy New Investigator Award

Bridget Arman, University of Melbourne

Bridget won this award for her talk tilted "Assessment of the tocolytic nifedipine in pre-clinical primary models of preterm birth"



David Healy New Investigator

Bridget Arman



Assessment of the tocolytic nifedipine in preclinical primary models of preterm birth

Supported by 2 Ritchie MONASH University

ANZPRA New Investigator Award

Anna Boss, University of Auckland

Anna won this award for her talk tilted "Alterations in placental endothelial and perivascular heterogeneity could contribute to the pathophysiology of fetal growth restriction"



ANZPRA New Investigator Award

ANZPRA

Anna Boss

Alterations in placental endothelial and perivascular heterogeneity could contribute to the pathophysiology of fetal growth restriction

Supported by





Society for **Reproductive Biology**

ART Lab Solutions Gamete and Embryo Award

Guillaume Burnet, The University of Queensland

Guillaume won this award for his talk titled 'Cripto promotes pluripotency and malignancy of the male germline in mice'



Hudson Institute of Medical Research Award for best ECR and MCR poster

Ruby Oberin and **Jacinta Martin** were joint winners of the ECR award. This was for their posters titled 'Altered epigenetic programming of oocytes modulates offspring growth and accelerates bone development' and 'Role of the prorenin receptor in endometrial cancer cell growth'.



Tessa Lord won the MCR award for her poster titled '*Investigating a role for the hypoxia-inducible factor EPAS1 in spermatogonial stem cell function*'



SRB Hudson Institute of Medical Research MCR Poster Award

Tessa Lord

Investigating a role for the hypoxia-inducible factor EPAS1 in spermatogonial stem cell function



Supported by HUDSON



Society for **Reproductive Biology**

Male Contraception Initiative Travel Award winners

Gemma Stathatos, David Skerrett-Byrne, Jessica Dunleavy, Brendan Houston and Amy Luan won the Male Contraceptive Initiative Travel Award.

SRB Male Contraceptive Initiative Abstract Award winners

This was jointly awarded to Gemma Stathatos and Jessica Dunleavy

SRB-RFD Best Publication Award

This was awarded to the publication:

Nixon Brett, Anderson Amanda L., Bromfield Elizabeth G., Martin Jacinta H., Cafe Shenae L., Skerrett-Byrne David A., Dun Matthew D., Eamens Andrew L., De Iuliis Geoffry N., Johnston Stephen D. (2021) Post-testicular sperm maturation in the saltwater crocodile Crocodylus porosus: assessing the temporal acquisition of sperm motility. *Reproduction, Fertility and Development* 33, 530-539. https://doi.org/10.1071/RD20204

Awards Sponsorship and Judging

Without sponsorship and the generous support from the SRB community, awards would not be possible. SRB would like to thank all individuals who gave up their time to form judging committees and come to difficult decisions to arrive at a winner.

The SRB would also like to sincerely thank the following sponsors for their generous support of the SRB Awards in 20201

- The Robinson Research Institute
- Mercy Perinatal, Mercy Hospital for Women
- Newcastle Research Centre for Reproductive Science, Newcastle University
- The Richie Centre, Hudson Institute of Medical Research and the Department of Obstetrics and Gynaecology, Monash University
- Australia and New Zealand Placental Research Association (ANZPRA)
- ART Lab Solutions
- Male Contraceptive Initiative



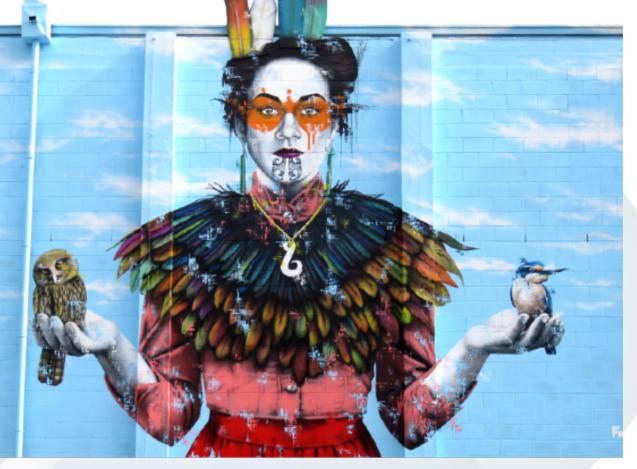
Fiona Brownfoot

2022 ANNUAL MEETING



Society for **Reproductive Biology**

ESA-SRB-APEG-NZSE ASM 2022



12[™] – 16[™] NOVEMBER, 2022 Te Pae, Christchurch, New Zealand

Save the date!

www.esa-srb-apeg-nzse.org

Artist: FinDac I Title: Kaitiaki. Photographer: A Walsh









CONFERENCE SECRETARY and Reproduction, Fertility and Development LIAISON REPORT



Society for **Reproductive Biology**

Thank you to everyone who nominated for the RFD-SRB Publication of the Year award. I would also like to extend my thanks and appreciation to Jenny Foster and the RFD team who supported the award and continue to be important partners with SRB. Thanks also to those who dropped in to say hi at the virtual SRB Booth, while there wasn't a whole lot of time for chatting, it was great to connect. We welcome Caitlin Wyrwoll to the role in 2022 and look forward to catching up with everyone in Christchurch.



Geoff De Iuliis







Australian Reproduction Update 2022

Super Early Bird Tickets now on sale!

Monday 28 & Tuesday 29 March 2022 Park Hyatt, Melbourne

> General \$300 Student \$200 (Prices valid until 31 December 2021)

Please visit our webpage to see the full program, speakers, ticket info, and more!

EXOTIC SPECIES REPORT



Society for **Reproductive Biology**

Objectives

- i) To increase the number of SRB members and attendees from broader disciplines in the life sciences related to reproductive biology, such as those in evolutionary biology, ecology, agriculture and veterinary sciences, and relevant areas of physiology, that work with species outside of mice/humans.
- ii) To promote further attendance from Western Australian researchers.

Activities to report

We have had a lot of engagement from other disciplines related to reproductive biology, particularly those in wildlife conservation biology and agriculture, through both the Repro Radio Podcast and through the Reproduction, Fertility and Development twitter account. Both of these have allowed for networking, particularly with early and mid-career researchers in other fields, providing a useful platform to find research similarities and differences that could be applicable to SRB.

- If SRB members are an author of emerging RFD papers and would like their work to get some twitter attention, please contact me (kelsey.pool@uwa.edu.au)!
- Similarly, if anyone is interested in speaking on the Repro Radio Podcast (or just want to hear some cool repro chat-<u>https://www.reproradio.com/</u>) we also welcome suggestions and love to hear about new research in reproductive biology from all backgrounds.



With Western Australia Livestock research council (WALRC) meetings for 2022 fast approaching, these meetings may provide an opportunity to discuss a way in which producers, and scientists from non-university backgrounds (eg. CSIRO, DPIRD) could be involved in a mutually beneficial way in SRB activities. Some possible ideas to discuss include:

continued

- Skill transfer workshops
- Research- site discussions
- Translation of conceptual research to applicable outcomesproducers pitch an issue, researchers match with relevant studies.
- Conference sessions targeted at more "layman" communication of research (this may also allow more opportunities for PhD and post-doc to give presentations and network with industry partners)
- A separate meeting or session, or online resource, outside of the main conference, that caters more specifically to these groups and allows for networking in an environment that suits both parties

A common perception across reproductive research groups in species outside of rodent models, is that SRB is purely a human-research based society. This view is apparently dissuading groups, particularly those in agricultural and veterinary sciences, from attending.



Kelsey Pool





Hi SRB ECR members!

We hope you all enjoyed SRB's first ever virtual conference! ASN did a fantastic job of bringing everyone together from afar, and thanks to them and our POC it had all the hallmarks of what we love about SRB conferences - great science, robust discussions, and lots of catch ups with familiar (and even some new!) faces.

Nonetheless, we are looking forward to an in-person meeting next year in Christchurch and hope to see you all there. If you have any feedback regarding the ECR forum (or anything else) for this year's conference, please let us know via email to:

Jessica.Dunleavy@unimelb.edu.au or Ella.Green@adelaide.edu.au

The conference also marked the end of Dr Dulama Richani's term on the SRB council as the ECR representative. We would like to extend a huge thank you to Dulama for her outstanding service to our ECR community, in what was a particularly challenging time.



ESA-SRB-ANZMBS combined ECR workshop 2021

ECR REPORT

The theme of the 2021 ECR workshop was '*Building collaborations and networking – the keys to a successful career*' and featured speakers from each of the societies with diverse collaborative experiences spanning academia, industry, and clinical research.

Professor Helena Teede (ESA, Monash University) kicked off the session, highlighting ways ECRs can approach the inherent career barriers that arise due to family obligations, particularly for women. She highlighted the importance of strong mentorship, working as a team, distributive instead of top-down leadership, and being strategic in restricting tasks to those with the most impact when capacity is limited.

Prof Neil Gemmell (SRB, The University of Otago) provided a practical guide for setting up and maintaining successful collaborations and how to navigate those that fail. He highlighted the power of saying 'thank you', trust, communication, setting clear expectations from the start and not forgetting that collaborations should be fun!

Finally, **Dr Sandra Iuliano** (ANZBMS, The University of Melbourne) talked about the unique considerations and approaches needed when linking with industry and provided insight on the changing landscape of industry collaborations.

The session was a great success and, with 373 people viewing the session live, it was one of the highest attended sessions of the conference. If you missed it or want to go back for a second look, it is available to view on the ESA-SRB-ANZBMS 2021 online portal for the next 12 months.

ECR REPORT



Society for **Reproductive Biology**

SRB-RFD Review

The return of the SRB meeting also marks the return of the annual Reproduction, Fertility and Development (RFD) review of the conference's key scientific themes. This review is a highlight of the SRB ECR calendar as it provides a great opportunity for our ECRs to collaborate, contribute to the society, and be part of a publication! Testament to this, we had an amazing response last year, with a large number of ECRs putting their hands up to help out – thank you to all those that did! If you want to get involved next time, there will be a call for volunteers in the lead up to the 2022 conference. In the meantime - keep your eyes peeled for the 2021 conference review to be published in RFD in this year!

Wishing everyone a great start to the New Year from your ECR representatives!



Ella Green, Jess Dunleavy & for the final time – Dulama Richani

MEET THE NEW ECR REP



Society for **Reproductive Biology**

Dr Ella Green from the University of Adelaide

What has been your most exciting discovery in the lab?

I would have to say my most exciting discovery so far was a key finding during my PhD, which was focused on how progesterone regulates a population of important immune cells called Regulatory T (Treg) cells during pregnancy in mice. I found that progesterone's actions to promote fetal growth are partially mediated by Treg cells, showing for the first time that these key immune cells are an effector mechanism of progesterone's action in early pregnancy for later pregnancy success.

Why did you choose a career in research?

I've always been fascinated by biology and nature and 'how things work'. It's a real thrill to study important research questions and hypotheses and make unique discoveries on a regular basis. I have a passion for women's health and the immune system, which makes working in the field of reproductive immunology very exciting.

Why do you think reproductive science is important?

The future of humanity is dependent on it! Fertility rates have declined beyond replacement level and we don't know the mechanisms to explain this decline or how to stop it. Furthermore, reproductive science is relevant to every person, since reproductive health is essential for the individual's health but also for the lifelong health of their offspring.

What would you tell budding researchers about a career in science?

If you want to enjoy your research, choose a topic you are really interested in. You might spend many long nights in the lab, so make sure you work on a topic you are passionate about! Secondly, find a supportive lab environment and surround yourself with mentors and colleagues who inspire you and support your career development.

If you could have any superpower, what would it be?

The ability to fly or teleport!



STUDENT REPORT

Hello fellow SRB students!

We hope you all enjoyed the wonderful science on display at SRB 2021. Congratulations to all presenters, finalists and award winners; it was a fantastic few days of science! While it was disappointing we all couldn't catch up in person, it was great to see our SRB students thriving.

What's new?

 Introducing our newly elected student representative – Azelle Hawdon! We are very excited to be working together over the next 12 months.

 A huge thank you to our outgoing student representative, Meaghan Griffiths. Thank you for your work and enthusiasm on council over the past two years!

2021 Student meeting

 It was lovely to catch up and chat with you all at the SRB student meeting held online this year

SRB 2022

- SRB will be held in New Zealand next year, COVID-19 restrictions allowing.
- The Student representative election process will be held online again, via SurveyMonkey.

As always, if you have any suggestions on how we can improve our student meeting and functions, please contact us!

Your friendly student reps, Shenae and Azelle Contact: Shenae.Cafe@newcastle.edu.au







Society for **Reproductive Biology**



Lisa Akison, Kelly Walton and Mark Baker/Dagmar Wilhelm

SRB 2021 Virtual conference and Awards announcements

The SRB annual meeting is a highlight in the calendar for all members, so it was with some disappointment when plans for a face-to-face conference had to be shelved for another year. However, the POC and ASN did a wonderful job of capturing the spirit and world-class research presentations that we have come to expect from this meeting in a virtual format. We were active on social media promoting the award sessions and plenary speakers in the lead up to the conference, as well as congratulating award winners. These received a lot of interest on these platforms, particularly on Twitter. For example, this Tweet congratulating Professor Natalie Hannan for being awarded the Robinson Research Award Received **14.9K impressions** (i.e. how many times the post was viewed) and **186 total engagements** (i.e. how many times someone engaged with the post by liking, sharing/re-tweeting or commenting).



SRB @ReproductionSRB Next up in our series 'Getting excited for @ESASRB': Congratulations to @DrNatHannan for winning the highly contested @RobsInstitute award. Don't miss her presentation first thing on Mon 22nd Nov. #ESASRBANZBMS2021 pic.twitter.com/2EA6HVwSI8

On the first day of the conference, the Comms team hosted the SRB forum 'Bridging the Gaps from Discovery to Impact'. This showcased two speakers, Professors' Jeremy Thompson and John Newnham, but unfortunately due to technical difficulties, Professor Helena Teede was unable to present. Jeremy spoke about his journey from Discovery to Industry, having successfully transitioned from being a discovery research scientist to initiating two start-up companies related to assisted reproductive technologies. John spoke about his involvement in a Discovery to Policy pathway, where his research in preterm birth has now led to changes to clinical practice in WA. The panel discussion that followed was very enlightening and I think would have provided ECRs with some food for thought for where they may steer their future careers.

COMMUNICATIONS REPORT

Society for **Reproductive Biology**

Showcasing SRB Research and Members on Social Media

continued

We have heavily promoted SRB members and their achievements over the past few months. This has included recently awarded SRB Fellows, pivotal papers in the field of reproduction and fertility and successful grant recipients. We encourage all SRB council members to tag SRB (@ReproductionSRB) in their Twitter feeds, and to contact Lisa (l.akison@uq.edu.au) if you would like her to showcase your recent paper/event or to advertise a new position. We have recently passed **3000 followers** on Twitter, so this is a great platform for disseminating your work or achievements. Check out some of the main people and organisations following @ReproductionSRB!



SRB Website

We are always looking for new repro-themed, scientific images to feature in the rotating banner images on the website – please send through your high-res images for consideration.

Changes in the Communications Team

We are sad to say farewell to Kelly Walton (Public Relations/Website Secretary) and Mark Baker (Newsletter Secretary). Kelly has stepped up to the role of Treasurer on the Executive Committee and we wish her all the best in this role. We welcome Dagmar Wilhelm to the role of Newsletter Secretary.

SRB Council



Society for **Reproductive Biology**



Prof Brett Nixon President



Dr David Sharkey Secretary



Dr Kelly Walton Treasurer



Prof Andrew Pask POC Co-Chair



Dr Shaun Roman Fellows/Life Member/ Plenary Lecturer



Dr Lisa Akison Communications Secretary



Caitlin Wyrwoll Conference Secretary/ RFD Liaison



Dr Tu'uhevaha Kaitu'u-Lino POC Co-Chair



Dr Geoff De Iuliis POC Co-Chair



Prof Jeremy Thompsor Co-Opted Member/ Public Officer



A/Prof Dagmar Wilhelm Newsletter



Azelle Hawdon Student Rep



Dr Kelsey Pool Exotic Species Liaison



Dr Fiona Brownfoot Awards/Sponsorship



Shenae Cafe Student Rep



Kylie Dunning Membership Secretary



Dr Taylor Pini Public Relations/Website



Dr Jessica Dunleavy ECR Rep



Dr Ella Green ECR Rep