

July 2024



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Australasian Neuroscience Society Newsletter



Prof. Tracy Bale



Prof. Gavan McNally



Prof. Susannah Tye



Prof. Jennifer Rodger



Meet our plenary speakers at the 42nd ANS Annual Scientific Meeting (ASM) to be held in Perth on 2-4 December..

Notifications

Become an ANS member or student member!

Please join us by becoming a Member of ANS.

You can join online at any time!

<https://tas.currinda.com/register/organisation/172>

Check out our website and follow updates on the ANS Twitter account or via our Facebook page.



<https://www.ans.org.au>



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Message from the President

It is exciting to see the ongoing development of the program for the 2024 ANS Annual Scientific Meeting, to be held in Perth on 2-4 December. The Perth LOC (Local Organising Committee) is working hard to make this meeting a superb experience, irrespective of your career stage or research area. I am also mindful of the huge amount of work that a previous Perth LOC dedicated to the planning of an in-person annual meeting in Perth that unfortunately was cancelled at quite short notice due to the pandemic. Please come along to support your WA colleagues and, as the conference theme indicates, to 'forge the nexus and cross the synapse' to continue building the ANS community.



Professor
Janet Keast

President, ANS

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Plenary speakers and symposia will be announced very soon, likely before this newsletter reaches your inbox. The LOC is also keen to maximise the opportunities for presenting research as posters and short oral presentations. Together, these will provide a high-quality and diverse showcase of neuroscience research in Australia and New Zealand, in addition to presentations by international guests. This year our international plenary speaker is Professor Tracy Bale, an eminent researcher and current President of IBRO. One of the unique features of the 2024 meeting will be an additional engagement opportunity with IBRO, likely to be focused on regional engagement and early career researchers.

With abstracts closing soon, I encourage you to start planning your trip to Perth to participate in another wonderful scientific and networking event, aimed to not only providing opportunities to share knowledge and ideas with others in "your" research area but – and I would argue equally as important – to learn from other research areas and technology experts.

I strongly believe that the diversity within ANS is one of our greatest strengths.

Another highlight of our annual meeting is the recognition of achievements by our colleagues, with the announcement of the annual ANS Awards. This is the first year of the annual Marcello Costa award, generously supported by the late Professor Costa. This will be presented in Perth for the best publication on neural regulation of organs by an early career researcher member of the Society. Marcello had a major impact on ANS and more broadly across neuroscience research and the community, summarised beautifully in a tribute in this newsletter by his friend and colleague, Professor Nick Spencer.

I would also like to draw your attention to the item in this newsletter from the Equity and Diversity Committee (EDC), showcasing the outcomes of the inaugural year of the ANS Indigenous Travel Awards. Our goal is to ensure that this program is sustainable, and to that end, the EDC and other members of Council have been seeking institutional partnerships for this support, as exemplified last year by the support of QBI. Please contact the EDC, your ANS State Representative or the ANS Secretariat if you would be interested in discussing this potential support with your institution. A template letter can also be provided. If you have a personal interest in providing more direct financial support for the longer-term success of this initiative, please contact the Secretariat or send me a note directly. Donations can be indicated in annual membership renewals but are feasible at any time of the year.

July 2024

(Message from the President ... continued)

As indicated in our recent Bulletin and emails, the new ANS Finkel Foundation Travelling Fellowship is now open, with applications to close in early August (details are here <http://ans.org.au/awards/australasian-neuroscience-society-finkel-foundation-travelling-fellowships>). Please circulate this announcement to your colleagues across any relevant research disciplines. This exceptional opportunity for early and mid-career researchers has been made possible by the very generous donation of the A&E Finkel Foundation Trust, who have previously supported the establishment of the Australasian Course in Advanced Neuroscience. The inspiration for the donation is from Alan Finkel, founder and long-term CEO of Axon Instruments, the US manufacturer of microelectrode amplifiers, cellular fluorescence imaging systems, and data acquisition and analysis systems. Since Axon Instruments was sold in 2004, Alan has been busy in policy and education activities, but he has never lost his interest in neuroscience, as evidenced by his founding and mentoring of the Australasian Course in Advanced Neuroscience and now these new Fellowships.

With best wishes – and I look forward to seeing you in Perth.



*Annual Scientific Meeting
to be held in Perth from
2-4 December 2024*



Marcello Costa Obituary

It is with great sadness that I report that Marcello Costa passed away at his home in Adelaide on April 14th this year, surrounded by his close family and dear wife, Daniela.

It is with great sadness that I report that Marcello Costa passed away at his home in Adelaide on April 14th this year, surrounded by his close family and dear wife, Daniela. Marcello was born on 9 January 1940 in Turin, Italy. As a young boy, he moved in 1949 with this family to Argentina, where he finished high school in 1960. Marcello returned to Italy to complete his Medical Degree at The University of Turin. However, he knew soon after completing his medical degree that he did not want to pursue a career in medicine. He was more interested in how things worked and wanted to quench his insatiable thirst for scientific enquiry. He even sold his bicycle as a teenager to buy his first microscope.

Marcello and Daniela were brought to Australia in 1970 by Geoff Burnstock, who was then Head of Zoology at The University of Melbourne. It was at Melbourne University that Marcello met John Furness, who became his long-term collaborator and close friend. In 1975, Marcello moved to Flinders University in South Australia. Together with John Furness (who also moved to Flinders University) and many other great scientists, they systematically unravelled the enteric nervous system, identifying all the major types of neurons in the gut wall and how they likely contribute to complex neurogenic motor

patterns that underlie propulsion. Marcello had a wonderful vision for scientific experimentation. He developed tools and novel approaches to address complex questions that had eluded scientific investigation.

In 2007, I moved back to Australia to take up at position at Flinders University, after some time overseas. Whilst setting up my laboratory, Marcello expressed interest in joining the lab. It was a tremendous honour to have Marcello as a critical member of the lab for the past 15 years, performing hands on experiments right up until he retired at 80 years of age. The past 15 years was an incredibly productive and energetic era with Marcello and the entire neurogastroenterology group – the most productive time (in terms of publications) during Marcello's career.

Marcello was a major contributor to the Center for Neuroscience at Flinders University. He had an enviable skill of identifying the most pertinent and relevant questions during seminars, often leaving the seminar speaker floundering for equally good answers. Marcello embraced his broad knowledge of all aspects of neuroscience by vehemently opposing the pseudo-sciences, like "chiropractic" and "Traditional Chinese Medicine". Together with the Friends of Science in Medicine, Marcello acted as a public health watchdog, seriously concerned about honesty in medical claims and the need for evidence-based medicine. Marcello was never afraid to speak up and was usually the first in an audience to ask questions. He went on national television and radio many times discrediting institutions that chose to

teach non-evidence-based health care professions. Marcello devoted 47 years of continuous service and leadership to Flinders University. In 2013, he was honoured the position of Matthew Flinders Distinguished Professor of Neurophysiology, until his formal retirement in 2021. We will deeply miss not only Marcello's critical eye and sharp scientific acumen, but his willingness to pass on knowledge, teaching thousands of medical students and science students from many different courses in different Universities.

Marcello was very widely read not only in neuroscience, but also philosophy, arts, politics and religion. There was rarely a time where Marcello didn't have an educated view on a current affair or world event.

Marcello was co-founder of ANS and President (1994-1995), and co-founder of the South Australian Neuroscience Institute (SANI) and the Friends of Science in Medicine (FSM). Marcello was awarded the ANS Distinguished Achievement Award in 2023, presented at the Brisbane Annual Scientific Meeting. He generously supported the ANS Marcello Costa Award to recognise excellence in early career research on neural regulation of organs, to be awarded for the first time in 2024.

Marcello was awarded the Australian Centenary Medal and in 2018, the inaugural Lifetime Achievement Award by the Federation of Neurogastroenterology and Motility Societies. In 2020, he was appointed as an Officer of the Order of Australia.

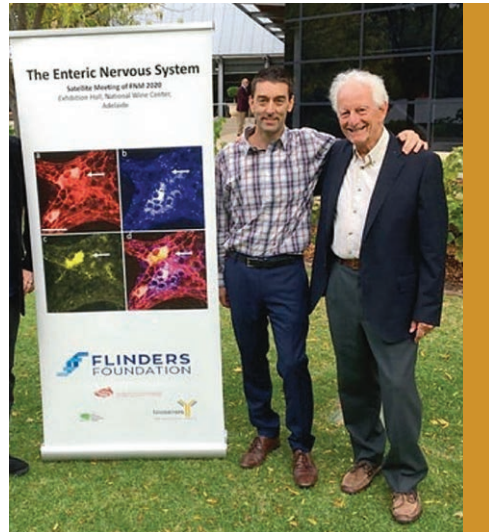
(Message from the President ... continued)

I am sure Marcello would have agreed that his successful career was only possible because of the untiring support from his delightful wife, Daniela – highly accomplished in her own medical career. Marcello was a great friend, mentor and inspiration. His everlasting contribution to Australian science and his indelible impact on the international field is firmly embedded in autonomic neuroscience.

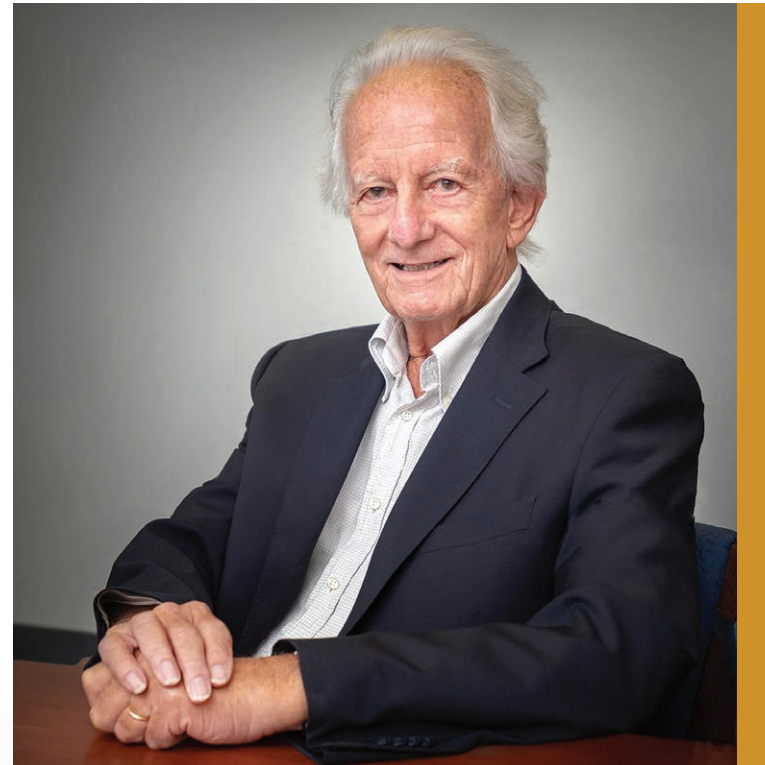
Rest in peace Marcello.

Nick Spencer

*College of Medicine and
Public Health,
Flinders Health and Medical
Research Institute.*



Professors Marcello Costa and Nick Spencer.



Applications Open for Travelling Fellowships

The Australasian Neuroscience Society (ANS) is excited to announce the opening of a new opportunity for ANS members - **The Australasian Neuroscience Society Finkel Foundation Travelling Fellowships**. These awards have been made possible by the very generous donation of the *A&E Finkel Foundation Trust*, who have previously supported the establishment of the *Australasian Course in Advanced Neuroscience*.



Professor
Janet Keast

President, ANS
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Up to four Travelling Fellowships of up to \$50,000 each will be awarded annually for the next 5 years.

The goals of the Travelling Fellowships are:

- To provide career development opportunities to early and mid-career ANS Members based in Australia or New Zealand by supporting a “mini-sabbatical” style of Travelling Fellowship to a host laboratory with world-leading expertise relevant to development of brain-computer interfaces or related areas of innovative neurotechnology.
- To enhance Australian and New Zealand neuroscience and development of innovative solutions to neurological conditions by seeding new collaborations with world experts in brain-computer interfaces or related areas of innovative neurotechnology and facilitating establishment or application of these technologies or approaches in Australia and New Zealand.

Further details about the Fellowships and the application process are available on the ANS website here. Closing date for applications: COB Friday 2nd of August 2024

Please circulate this information to interested colleagues from any fields relevant to the award. ANS welcomes new members and participants in our future events.

The ANS 2024 Scientific Meeting: Forging The Nexus, Crossing The Synapse

July 2024

Planning is well underway for the 42nd ANS Annual Scientific Meeting (ASM), and we are thrilled to welcome you to Perth on December 2nd to 4th. Hosted in Western Australia for the first time in more than 20 years, the theme for this year's meeting is 'Forging the Nexus, Crossing the Synapse'. This reflects our desire to connect researchers across the country at the nexus of neuroscience, neurotechnology and forward thinking, and is also a nod to uniting our physical distance across the Nullarbor.

The Local Organising Committee - chaired jointly by Dr. Sarah Hellewell, Dr. Chidozie Anyaegbu, Dr. Stuart Hodgetts and A/Prof. Stephanie Rainey-Smith - are planning an exciting program which includes plenary lectures as well as symposia, oral and poster presentations spanning the breadth of neuroscience themes to showcase the exceptional work of Australasian researchers across career stages.

Name	Affiliations	Presentation Title
International Plenary: Prof. Tracy Bale	Professor and Director for InterGenerational Stress and Health and the Director for Sex Differences Research in the Department of Psychiatry at the University of Colorado, Anschutz Medical Campus.	Extracellular vesicles serve as dynamic cellular communicators of stress and trauma.
Elsbeth McLachlan Plenary: Prof. Gavan McNally	School of Psychology, University of New South Wales	How punishment shapes our actions and choices.
Lawrie Austin Plenary: Prof. Susannah Tye	Queensland Brain Institute, University of Queensland	Immunometabolic control of dopamine systems in health and disease: evolutionary perspectives and translational implications.
ANS Plenary: Prof. Jennifer Rodger	University of Western Australia, Perron Institute for Neurological and Translational Science	Repetitive transcranial magnetic stimulation for sceptics: how understanding mechanisms drives translation and innovation.
Eccles Plenary: Prof. Andrew Morokoff	Neurosurgical Society of Australasia	TBC

July 2024

(The ANS 2024 Scientific Meeting ... continued)

The ASM will be held at the newly refurbished Pan Pacific Hotel in the Perth CBD, centrally located to the picturesque Swan River, hotels, and the best of Perth's dining and entertainment. The conference dinner will be held at "The Point Rooftop Bar and Restaurant", Perth's premier waterfront roof-top bar with award winning cuisine and interactive live chef experience. If you have not previously visited Western Australia or it has been some time since you ventured out West, you may be pleased to discover Perth as a cosmopolitan city with unique biodiversity, world-leading beaches and unforgettable sunsets.

Western Australia's vibrant and engaged neuroscience community are excited to see you in December.



Prof. Tracy Bale



Prof. Gavan McNally



Prof. Susannah Tye



Prof. Jennifer Rodger



Annual ANS Award Applications Deadline Extended to Friday 26 July 2024 – Apply now!

July 2024

This year, the ANS is granting an expanded number of prestigious Awards to members at various levels for achievements in research and education.

These include:

- The **A.W. Campbell Award** which recognises the best contribution by a member of the Society in their first five postdoctoral years.
- The **Education Excellence Award** recognises an individual or team who/that has made outstanding contributions to neuroscience education in Australasia.
- The **Marcello Costa Award** for the best publication on neural regulation of organs by an early career (PhD student or up to 3 years postdoc) researcher member of the Society. *
- The **Mark Rowe Award** for the best publication by an early career (PhD student or up to 3 years postdoc) researcher member of the Society. *
- The **Nina Kondelos Award** which is conferred on a female neuroscientist for an outstanding contribution to basic or clinical neuroscience research.
- The **Paxinos-Watson Award** which recognises the most significant neuroscience paper published by any member of the Society. *

(* Any publication may only be submitted for one of these three awards.)

These prestigious Awards enhance your CV, look great on your wall and are accompanied by a monetary prize, so please consider applying, and encourage your students and mentees to apply. Note the winners of the AW Campbell and Nina Kondelos Prizes will be invited to present Plenaries at the 2024 ANS conference associated with these Awards. Winners of the other awards may be invited to give oral presentations at the 2024 meeting.

The [ANS website](#) has all details of these Awards and how to apply. All applications should be emailed to the ANS Secretariat (secretariat@ans.org.au). Questions regarding the Awards should be directed to the Secretary, Assoc Prof Michael Lardelli at michael.lardelli@adelaide.edu.au.

Applications close on Friday 26 July 2024.

Report on the Australasian Neuroscience Society 41st Annual Scientific Meeting, Brisbane, 4-7 December 2023

July 2024

The 2023 ANS Annual Scientific Meeting was hosted at the W Hotel in Brisbane from 4-7 December.

More than 550 registrants, including 190 students, enjoyed a stimulating three-day program, which included cutting-edge plenary talks, themed symposia, oral and poster presentations, an Equity and Diversity Panel Discussion, the Brain Bee Final, an ANS Student-EMCR networking event, and a dazzling beach-themed Party with live band, great food, photo-booth and pink flamingos!

The quality of the scientific presentations was uniformly high, and the many lively discussions during the coffee and lunch breaks ensured the meeting lived up to its theme, 'Exciting the Network'.

Amongst the many highlights were the plenary lectures delivered by A/Prof Saul Villeda (UCSF), Professor Elizabeth Coulson (UQ), Professor Marcello Rosa (Monash), Professor Michael Breakspear (Newcastle), and Professor George Paxinos, as well as the AW Campbell Award presentation by Dr Laura Fenlon (UQ) and the Nina Kondelos Award presentation by Professor Johanna Montgomery (University of Auckland).

The conference was generously supported by exhibitors and sponsors, who collectively provided more than \$160,000 in additional revenue to help offset costs.

As a mark of the success of the meeting, respondents rated as "very good" or "excellent" the scientific content (76%), conference venue (78%), location/accessibility (90%), and the conference overall (87%).

These ratings were also reflected in respondents' written highlights: **"Plenary lectures were amazing"**; **"Great to see such exciting programmes of work"**; **"As an exhibitor I was very pleased with the interaction and traffic to our stand"**, **"The ANS Party!"**; **"The set-up of the poster displays was really good"**; **"The content of most talks was excellent and the quality of research in Australia is truly astounding and inspiring"**.

The 42nd ANS Annual Scientific Meeting will be held in Perth from 2-4 December 2024. The theme of the meeting is 'Forging the network, crossing the synapse'. We look forward to seeing you there!

Top: International plenary speaker, Associate Professor Saul Villeda, University of California, San Francisco.
Bottom: Past president Professor Peter Schofield (NeuRA) and current President Professor Janet Keast (University of Melbourne).



(Report on the Australasian Neuroscience Society
41st Annual Scientific Meeting, Brisbane ... continued)



1. Dr Gregori Bieri (University of California San Francisco), Dr Laura Fenlon (The University of Queensland), Associate Professor Saul Villeda (University of California San Francisco) at the conference party. 2. Professor George Paxinos (NeuRA), Eccles Plenary Speaker. 3. Amazing entertainment at the beach-themed conference party. 4. Professor Jason Mattingley (Conference Executive Chair ANS, The University of Queensland), Dr Tara Walker (Co-chair ANS Local Organising Committee, The University of Queensland) and Professor Thomas Burne (Co-chair ANS Local Organising Committee, The University of Queensland). 5. Checking out the exhibitors: Dr Matilde Balbi (The University of Queensland) and Montana Samantzis (The University of Queensland). 6. The audience was fully engaged with the fabulous scientific program.

ANS newsletter Indigenous Travel Award

In 2023, ANS supported an inaugural Indigenous Travel Award program. We had over 20 applicants from across Australia and New Zealand, with 3 fantastic candidates supported to attend the meeting.

All three awardees also visited the Queensland Brain Institute (QBI) following the ANS meeting, and we'd like to say a special thank you to Dr Matilde Balbi and the QBI equity and diversity committee for supporting that visit, which all three awardees thoroughly enjoyed and was the icing on the cake of a fantastic trip.

Gina Waters is currently a Clinical Psychology PhD student at the University of Auckland. Gina whakapapa (is a proud member of) Māori Ngāti Porou, Ngāti Kahungunu Wairoa, Kai Tahu peoples, as well as Black Foot Nation in Montana USA and Nyoongar mob in Perth. She has worked in mental health services in Aboriginal communities in WA (Martu/Jigalong) and NT (Jawoyn) before starting her research training in New Zealand. Her research is conducted through the Mātai institute in Gisborne, NZ, which brings the most advanced clinical imaging to regional NZ and Māori communities who are often overlooked in medical research. Mātai drives innovation and strives to make a lasting impact on healthcare, social issues, education, and economic outcomes, by centring Māori voices in all aspects of institutional governance and research. Gina's research aims to use MRI to better understand

the presentation and treatment of ADHD in Māori communities. Of the ANS meeting, Gina said:

"Neuroscience is not a big field at my university. This conference opened my eyes to the diverse ways that research in this area can be approached. It therefore increased my confidence to expand my horizons in this area of research".

Gina was also a member of the Equity and Diversity committee panel at ANS2023, sharing her experiences about how institutions can better support Indigenous trainees coming through their programs.



Left to right: Claire Bradley, Anthony Harris, Gina Waters, Eden Slicer, Emily Garratt.

(ANS newsletter Indigenous Travel Award ... continued)

Emily Garratt completed her honours project at UTAS in 2023, and in 2024 she is starting her PhD, also at UTAS. Emily is a proud Palawa woman and decedent of famed Tasmanian Matriarch Dolly Dalrymple. Emily is interested in neurodegeneration, and her project is based at the Wicking Dementia Centre. She was recently awarded a prestigious Japanangka errol West Graduate Research Scholarship to support her PhD, saying that she *“learnt a lot about application processes from this ANS award, and it also gave me the confidence to apply”*. Congratulations Emily and we hope to see you presenting your PhD work at ANS soon! Of the ANS meeting, Emily said:

“This award gave me the opportunity to meet so many people, which challenged my perception of a career in neuroscience, as everyone had a different path. This was encouraging knowing there is no “right way” to have this kind of career” and “It also gave me confidence to put myself out there and network with peers and academics at the conference”.

Eden Slicer completed her honours project at UNSW in 2023, and in 2024 she commenced postgraduate medical training at UNSW. Eden is a proud Gundungurra woman who grew up on Palawa country. Eden was attracted to neuroscience after seeing how neurological disorders affected her family and mob, with the goal to eventually specialising in neurology or neurosurgery after finishing her medical training. But don't think you've seen the last of Eden at ANS just yet. She says:

“I was so deeply inspired by all the incredible neuroscience at ANS, so have kept in close contact with my honours lab”...“I hope to complete my PhD in the future, so am keen to stay as involved in the neuroscience community as possible.”

Connecting with experts in the field and peers was also a highlight for Eden; *“meeting with plenary speaker Dr. Michael Breakspear was an inspiring interaction I will hold with me into my future career”*, and during the QBI visit *“networked with current Ph.D. candidates to hear their experiences, passions, and goals, aiding our developing understanding of our directions”*.

The equity and diversity committee would like to thank the ANS council and executive committee for their support of this innovative program to support the neuroscience careers of First Nations researchers in Australia and New Zealand. If you'd like to help promote the 2024 travel award at your university, please keep an eye out for announcements or contact Lizzie Manning (lizzie.manning@newcastle.edu.au) for more information.



Left to right: Eden Slicer, Emily Garratt, Gina Waters, Zhaoyu Li.

Kioloa Neuroscience Colloquium 2024

This year's Kioloa Neuroscience Colloquium, hosted by ANU's Eccles Institute of Neuroscience, took place on a wintry weekend from the 17th to 19th of May. Nearly 60 neuroscientists from Canberra, Sydney, Newcastle and New Zealand gathered at ANU's Kioloa Coastal Campus near Batemans Bay for one and a half exhilarating days of neuroscience at the beach.

Felix Thomas

PhD student, Eccles Institute of Neuroscience, ANU

The colloquium kicked off on the Saturday morning with a charismatic plenary session presented by Elena Bagley (USyd) on how opioids affect the brain and the science behind addiction. This was followed by several sessions of short talks given by researchers from the Eccles Institute at ANU, Western Sydney University, the University of New South Wales and the University of Newcastle. Most of the presenters were PhD students whose talks covered topics ranging from molecular profiling of pain to novel treatments for neurological conditions. All of this was conducted in the meeting's trademark friendly, relaxed and supportive atmosphere where young scientists can interact with world-class researchers while developing their presentation skills.

The talks ended close to dusk and were followed by an energetic poster session over drinks and snacks. The poster session allowed for more in-depth conversations about science, with everybody keen to discuss each other's work. Following a delicious dinner, the idea of lighting the bonfire was quickly abandoned because it was a particularly wet and windy evening. However, some of the hardier

attendees managed to wander down to the nearby beach, while the rest of us snuggled up indoors with games and conversation.

The Sunday morning dawned cold and clear, which seemed to suit the many kangaroos grazing between the huts. First up was the international plenary speaker, Karl Iremonger from the University of Otago, who captivated the audience with his talk about the cellular basis of the stress response. After Karl's talk, the morning continued with another oral session, with early-career and PhD researchers energetically sharing their latest research. The program ended with voting for the best student

presentation. Voting was very close, demonstrating the quality of the presentations, but the prize was taken out by Si Yin Lui (UNSW) for her talk on ventral striatopallidal pathways in alcohol-seeking rats. After a quick lunch, the attendees bid each other farewell and headed home with renewed enthusiasm for neuroscience, as well as many new friends and collaborators.

The organisers thank ANS, ANU and UNSW for providing the funding that helped to make Kioloa 2024 such an exceptional event. We look forward to an even more exciting Kioloa 2025.



Kioloa Group Photo May 2024.

Teaching the Nervous System in Australian Universities

Are you responsible for, or coordinate, a Unit or Course of Study which includes introductory/foundation level nervous system content, at an Australian university?

We are Australian academics conducting a study to ascertain what nervous system concepts are being taught and whether these concepts align with international curriculum guidelines. This information could be used by the academic community to inform the teaching of nervous system content.

We are inviting individuals who are responsible for teaching introductory/foundation level (e.g. first year) nervous system content, or who are coordinating the teaching of this content, at an Australian university to participate in the study. The nervous system content can occur within a neuroscience or other (e.g. physiology, anatomy) course or unit of study.

Participation involves completion of a 20-30 minutes (depending on the amount of nervous system included in your course) **anonymous** online survey. This project has been approved by the University of South Australia's Human Research Ethics Committee (Ethics Protocol 205746). The survey can be accessed <https://redcap.link/nervous.system.content.in.tertiary.teaching>. After completing the survey, you can enter a draw to win one of six \$50 Westfield or JB Hi-Fi gift vouchers.

If you have any questions, please contact:

- Professor Kay Double, University of Sydney
kay.double@sydney.edu.au
- Dr Revecca Kakavanos-Plew, University of South Australia
revecca.plew@unisa.edu.au or
- Associate Professor Gabrielle Todd, University of South Australia
gabrielle.todd@unisa.edu.au.



Professor
Kay Double

University of Sydney



Dr Revecca
Kakavanos-
Plew

University of South Australia



Associate
Professor
Gabrielle Todd

University of South Australia

Researcher Profile: Dr. Maureen Hagan, Monash University

July 2024



**Dr. Maureen
Hagan**

*Biomedicine Discovery
Institute, Department of
Physiology, Monash University*

PhD received (year and place):

New York University 2013

Previous workplaces (Phd and/or Postdoc):

I did my PhD at NYU with Bijan Pesaran. I came to Monash in 2014 as a postdoc and have been here ever since!

Email: maureen.hagan@monash.edu

1) **How did you get into science and your current position?**

I did my undergrad at UCLA. I worked in a lab that focused on Parkinson's disease research. It was an amazing experience, and I learned a lot. One of the big things I took away from that experience was how difficult it is to treat neurological disorders when there is still so much unknown about how the brain works. I decided to stay in research and focus on trying to answer fundamental questions about how the brain works.

2) **Please outline the goal of your research in three short sentences.**

My lab is interested in how different areas of the brain communicate. Brain areas work together in networks to support cognition and behaviour. I'm interested in the strategies the brain uses to keep track of inputs from various other brain areas and how it can flexibly shift between different streams of information to meet behavioural demands.

3) **What do you love about your job?**

I love that I get to be creative. Whether it's finding a novel approach to a problem or coming up with an innovative way to view a complex data set, I enjoy finding unique solutions.

4) **What project(s) are you currently working on?**

At the moment the lab is using visual attention as a behavioural model for understanding how information flows through the brain. Visual attention can be controlled by endogenous goals that we consciously choose to direct our attention to, or exogenous stimuli that are highly salient and capture our attention. At any given moment, endogenous goals and exogenous sensory stimuli are in constant competition for our attention. How the brain integrates these two separate streams of information to control behaviour is entirely unknown.

5) **Do you have any advice for anyone considering a career in science? What advice would you give your 5-year younger self?**

Your time is precious – even as a young scientist! Find projects you're passionate about and focus on them. Don't feel bad about saying no to opportunities that aren't right for you.

6) **What do you do when you are not working?**

I have two young kids – so a lot of my time is taken up with unicorn cupcakes and ballet classes. But when I'm not doing that, I love to read, practice yoga, and travel.

7) **What are your future plans?**

To date, most of the work in the lab has focused on animal experiments. We're currently expanding into human experiments as well which will allow us to answer different, complimentary research questions. In the long term, I would love to circle back to where I began and try to apply some of the things we've learned to clinical populations.

8) **Anything else you would like to share that's not covered in the questions above?**

I'm always up for a chat about science or life in science. Feel free to reach out if you want to hear more about the lab and any opportunities we have!

Links to research lab:

<https://www.monash.edu/discovery-institute/hagan-lab>

Researcher Profile: Dr Conrad Chun Yin Lee, ARC DECRA Fellow



Dr Conrad Chun Yin Lee, ARC DECRA Fellow

Department of Anatomy
and Physiology, Faculty
of Medicine, Dentistry and
Health Science, University
of Melbourne

Links to websites:

<https://findanexpert.unimelb.edu.au/profile/1001156-conrad-lee>

PhD received (year and place):

2017 (Australian National University)

Previous workplaces (Phd and/or Postdoc):

Eccles Institute of Neuroscience, JCSMR,
Australian National University; Queensland
Brain Institute, University of Queensland

Email: conrad.lee@unimelb.edu.au

1) How did you get into science and your current position?

I had always been inquisitive as a child, and enjoyed science at school, and so decided to study psychology at university. Along the way, I fell in love with neurobiology, animal behaviour, and the world of academic research. I remember recording from my first neuron during my Honours year, and since then, I was hooked! Naturally, I pursued a PhD in neuroscience, specializing in electrophysiology and animal behaviour.

2) Please outline the goal of your research in three short sentences.

My research goal is to describe and understand the brain circuits that enable conscious perception from sensory inputs. As the brain varies under different states of awareness (e.g. sleep to high attention), how do these internal circuit dynamics give rise to changes in our perception and behaviour? To do this, I use a combination of electrophysiology, genetic and optical approaches, and behavioural testing, in a variety of animal models and sensory systems.

3) What do you love about your job?

Variety stands out as one of the most exciting aspects of being a sensory neuroscientist. My daily tools vary from a saw to a soldering iron, from the keyboard and to a scalpel. Each day presents fresh challenges, ranging from programming and engineering to hands-on work with animals and surgical procedures. This diverse range of activities keeps the role dynamic and engaging. Moreover, the collaborative environment within the scientific community is incredibly rewarding. Discussing nuances in data and experimental design with like-minded scientists generates a sense of camaraderie and shared purpose.

4) What project(s) are you currently working on?

Currently, I am using the zebrafish as a model organism to study sensory coding and behaviour. The zebrafish presents a unique model in neuroscience, due to its transparency and the wide range of genetic and optical tools available. Combining these tools with behaviour allows me to examine the whole brain at single-cellular resolution in vivo. Specifically, I am working on two projects: how fear affects brain wide network dynamics, and multisensory integration in autism spectrum disorder. In both projections, I am interested in how auditory and visual inputs integrate, and how this affects perception and behaviour.

5) Do you have any advice for anyone considering a career in science? What advice would you give your 5-year younger self?

For anyone considering a career in science, my advice is to get comfortable with failure. Not all ideas are fruitful, and not all experiments will go to plan. Failure is inevitable, but learning from our failures is key. Stay humble, be resilient and be open to learn your peers. I credit a lot of my successes to my peers, whom which I have learnt a great deal from. To my younger self, I would advise not to overly fixate on securing fellowships or grants. Instead, focus on the passion and enthusiasm you have for your work. Be rigorous in your work and be true to your standards. Let your genuine love for science to shine through. With dedication and a bit of luck, the opportunities will naturally follow suit.

6) What do you do when you are not working?

When I'm not working, I'm usually on my bike. A lot of good ideas have come from long rides up the local mountain! Otherwise, you'll find me underneath my car or in the shed. I like working with my hands and building something unique.

7) What are your future plans?

The future of a research scientist is about embracing the unknown – it's an exhilarating adventure every step of the way! I'm open-minded and eager to explore new projects, collaborate with others, and to tackle more complex questions. If stepping into leadership roles is part of the journey, I'm up for it! My plan is to continue to help meaningfully shaping the future of neuroscience, no matter how big or small.

ANS Early Career Researcher Spotlight

Dr Rebecca San Gil

July 2024



ANS early career researcher Dr Rebecca San Gil from UQ's Queensland Brain Institute has developed a longitudinal map of the proteins involved in MND across the trajectory of the disease.

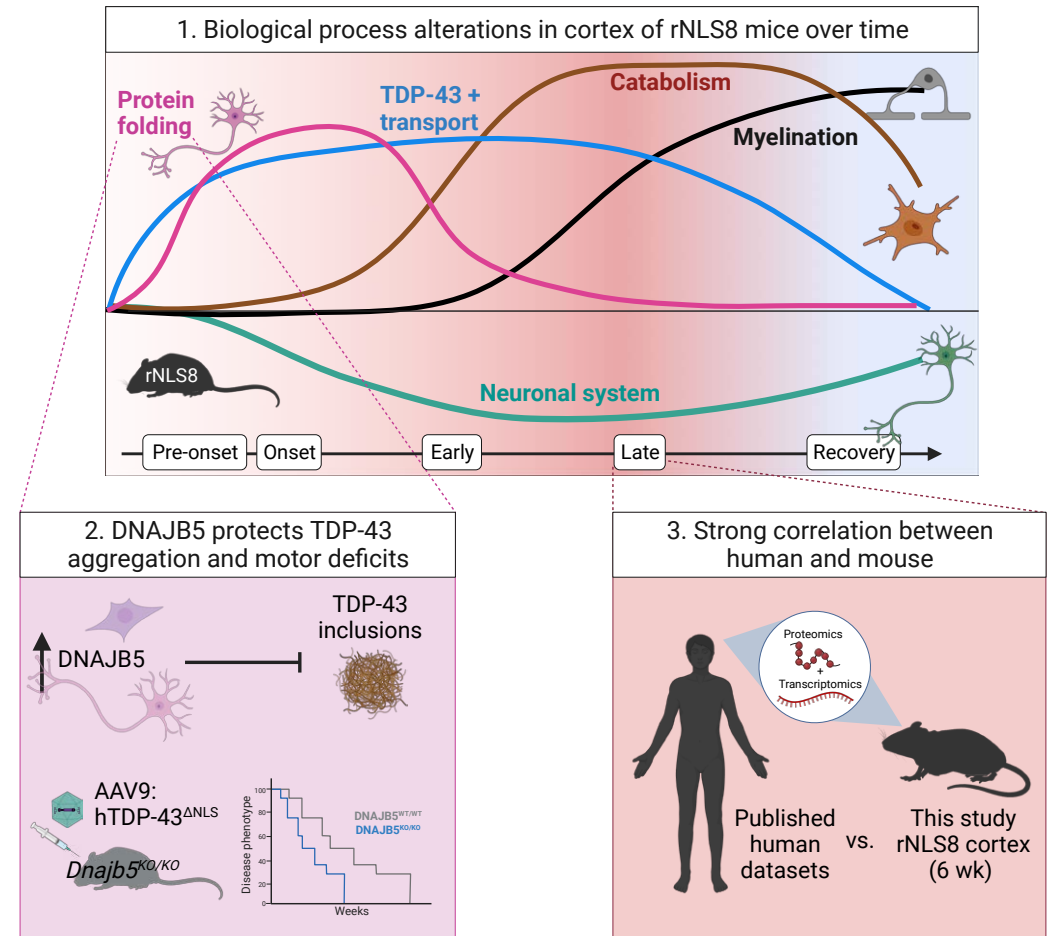
Building on the mapping project, Dr San Gil chose to focus on protein folding factor, DNAJB5. Before the onset of MND in mouse models, this protein was found to be particularly abundant, sparking curiosity about its role in disease progression.

It was hypothesised that short-term elevation of DNAJB5 is likely a protective mechanism by neurons to control protein dysfunction. Further investigation of this mechanism may help to identify new preventative and therapeutic approaches to MND.

The findings are published in Nature Communications <https://www.nature.com/articles/s41467-024-45646-9>

Dr Rebecca
San Gil

Queensland Brain Institute,
University of Queensland



Australasian Neuroscience Society Annual General Meeting

Held at W Hotel, Brisbane

06/12/2023 @ 17:00 PM – 18:00 PM AEDT

1. Welcome and Apologies

The Meeting Chair, Michael Lardelli (Secretary) opened the meeting at 5:03pm AEST. He acknowledged that this meeting is held on the traditional lands of the Turrbal and Jagera peoples and we pay our respects to their Elders both past and present.

Apologies

Andrew Lawrence
Karin Aubrey
Andrew Gundlach
Charles Watson
Laurence Geffen
Margaret Morris
Alison Cauty
Nada Reeson
Paul Pilowsky
Samantha Gardener
David Vaney
Darryl Eyles
Norman Saunders
Bahaa Al-mhanawi

2. Proxies, Quorum

No proxies were received for this meeting.
A quorum was confirmed for this meeting.

3. Confirm AGM Minutes of 6 December 2022 as a true and accurate record of proceedings

Motion: That the ANS Council confirms the AGM Minutes of 6 December 2022 as a true and accurate record of proceedings.

Moved: Michael Lardelli
Seconded: Peter Schofield
Motion Passed

4. President's Report

Janet Keast provided a verbal report for this meeting.

- Thanked ANS members for attending the AGM and Conference
- Special thanks to Peter Schofield for his work over many years as a member of the Council and Executive Thanks to Executive, Council and Committees
- Thanks to Sponsors and Supporters
- Thanks to TAS
- Thanks to Tara Walker, Thomas Burne and Jason Mattingley + LOC for ASM

Minutes for ANS AGM 2023

Janet summarised the activities and events that have taken place during 2023 and thanked those involved with organising:

- Annual Scientific Meeting: Co-chairs Tara Walker and Thomas Burne
- ACAN 2023: hosted by Florey/Melbourne University, Chris Reid (Course Director); Lucy Palmer, Karl Iremonger, Jay Bertran-Gonzalez (Co-Directors); Greg Stuart (Mngt Comm Chair). Jay Bertran-Gonzalez will also be the Course Director from 2024
- Brain Bee Challenge: Ramesh Rajan with new leadership team of Bruno van Swinderen, Jenny Rodger, Matt Kirkaldie, Charles Watson.
- State and Regional Events

Committee initiatives during 2023 include:

- Indigenous Travel Awards
- Code of Conduct
- Teaching Excellence Award
- ANS Supporter of Animal Openness Agreement

Janet announced a New Annual ANS Award:

- Marcello Costa Award
Awarded annually for the best publication on neural regulation of organs by an early career researcher.

5. Tribute to Professor Alan Mackay-Sim delivered by Professor James St John, Griffith University

Janet Keast introduced Prof. James St John. Prof. James St John reflected on the life, career and scientific achievements of Professor Emeritus Alan Mackay-Sim.

6. Secretary's Report

Michael Lardelli provided a verbal report for this meeting. He highlighted the increase in membership since 2020, noting the positive impact the Annual Scientific Meeting has on ANS' membership.

7. Treasurer's Report

Jana Vukovic provided a verbal update for this meeting, highlighting key outcomes from the FY2022-23 Audited Financial Report

- Profit from ordinary activities was \$44,852
- GFM Wealth Investment value total was \$959,064
- Net Asset value was \$1,308,656
- Jana confirmed that the Society was solvent and could pay creditors as and when invoices become payable

Minutes for ANS AGM 2023

Jana Vukovic summarised the flow of revenue to expenses she uses for budgeting

- ANS Membership fees contribute to ANS operational costs
- ANS Investment returns contribute to ANS operational costs, State Rep activities, Equity and Diversity Committee initiatives and the Brain Bee Challenge
- ANS Conference registration and sponsorship are used to pay for all conference related costs to keep the event self-sustaining
- ACAN course fees and sponsorship are used to pay for ACAN operational and course costs to keep the course self-sustaining
- ACAN Investment returns pay for ACAN Equipment

7.1 Receive the auditor's report of the financial accounts

Motion: That the Society receives the annual Financial Report and accompanying Auditor's report

Moved: Jana Vukovic
Seconded: Lyndsey Collins-Praino
Motion passed

7.2 Appoint Tinworth and Co as the auditors for the 2023/24 Financial Year

Motion: The Society appoints Mark Tinworth of Tinworth & Co as the Auditor for the 2023-2024 Financial Year

Moved: Jana Vukovic
Seconded: Anthony Hannan
Motion passed

8. Conference Executive Chair's Report

Jason Mattingley provided a verbal report for this meeting.

- It was confirmed that the 2023 Conference had a total of 547 delegates
- During the conference there would be 53 oral presentations, 38 data blitz talks, 261 posters and 11 Symposia

Jason thanked the Brisbane LOC Co-chairs Tara Walker and Thomas Burne and the LOC members Rachel Gormal, Rebecca San Gil, Laura Fenlon, Eduardo Albornoz, Nela Durisic, Rodrigo Suarez, Victor Anggono and Hilary Yong for their work in making the 2023 Conference a success.

9. ANS Awards

Michael Lardelli introduced the ANS Awards for 2023, thanking the Assessment Committee for their work with special thanks to Nicole Jones.

The ANS Awards recipients for 2023 are:

- **AW Campbell Award** – Dr Laura R. Fenlon, School of Biomedical Sciences, The University of Queensland

- **Nina Kondelos Award** – Prof. Johanna Montgomery, Department of Physiology, University of Auckland
- **Mark Rowe Award** – Joint recipients – Dr Stuart Oldham, Turner Institute for Brain and Mental Health, Monash University and Murdoch Children's Research Institute Oldham S, Fulcher BD, Aquino K, Arnatkeviciute A, Paquola C, Shishegar R, Fornito A
"Modelling spatial, developmental, physiological, and topological constraints on human brain connectivity"
– Science Advances 8, eabm6127, 2022
Dr Brett J. Kagan, Cortical Labs, Melbourne, Australia
Kagan BJ, Kitchen AC, Tran NT, Habibollahi F, Khajehnejad M, Parker BJ, Bhat A, Rollo B, Razi A, Friston KJ
"In vitro neurons learn and exhibit sentience when embodied in a simulated game-world"
– Neuron 110:3952-3969.e8, 2022
- **Paxinos-Watson Award** - Dr Brett J. Kagan, Cortical Labs, Melbourne, Australia
Kagan BJ, Kitchen AC, Tran NT, Habibollahi F, Khajehnejad M, Parker BJ, Bhat A, Rollo B, Razi A, Friston KJ
"In vitro neurons learn and exhibit sentience when embodied in a simulated game-world"
– Neuron 110:3952-3969.e8, 2022

10. ANS Distinguished Achievement Award

Janet Keast introduced Prof. Marcello Costa and presented him with the ANS Distinguished Achievement Award.

Marcello was nominated by Professor Nick Spencer for this award and at the October 10, 2023 ANS Council Meeting the award was confirmed unanimously.

Marcello thanked Nick Spencer for his nomination and the ANS Council for their vote in support. He also reflected briefly on his career as a neuroscientist in Australia. Marcello expressed a sincere hope that the next recipient of the ANS Distinguished Achievement Award would be a woman.

11. Appointment of 2024 office bearers and Council members

Michael Lardelli announced changes to the office bearers and Council members for 2024.

Thanks were given to outgoing Council members Peter Schofield, Rebecca San Gil, Ramesh Rajan and Chris Reid.

Michael then confirmed the ANS Council and office bearers for 2024.

2024 ANS Council & Office Bearers

Nicholas Price – *VIC Representative*
Karl Iremonger – *NZ Representative*
Ehsan Kheradpezhohu – *ACT Representative*
Thomas Burne – *QLD Representative*
Lezanne Ooi – *NSW Representative*
Jenna Ziebell – *TAS Representative*
Lyndsey Collins-Praino – *SA Representative*
Samantha Gardener – *WA Representative*
Kristie Smith – *Neuroscience Research Representative*
Alastair Fortune – *Student Body Chair*
John Bekkers – *Public Officer*

2024 ANS Executive

Janet Keast – *President*
Jason Mattingley – *President-elect*
Hamid Sohrabi – *Conference Executive Chair*
Jana Vukovic – *Treasurer*
Steve Kassem – *Treasurer-elect*
Michael Lardelli – *Secretary*
Matilde Balbi – *Secretary-elect*

12. Next Meeting/Close

The next ANS AGM will be held during the 2024 Conference in Perth, Monday 2 December – Wednesday 4 December. Finalised meeting date TBC.

There being no questions or other business raised, the meeting was closed at 1801 AEST.



July 2024

Communications

Is there information you would like included in our ANS Newsletter, published in our monthly online Bulletin, posted on our website, or Facebook page, or tweeted?

ANS has a Communications Committee to help members disseminate information and assist the Society in publicising its activities to Members and the public. This committee is co-chaired by Dr Nathalie Dehorter (Australian National University) and A/Prof Marco Morsch (Macquarie University). It oversees the production of the newsletter and ensures that current content is posted on the ANS website, published in our monthly online Bulletin prepared by the ANS Secretariat, posted on the ANS Facebook page (curated by Dr Nathalie Dehorter) and disseminated through postings on the ANS Twitter account (by Dr Lila Landowski, University of Tasmania) and LinkedIn (curated by Prof Thomas Fath, Macquarie University).

-  <http://www.ans.org.au>
-  <https://twitter.com/AusNeuroSoc>
-  <https://www.facebook.com/AusNeuroSoc>
-  <https://www.linkedin.com/groups/8362021/>

If you have content for us, please email Marco Morsch (marco.morsch@mq.edu.au).

Become an ANS member or student member!

Please join with your colleagues in Australia and New Zealand by becoming a Member of ANS. You can join online at any time!
<https://tas.currinda.com/register/organisation/172>

www.ans.org.au



Policy

ANS Policy on Requests for Publicity via Email Circulation:

The policy of ANS is to minimise email traffic to members. Advertisements for meetings and other significant announcements such as job vacancies can be added to the website and included in the newsletter and monthly bulletin if appropriate. Such requests should be directed to the ANS Secretary.

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