



## Canterbury Branch Royal Society of New Zealand Te Apārangi January 2025 Newsletter

Dear Member

Happy new year to you all. We hope you had a wonderful time with family and friends.

In this first newsletter of the year, we have a couple of travel grant reports, details of a Rutherford 2024 Medal winners talk, a proposed field trip, branch Constitution update, some plans for the next few Months, Children's University support and a Noble Prize winner talk coming to Christchurch.

### Branch Constitution

You would have received before Christmas a draft constitution for you to consider, that includes changes required by the new Incorporated Societies Act. We would really like your feedback, as it is your society and your vision for the future is important.

Societies, like ours, that has a history that nearly goes back to the beginning of the province, at like old architecture, it holds who we are, what we stand for. They are the foundation of the province. Yes, times have changed, but we all have a responsibility to keep as many of these institutions going a possible, and while kept the purpose and intentions of the founders, modernise these to the current time.

That is why your input is so important. We will hold an evening later in February, so you can give us your thoughts and vision, so that they can be included into the constitution.

We will send out details of this early in February.

### 2024 Rutherford Medal Winner

[Professor Richard Beasley](#), the 2024 Rutherford Medal Winner will present a talk/discussion about his work. Richard, a clinician researcher, is Director of the Medical Research Institute of New Zealand, Research Physician at Te Whatu Ora Capital, Coast and Hutt Valley, Professor of Medicine at Te Herenga Waka – Victoria University of Wellington, Adjunct Professor at Ōtākou Whakaihū Waka University of Otago and Visiting Professor at University of Southampton in the United Kingdom. His main research focus has been on asthma, which has been a major health problem both in New Zealand, which has one of the highest rates of asthma in the world, and globally.

Date: Wednesday 27<sup>th</sup> August 2025

Venue: TBD

Time: TBD

## **Students travel grants.**

### **Awarded.**

### **Reports from grant recipients.**

2025 ANZSWWER Conference -Report from the Ara Social Work Team

With support from your society, the social work academic team at Ara Institute of Canterbury were able to attend the annual ANZASWWER conference in Dunedin. This is an Australia/New Zealand conference and is regularly held in Australia. It is an extremely worthwhile event in terms of content and research outputs, however often out of financial reach for many academics. That it was held in Te Waipounamu this year was a golden opportunity to attend, and the Society's funding paid for accommodation and a few other expenses. We are very grateful.

Each of the team has written a short paragraph on the impact of attending the conference on their research and teaching career.

#### [Dr Dominic Chilvers](#)

Two significant things came from the conference that will benefit my research. Firstly, I was asked by an Australian colleague if there would be an opportunity to work together to repeat our research into distress during placement in Australia. This would significantly increase the participant pool and therefore the trustworthiness of our research. Secondly, I was able to establish a mentoring relationship with a very experienced Australian academic (Ronnie Egan) and she has agreed to offer formal professional supervision. These opportunities would be unlikely to have eventuated without attending the symposium, so I really appreciate the financial support to attend.

#### [Kath Harrison](#)

As social workers educators, we have obligations to uphold the social justice mission of the profession while also progressing the teaching, learning and research activities of our substantive roles. At times these Kaupapa can feel entirely separate, and on occasion even in conflict. For me, one of the most resonating aspects of attending the ANZSWWER conference this year, was the reminder from Keynote Speaker Associate Professor Tracie Mafile'o that "storytelling is how we will decolonise teaching and research" (Kovach, 2018) and that "slow scholarship pushes against neoliberalism in higher education" (Wahab et al, 2022). As a passionate social justice advocate, and relatively new researcher, this was a timely reminder to hold on to the integrity of values-informed processes in the face of time pressures and competing demands. Equally, in spaces where indigenous or qualitative approaches may be considered as somehow less valid or valuable, I will hold onto my belief that 'storytelling is relational, storytelling is evocative, storytelling is political, storytelling is transformative'.

#### [Amelia Tuakana](#)

As a Pasifika educator, the idea of research has never been that appealing to me, my strength is whanaungatanga and talanoa (discussion), not so much academic writing. I was grateful for the opportunity to attend; it allowed me to listen, connect and be inspired by some amazing Pasifika academics that are passionate about research; this has supported and captured the voices of our people and communities. It also empowered me to believe that I am capable of pursuing research. One highlight for me was talking to the keynote speaker who is Pasifika, I was honest about my hesitation, and she encouraged me to consider writing a piece of work to capture what I am doing to support our Pasifika ākonga in the talanoa space.

Ironically, this example demonstrates self-belief, what is a bit part of my WHY in supporting our Pasifika ākongā in the degree to empower their self-belief too.

[Anna Scott](#)

Thank you very much to the Royal Society of NZ (Canterbury Branch). Through your generosity, I was able to present at my first conference and to be an international one was an amazing opportunity. My project is in conjunction with Fiona Clarke from the University of Canterbury about our collaborative approach to social work placements in Ōtautahi. Ultimately, this is about being student focused and finding ways to meet their needs in challenging times. Fiona and I will continue to build on this project in 2025. Attending other presentations, I was so inspired being surrounded by other social work educators. The whole experience was very applicable to the work I do. Following one presentation, I have already contacted the midwifery teaching team at Ara about the possibility of developing interprofessional simulations for skills development. This will be a great learning opportunity for both social work and midwifery ākongā.

[Jimi McKay](#)

Highlights of the conference were connecting with other social work educators from Aotearoa and Australia. The presentation I submitted on 'Engaging social work students with social justice practices in education' was well received with lot of Q&A post presentation. In talking with colleagues from across the motu and Australia I didn't appreciate how more advanced some of what we teach to around social justice for social work practice is. Though not a presentation on a specific piece of research, it did get me thinking about publication of what we're doing in our teaching space. A rough scan of the literature identified that social justice social work practices isn't well articulated, and there is scope for further publications around this.

[Dr Adele Parkinson](#)

I find attending conferences such as ANZSWWER inspires my thinking, and exposure to new ideas sparks a process in which I begin to make research connections in my mind and become curious about topics. This fuels my research career, as research begins with such ideas and ponderings. I have been considering several research possibilities since attending this conference. Although not yet fully evolved, these will bear fruit at some stage. Meeting with other academics is also highly useful. I am currently working towards establishing a research collaboration in my field of interest (parent and child mental health) in Aotearoa New Zealand, and conversations with several academics at the conference has provided possibilities for future collaboration. In relation to a current research project about which I was presenting at the conference, it was so useful to meet with my co-presenter and collaborator in person (he lives in Dunedin): this helped to extend our thinking on the topic and reach consensus on some crucial points. Additionally, the entire process of preparing for and presenting has moved me further along in my preparation for writing the indigenous ally paper.

A further highlight for us all was to be at the conference as a team. Research is not an easy process, and it requires support and many minds. To be away together, talking about ideas and learning, was a privilege we do not take for granted. We are very grateful to the Society for enabling us to attend.

On behalf of the social work team,

Ngā mihi mahana

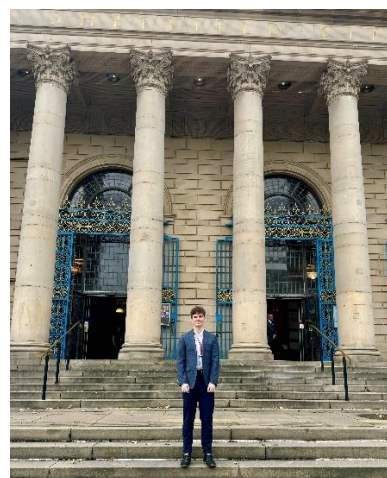
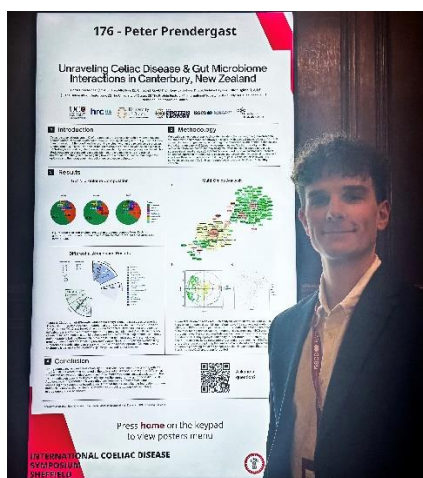
Adele Parkinson

From **Peter Prendergast**  
**Royal Society of New Zealand (RSNZ) Canterbury Branch Travel Award Report**  
**Peter Prendergast**  
**Email: Peter.prendergast@pg.canterbury.ac.nz**

My name is Peter Prendergast, and I am currently doing a PhD at The University of Canterbury. From September 5th to 7th, I had the honour of attending the 20th International Celiac Disease Symposium (ICDS) in Sheffield, UK. This opportunity was made possible through the support of the Royal Society of New Zealand (RSNZ) Canterbury Branch travel award, and I am truly grateful for the assistance. During the symposium, I presented findings from the first year and a half of my PhD research in the form of a poster. My work centres on understanding the interactions between the gut microbiome and celiac disease, specifically focusing on the Canterbury region of New Zealand. This research holds particular importance as it sheds light on a previously unexplored celiac disease population within a region that reports one of the highest incidences of the disease globally.

In my study, I analysed sequencing data to characterise the gut microbiome composition in paediatric patients with celiac disease. This work also integrates metabolic data and employs multi-omics analysis to identify associations between gut bacteria and metabolic pathways that may play a role in the pathogenesis of celiac disease. One of the main goals of this research is to pinpoint high-risk bacteria and investigate their connections to disease-related metabolic processes, an area that remains highly active and promising within the broader celiac disease research field. Participating in ICDS provided a valuable platform to share my findings with a global community of experts and gather constructive feedback. Beyond presenting my work, the symposium allowed me to deepen my understanding of other dimensions of celiac disease research, including clinical diagnosis, therapeutic innovations, and dietary management strategies. This conference broadened my perspective and reinforced the importance of a multidisciplinary approach to tackling complex health conditions.

Overall, attending the ICDS was an invaluable experience. It not only advanced my knowledge within my area of focus but also inspired new ideas and collaborative possibilities. I returned to New Zealand with fresh insights, renewed enthusiasm for my research, and a deeper appreciation for the global efforts in understanding and addressing celiac disease. I remain immensely thankful to the RSNZ Canterbury Branch for making this opportunity possible and enabling me to contribute to this vital area



## Bug of the year

It's that time of the year again to vote for your favourite bug of the year.

Society member Rob is asking for your support for the Giant Springtail.



[Vote Here for 2025 Bug of the Year](#)-and don't forget to include the **GIANT SPRINGTAIL** as one of your three choices!

But wait there is even more!

There is even a colouring competition. Just colour the springtail (attached to the email) with your wildest colour schemes and post an image/photo of it on social media (Instagram, Bluesky or Mastodon) with the hashtag #TeamGiantSpringtail. The best one (as judged by [Frank Ashwood](#)) will win a free giant springtail photo print! No age categories - young or old, just have a go! Closing date for the contest will be Valentine's Day, Friday 14th Feb. Make sure to vote for the Giant Springtail in the Bug of the Year competition before entering the colouring-in contest.

Do you have a favourite bug, let us know. Post it on our Facebook page.

## Free public lecture: 'From curiosity to technological impact', hosted by Mounqi Bawendi, the joint 2023 Nobel Prize in Chemistry winner



We are pleased to invite you to a free public lecture: 'From curiosity to technological impact', hosted by Mounqi Bawendi.

Mounqi Bawendi is a Professor at MIT where his laboratory applies nanomaterials for light emission, photodetection, spectral sensing, solar energy harvesting, and bio-imaging applications. Professor Bawendi shared the 2023 Nobel Prize in Chemistry, for the discovery and synthesis of quantum dots.

Quantum dots, one of the first materials to inhabit the realm of nanoscience, have become ubiquitous in displays and other applications. His talk will discuss their origin story as well as their development and applications during a span of almost 4 decades. A story that reflects the importance of curiosity driven science to drive innovation and technological progress.

### Lecture Details

**Time: Monday 10 February 7pm - 8.30pm**

**Location: [Te Pae Christchurch Convention Centre, Christchurch](#)**

[REGISTER HERE](#)

## Next Annual General Meeting

The 2024 Annual General Meeting will be held on the Wednesday March 26<sup>th</sup>. Venue to be decided.

How about thinking about coming on to the council and join the team. Your input, help, support and ideas will be welcomed.

## Children's University

As you will know, we supported a programme by the Children's University involving microscopes and forest litter, which was highly successful.

Last week, I met with Jack Swannell, Operations manager and they will be presenting a proposal to the branch council in February for either a continuation support of the programme or a different programme.

Also, we have an agreement to put to the council for the branch to become a Learning Destination for the activities the branch has, especially the public talks, so those students enrolled in the Children's University

can gain hours to put towards their graduation. Once the council has approved the agreement form, the Children's University will promote our coming activities to their students and parents.

Some of the council also attended the graduations ceremonies held last November. It was really exciting to see the joy and dedication of these 7–14-year-old receiving their certificates.



One of the recipients receiving their certificate

## Branch Podcast

Plans for our podcasts are coming together. We should be able to give the council a draft outline and costs to be considered at the council meeting in February. All going to plan, we should have the first podcast on air April/May.

## Branch members field trip

We are planning a field trip, probably late February or March to the Tawhaki National Aerospace Centre here in Christchurch and hopefully to their site at Kaitorete.

We should have everything confirmed by the end of next week or early in the following week.

Those who are interested can contact [rwfagg@gmail.com](mailto:rwfagg@gmail.com) to register their interest.

## Link and Alert newsletters

<https://www.royalsociety.org.nz/fellows-and-members/link-news/2024/july/>

Don't forget you can subscribe to the RSNZ Te Apārangi weekly Alert newsletter shares events, news, and opportunities for those interested in exploring and discovering knowledge or reading past issues at

<https://www.royalsociety.org.nz/whats-happening/alert-newsletter/>.

## Upcoming Branch talks, field trips, and related activities

### Christchurch talks

Prof Ann Brower- Changing the world one data point at a time.

Date: late February/March

Venue: TBD

Rutherford Medal winner- Professor Richard Beasley, the 2024 Rutherford Medal Winner  
Wednesday 27<sup>th</sup> August  
Venue TBD  
Time TBD

### **Timaru talks**

No events planned

### **Upcoming field trips**

#### **Christchurch**

Proposed trip to Tawhaki National Aerospace Centre  
Date late February/March

And don't forget our CO2 monitor you can borrow. Contact us and we'll arrange for you to pick it up. A guide to recommended CO2 measurements can be found at <https://www.rnz.co.nz/news/in-depth/470690/whose-breath-are-you-breathing>.

All we ask in return is that you post your findings on either the branch's Facebook page or Twitter.

## **From other branches and RSNZ Te Apārangi**

### **From Royal Society Te Apārangi**

#### [Crown Research Institutes to merge into three mega science groups](#)

The Crown Research Institutes will be merged as part of sweeping changes to the science sector.

In an email to staff seen by RNZ, the seven CRIs will become three mega science organisations - "Public Research Organisations" (PROs) - with a fourth established to focus on "advanced technology".

**Mary Argue @RNZ**



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Read the [Minister's announcement](#).

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### [First Science System Advisory Group report released](#)

The first report from the Science System Advisory Group (SSAG) is now available. This document provides preliminary advice and recommendations on the architecture and principles for the future of the science sector. Sir **Peter Gluckman** FRS FRSNZ, chair of the Science System Advisory Group (SSAG), says he is [delighted the government has accepted the core concepts arising from the group's first report](#) recommendations.

**@Science System Advisory Group**

### ['Profound consequences': Canterbury University scientists make 'dark energy' breakthrough](#)

New research by Canterbury University scientists suggests that dark energy doesn't actually exist.

Now, a team of New Zealand physicists led by Professor David Wiltshire analysed light curves from the Pantheon+ supernovae to show the universe was expanding in a "lumpier" way.

@RNZ

This research is funded by a [Marsden Fund Standard](#) grant and the Rutherford Foundation.



## Science System Advisory Group



### [The summer the Southern Alps turned red](#)

**By Dr Holly Winton, Dr Phil Novis and Dr Heather Purdie**

New research uncovers the real source of the red dust that blanketed the mountains in the summer of 2019/2020 and explains why climate change could see events like this happen more often.

When snow on the Southern Alps turned from white to red in the summer of 2019/2020, ash from Australia's bushfires was blamed. But researchers studying the event now say the real culprit was desert dust storms that sent massive amounts of red dust across the Tasman Sea. These storms are likely to occur more often as the climate warms.

[Read more.](#)

This research is funded by a [Marsden Fund Standard](#) grant.

["Hawke's Bay Scientists on Air" radio broadcasts](#), which we support, now go to air each second Monday after the 10:00 am news.

"Talking About" is the Otago Institute's podcast series. It features topical conversations about anything and everything from the worlds of Arts, Sciences, and Mātauranga Māori.

<https://oar.org.nz/oi-podcast/>

## Other items of interest

### From British Museum



Rather than a single trade route between 'East' and 'West' the Silk Roads were an overlapping network that connected Asia, Africa and Europe. Today, with the help of curators Sue Brunning, Luk Yu-ping, Elisabeth O'Connell and Zumrad Ilyasova, you will journey along the networks of the Silk Roads, following in the footsteps of the people and objects that used them between 500-1000 CE.

Click here for link

<https://youtu.be/prdfejAsrNI?si=1fiLcsPTyorKdORb>

### From The National Gallery



'200 Years of the National Gallery'. Travel back through 200 extraordinary years of our history - from our origins in a private house in Pall Mall to our current home in bustling Trafalgar Square. '200 Years of Your National Gallery' is a three-part documentary miniseries. Stream for free exclusively on YouTube. Through the eyes of the staff, past and present, who care for the nation's collection, and with rarely seen and newly digitised archive footage and images, we go exclusively behind-the-scenes to see the role the Gallery plays at the heart of cultural life of the UK.

Click here for link

<https://youtu.be/V0fQZLgGJpw?si=zftkSHalnZ6wpXsH>

## From the Linnean Society of London



### Leonhard Fuchs's History of Plants (1542) | Sachiko Kusakawa

Leonhard Fuchs's *History of Plants*, published in 1542, was a landmark in Renaissance book-printing. It contained more than five hundred large woodcuts of plants, accompanied by their morphological description and medicinal uses. Typical of its time, Fuchs's study was based on a classical work on the medicinal uses of plants by Dioscorides (first century AD). Unusually for its time, Fuchs's book contained an illustration of the artists that were involved in the production of the images. Fuchs had good reason to be proud of the artists, as they created for him the beautiful illustrations that functioned in multiple ways to aid the study of plants. I will introduce the ways in which illustrations mattered in Fuchs's *History of Plants* before having a look at the copy now at the Linnean Society. Sachiko Kusakawa is fellow in the history and philosophy of science at Trinity College, Cambridge, and has published widely on the history of scientific illustrations. She has published widely on illustrations in sixteenth-century printed works on botany, anatomy and natural history, and on scientific drawings in the early Royal Society of London. Her most recent book is about one of the most famous books in the history of medicine (*De humani corporis fabrica*), Andreas Vesalius: anatomy and the world of books (2024).

Click here for link [https://youtu.be/bN-wLc6Jmx8?si=PW9FJZZ\\_877IWEWJ](https://youtu.be/bN-wLc6Jmx8?si=PW9FJZZ_877IWEWJ)

## From Science News



### Megadroughts are on the rise worldwide

One of the most extreme megadroughts has helped fuel wildfires in Los Angeles County and elsewhere in California.

[Read More](#)



### Ancient, engraved stones may have been buried to summon the sun

Members of a Stone Age culture in Denmark may have ritually buried stones to counter the effects of a volcanic eruption.

[Read More](#)

That's all for this month. Don't forgot you can keep updated on the branch's Facebook page Canterbury RSNZ Branch or Twitter @CanterburyRSNZ.

If have any suggestions for speakers, field trip ideas, or even contribute something to the newsletter please contact us and if you want to help us, please contact us, your input is valued. and we are always willing to discuss anything regarding the branch with you.

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