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The New Zealand Statistical Association

Newsletter

Number 95 November 2026

Welcomes

- Welcome from the President
- Editorial

Obituaries

- Garry Dickinson
- Bill Bolstad

Upcoming Conferences and Events

- Australasian Applied Statistics Conference 2026
- NZSA Conference 2026
- The 40th Anniversary Symposium of Japanese Society of Computational Statistics

Conference and Event Reports

- Women in Data Science NZ 2026

Updates

- NZSA Mentoring Program
- SECS Network
- ANZJS: Statistical Computing

Statistics Education Teams

- Statistics Education Research

Local News

Statistics at:

- Biostatistics Centre on Dunedin Campus, University of Otago
- Statistics Research Associates Ltd
- Department of Mathematics and Statistics, University of Otago
- Luma Analytics
- Department of Mathematical Sciences, AUT
- Milford Asset Management
- Bioeconomy Science Institute
- Department of Statistics, University of Auckland

President's Welcome

by JOHN HAYWOOD



Kia ora koutou,

Welcome from me to this second issue of the NZSA Newsletter for 2026. I hope that everyone has had a good year and, like me, you're looking forward to the summer ahead, including our own NZSA Conference in Auckland in mid-December. As always, a big thank you to all our newsletter contributors plus reviewers, and to our editor, David.

You will note we have two obituaries included in this issue. Of course that is two more than we would like to see, but certainly it is fitting to acknowledge and celebrate the impact that Garry Dickinson and Bill Bolstad had on Statistics within New Zealand, in their respective ways.

The mahi from our wonderful members of the NZSA's Executive Committee has kept on delivering throughout this year on the mission of the NZSA: *to lead New Zealand to value and make intelligent use of statistical thinking and good statistical practice*. Our membership numbers continue to grow strongly: in April's Newsletter I reported we had 588 members in total, and by early November that total has reached 649. So that's an increase of just over 10 % within half a year, which is amazing. Also, NZSA membership is now by far the largest it has been since the Association was formed, back in 1948. Kia kaha, NZ Statisticians!

Treasurer Ciprian Giurcăneanu has completed annual reporting for our GST return and our Charities Services registration, with both those returns involving a lot of work - thanks so much, Ciprian. Our Science Fairs Convenor, Roy Costilla, coordinated NZSA support this year for 13 Science Fairs all over the motu, from Northland to Southland, and with sponsorship of $200 per fair.

In other NZSA sponsorship news, the Executive Committee agreed to continue our support of the New Zealand Mathematics and Statistics Postgraduate Conference (NZMASP), to be held this year at the University of Otago, from 25-27 November. Early in the year we also funded two poster prizes (of $250 AUD each, paid to Bao Anh Vu and Alejandra Avalos Pacheco) at the Bayes on the Beach Conference (9-11 Feb 2026), which this year was held in Wollongong, NSW. In addition, NZSA was a Gold sponsor for the Women in Data Science New Zealand (WiDS NZ) 2026 meeting held on 25 August at Victoria University of Wellington, with NZSA's Secretary, Ivy Liu, one of the main organisers. Our mentoring champion, Lisa Thomasen, also addressed that WiDS NZ session, which you can read more about within this issue. A further WiDS NZ session, which NZSA will also sponsor, is planned for the afternoon of Wednesday 16 December, as a satellite meeting following the main NZSA Conference.

There are details about three upcoming conferences included in the Newsletter, including our own NZSA 2026 Conference that is scheduled for 14-16 December at the University of Auckland. Thanks to our Past President, Beatrix Jones, for leading the Organising Committee for what should be a great, three-day celebration of many things statistical - and note that registration is still possible! Our own three-day conference is followed by the 40th Anniversary Symposium of the Japanese Society of Computational Statistics (JSCS), also at the University of Auckland, with last year's Littlejohn Research Award recipient, Thomas Yee, heavily involved as a member of the local organising committee for the JSCS

Symposium. Thomas is also running one of the workshops on Wednesday afternoon (16 Dec) that follows the main NZSA Conference - so Thomas has a very busy week coming up in mid-December! I'm looking forward to catching up with many of you at this year's conference - and look out for an announcement, coming soon by email, about how to join the NZSA's Annual General Meeting (AGM) online, if you can't make it to Auckland in person this year.

Activities coordinated by our Mentoring and SECS reps (Lisa Thomasen, and the team of Muskaan plus James Bristow, respectively) continue to go from strength to strength - and I'm sure those activities are partly responsible for our strong growth in membership over recent years - thanks so much, to the whole of the Mentoring and SECS teams. The second annual recipient of the NZSA Tidy International Travel Scholarship has been chosen by the SECS team (congrats to Adam Wong-Toi!), with that award generously funded by Hadley Wickham. Adam will attend the Australasian Applied Statistics Conference (30 Nov-4 Dec), and Vanessa Cave gives us more info about that conference within the Newsletter. Also, for what I'm sure is the first time, the Newsletter features an image of Wonder Woman, aka "Conference Kelley" [Kelley Kidwell, U. Michigan] - Lisa Thomasen explains more about that as part of her report on this year's Mentoring Program activities. Perhaps we will see more superheroes, or their alter egos, at this year's NZSA Conference?

There will be quite a large number of changes in the make-up of the NZSA's Executive Committee at this year's AGM. Without spoiling the surprise of who members can vote for to take on some of the various Exec roles on 15 December, it is appropriate here to give a very big thank you to people who are completing their terms of service and finding other ways to support NZSA, or simply taking a well-earned rest!

Huge thanks to:

Secretary: Ivy Liu; Past-President: Beatrix Jones; Membership Secretary: Matt Parry; Awards Committee Convenor: Vanessa Cave; Mentoring Programme Representative: Lisa Thomasen; Student and Early Career Statisticians Representative: Muskaan; R Users Group Representative: Shirley Wu; Website Administrator: Heather Jenkins; and Newsletter Editor: David Huijser.

As well as changes to the NZSA Executive Committee, members will know we (and the Education Committee in particular) have been heavily involved in commentary and suggestions about the changes being made to the Mathematics and Statistics areas of the School Curriculum. The General Manager of the Ministry of Education's Curriculum Centre has written to me (as NZSA President, in response to letters I sent on behalf of NZSA) more than once, to thank NZSA for our helpful and constructive suggestions, many of which have been carefully pulled together by Chris Wild. As always, Maxine Pfannkuch's Ed Comm report is full of feedback from a very active committee, chaired wonderfully by Pip Arnold - and you can read in Maxine's report more about the reasons why Chris Wild has received the inaugural International Association for Statistical Education (IASE) "Advocacy in Statistics Education Award". This award is truly very well deserved - many congratulations, Chris!

Best wishes,

John

Editorial

by David Huijser



Kia ora koutou,

Welcome to Issue 95 of the NZSA Newsletter!

Once again, this issue comes to you a little later than originally planned. My apologies to all our contributors, particularly those who had to revisit and rewrite their material because it had become outdated while we were putting the issue together.

I must pause to share some sad news. We recently lost two members of our NZSA community, and their contributions will not be forgotten. Later in this newsletter, you'll find an obituary for Bill Bolstad written by Lyn Hunt and Harold Henderson and an obituary for Garry Dickinson written by Len Cook, with contributions from David Rhoades, Vince Galvin, Ross Dickinson and others.

There are also a few changes to our contributors to note.

For many years, Lisa has contributed to the NZSA Newsletter on behalf of Fonterra, as well as covering the Mentoring Programme. We would like to thank her for her contributions.

I am also very pleased to welcome back Mazen Kassis as a contributor. As Head of Data, Insights and AI at Milford Asset Management, Mazen brings a perspective from the rapidly evolving intersection of statistics, data science and artificial intelligence. He has made a contribution to this issue, which you can find later in the Newsletter.

This edition also features a one-time contribution from Tilman Davies, Statistical Computing Editor for the ANZJS, which you can find in the Updates section of this newsletter. We would also like to take this opportunity to highlight the Statistical Computing Section of the ANZJS and remind readers that it provides an excellent outlet for research and developments in statistical computing.

On a different note, in the last newsletter we briefly mentioned the event where Len Cook discussed his newly published book. This provides a nice example of a mixture model: on the one hand, I am delighted to report that the book has already completely sold out; on the other hand, I feel a little sorry for those who missed the opportunity to secure a copy before they disappeared from the shelves!

I am very grateful to everyone who has contributed to this issue. The continued willingness of our members to share their work, experiences and perspectives is a testament to the vitality of our statistical community—and is what makes the Newsletter possible.

So, without further delay, I hope you enjoy Issue 95!

As always, please send any items for our next issue - planned for April 2027 - to newsletter@stats.org.nz.

Hei konā mai,

David Huijser

Obituaries

Garry Dickinson

by Len Cook, with contributions from David Rhoades, Vince Galvin, Ross Dickinson and others



Garry Dickinson at the 1999 NZSA Conference dinner at Victoria University of Wellington

Garry Dickinson – Recollections of statistical colleagues

Garry Dickinson came to Statistics NZ in 1978, having been appointed as one of the four Assistant Government Statisticians, and he was responsible for methodology. His corner office on the 3rd floor of Aorangi House made him readily accessible to the teams that he was responsible for. About 1993 Garry became Chief Mathematical Statistics Advisor, which was the post from which he eventually retired. He and Rosalie then moved to Nelson, where Garry lived until he died in 2025. Rosalie died about 5 years ago. In line with his great capacity for detail, Garry built sophisticated models including old sailing ships, while Rosalie played a part in the community gardens of Nelson.

Garry and Rosalie were a strong part of the New Zealand statistics community for some four decades, at a time when cross agency collegiality was very high, fostered very much by those with the interest in both statistics and people that Garry and others brought to it. I recall that one Saturday in 1981, I popped into the department after a demonstration opposing the Springbok Rugby tour and found Garry in his office. I learned then that he had been involved in 1960 in the "No Māori No Tour" demonstrations way back when protesting was less easy. Garry also helped me wallpaper my first house in Karori in 1978, and during the hanging of the third drop, Shirley had the courage to tell my then boss that he had put the wallpaper on upside down.

Ross Dickinson, Garry's brother, tells us that Garry was born in Taihape in 1942. After war when Garry's father, an RNZAF pilot, returned to NZ, they lived in Feilding before the Dickinson family moved to Fordell, from where Garry attended Wanganui Technical College. Garry then studied at Victoria University of Wellington, completing a BSc in 1961 and an MSc (in mathematics) in 1962. Garry then joined the

DSIR Applied Mathematics Division, and after two years travelled to the UK, where he worked for the company laying the Cook Strait cable, British Insulated Callender's Cable Ltd. In 1967 he achieved an MSc (in statistics) from London University through part-time study.

David Rhoades notes that Garry joined the Applied Mathematics Division of the DSIR on January 4, 1963, then left in 1964, then rejoined in 1971 and had a total of 10 years of service. When David joined the Applied Maths Division in 1976, he was put into Garry's room. This was large enough to be divided in two, which Garry soon did as a DIY project, with a little bit of help from David. I remember visiting Garry a bit after that and recall his pride in being able to get around the rules of the day.

David recalled that he associated Garry with multivariate methods and social statistics, although his work was obviously much wider than that. He gave David a lot of insights into practical statistics, which David lacked at that time, because when he joined "my mind was mainly full of abstract probability theory". My own recollection of Garry's time before he came to the Department of Statistics is very similar – he taught me how to use AID (Automatic Interaction Detection), which he once described as multivariate graph paper, when we were analysing the 1974 Survey of Persons aged 65 and over.

He played a major part in the comprehensive rethink of population census methods after 1981, which led in 1986 to perhaps the most successful innovation of a statistical system that I have seen. Innovation in methodology and information technology was accompanied by questionnaire transformation, new field enumeration practices and new vehicles for accessing information, including CD ROM, and table generating tools. In my mind, it remains a role model for any top-down transformation, and Garry along with John Darwin, Steve Kuzmicich and Ron Welply led that. Garry also oversaw the Electronic Data Processing Group for a long time, introducing client server systems and preparing for data integration across the whole agency.

Garry initiated and oversaw the professional gathering of the oral histories of those still alive then who had retired by who played a major part in official statistics from the 1940s. These are now available from the National Library.

During the 1960s, Garry was involved in advising the Society for Research on Women on survey practices and analysis, and among his less tangible contributions to the Department of Statistics in the 1980s was his enthusiastic participation in discussions about how to progress the development of Social Statistics that occurred in this time. He also maintained an active interest in the NZ professional community, serving as the President of NZSA from 1984-1986.

After leaving Statistics New Zealand Garry was involved as a statistical consultant. For example, during 1998-1999, the Broadcasting Standards Authority embarked on a major research project: Monitoring Community Attitudes in Changing Mediascapes. This was a major public opinion survey on attitudes towards broadcasting standards issues, for which Garry was the expert statistical advisor.

Not surprisingly, the Applied Mathematics Division history also includes an article by Garry on "Exciting times for computing pioneers" and lists some of his reports and publications, the topics of which included:

* A market research application of multivariate analysis techniques

* The correlates of severe child abuse

* An application of general linear modelling to the analysis of contingency tables

Working with Garry was always collegial and stimulating, and Garry very quietly mentored many of us at critical times of our careers. He was always available for advice.

These recollections of professional colleagues were not able to be submitted to Garry, as we recently found that he died in June 2025. Although over 20 years have passed since any of us have been closely associated, Garry and Rosalie were well known to several generations of New Zealand Statisticians.

Bill Bolstad (1943 – 2026)

by Lyn Hunt and Harold Henderson



Bill was a valued staff member at the University of Waikato and retired as senior lecturer in statistics at the end of 2012. He was awarded the title Honorary Fellow at the University of Waikato in 2013.

After completing his graduate studies in mathematics at the University of Missouri in 1965, Bill then carried on with mathematical statistics at Stanford University, California, while working at Lockheed Missile & Space Co. as an Associate Engineer and continuing on to the position of Dynamics Engineer by 1968. He later moved to New Zealand where he tutored part-time in mathematics and statistics at the Waikato Polytechnic in Hamilton, going on to teach at secondary level at Hamilton Boys' High School until joining the University of Waikato in 1975.

He completed his PhD in Statistics, "Estimating and forecasting univariate and multivariate time series using dynamic linear models" at the University of Waikato in 1990.

Bill's research interests were in Bayesian statistics, MCMC methods, recursive estimation techniques; multiprocess dynamic time series models; forecasting and control.

As Bill wrote in 2013 on his staff web: "I am interested in Bayesian statistics and Bayesian methods applied to time series analysis. With the advent of Markov chain Monte Carlo sampling based methods, Bayesian methods can now be applied to a much wider class of models than the restricted class that is, analytically tractable. Removing this impediment will lead to a much greater use of Bayesian statistics in the future, allowing their known theoretical advantages to be utilized. One of the main reasons that frequentist methods dominate current statistical practice is the lack of exposure to Bayesian ideas in introductory statistics courses. I have written a book, Introduction to Bayesian Statistics, to introduce students to this approach which is widely used all over the world, as well as being the text for STAT226B at Waikato. This year I am introducing a new course, STAT326B "Computational Bayesian Statistics", and am currently engaged in writing another book based on this course."

Bill was responsible for starting two courses in Bayesian statistics at the University. He also published two books on Bayesian Statistics:

- Understanding Computational Bayesian Statistics, 2010, William M Bolstad
- Introduction to Bayesian Statistics, 2017, William M Bolstad and James M Curran

When he retired he donated money for the "William and Sylvie Bolstad Prize in Bayesian Statistics" to the top undergraduate student in a Bayesian Statistics paper at the University of Waikato each year.

Bill and Sylvie's son, Ben, earned an MSc (Hons) in Statistics from the University of Waikato in 1997 and went on to complete a PhD under Terry Speed at UC Berkeley in 2004. Further information about his work is available on his website https://bmbolstad.com/.

Upcoming Conferences and Events

Australasian Applied Statistics Conference 2026

by Vanessa Cave



The Australasian Applied Statistics Conference 2026 (AASC2026) will be held on the Sunshine Coast from the 30 November to the 4 December 2026.

AASC2026 is for anyone passionate about real-world data analysis, providing opportunities to exchange ideas in all areas of applied statistics, as well as encouraging networking and collaboration. Whether you are a student, researcher, industry representative, or simply have a keen interest in anything related to statistics, AASC2026 will provide plenty of opportunities to learn, engage, share, and connect with fellow data science enthusiasts in a friendly setting.

More information is available on the conference website (https://aasc2026.netlify.app/).

2026 NZSA Conference

by Beatrix Jones



The 76th annual New Zealand Statistical Association (NZSA) conference will be hosted by the University of Auckland, December 14-16.

Keynote speakers:

- Francois-Xavier Briol, University College London
- Alain Vandal, University of Auckland
- Rachel Owens, Air New Zealand
- Chanatda Somchit, New Zealand Institute for Bioeconomy Science

For more information click on this link.

The Japanese Society of Computational Statistics will be holding their 40th Anniversary symposium at the University of Auckland, December 17-18. They have invited NZSA members to attend the keynote sessions without cost/registration. Alternatively, you may fully participate in their conference by registering at special rates for NZSA members (FREE for students, and about $60 NZD for others): JSCS registration page.

The 40th Anniversary Symposium of Japanese Society of Computational Statistics

by THOMAS YEE



To mark its 40th anniversary, the Japanese Society of Computational Statistics will host a commemorative symposium, bringing together domestic and international researchers to share recent advances in computational statistics and promote global collaboration.
The timing of the symposium aligns with the NZSA Conference week, including a shared Wednesday, allowing attendees to benefit from both events.

Dates: December 17–18, 2026

Location: University of Auckland

Keynote Speakers

- Thomas Lumley, PhD
  Professor and Chair in Biostatistics, Faculty of Science, University of Auckland
  (Fellow of the Royal Society of New Zealand, Fellow of the American Statistical Association, Member of the International Statistical Institute)

- Paul Murrell, PhD
  Associate Professor, Faculty of Science, University of Auckland
  (Fellow of the American Statistical Association)

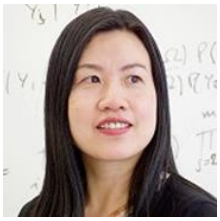
- Simon Urbanek, PhD
  Associate Professor, Faculty of Science, University of Auckland

For more information, please visit:
https://jscs-sympo40anniv.ywstat.jp/

Conference and Event Reports

WidS NZ 2026

by Ivy Liu



Women in Data Science New Zealand (WiDS NZ) 2026 was successfully held on 25 August 2026 at RHLT1, Rutherford House, Pipitea Campus, Victoria University of Wellington, Wellington, New Zealand. See the photos below. The event was organised by the Centre for Data Science and Artificial Intelligence (CDSAI) and co-chaired by WiDS New Zealand Ambassadors Kate Kolich (Head of Data and Artificial Intelligence at Contact Energy), Ivy Liu (Professor in Statistics, Deputy Director in the Centre for Data Science and Artificial Intelligence at Victoria University of Wellington), Bing Xue (Professor of Artificial Intelligence, and Deputy Head of School in the School of Engineering and Computer Science at Victoria University of Wellington), and Qi Chen (Senior Lecturer at Victoria University of Wellington). The New Zealand Statistical Association (NZSA) was a gold sponsor of the event. WiDS NZ expressed its appreciation to all of the 2026 sponsors, whose support enabled the event to remain free to attend and made it possible to offer three undergraduate and one postgraduate scholarships to women studying data science.

WiDS NZ is part of the international Women in Data Science initiative and aims to inspire and educate data scientists, support women in the field, and showcase outstanding work across academia and industry. The event featured an extensive programme of keynote and invited talks, as well as panel discussions. Lisa Thomasen, representing NZSA, gave an invited talk in which she shared her experiences in mentoring and community-building. She strongly encouraged attendees to join NZSA and take advantage of its mentoring programmes.

The event attracted 270 registrations, with approximately 150 attendees including academics, students and early-career professionals. It provided valuable opportunities for networking and professional development. Strong attendance, a diverse programme, interactive discussions, and networking were among the key highlights of the event.

WiDS NZ 2026 continued the initiative's broader mission of supporting women pursuing careers in data science while remaining open and inclusive to participants of all genders.



A list of all sponsors





Speakers and four scholarship winners (ones with the bags)

Updates

NZSA Mentoring Program

by Lisa Thomasen



This year we collaborated with the SSA to offer the SSA & NZSA Mentoring Program Professional Skills Webinar Series, which consisted of 4 webinars held between April and July. These were well attended with many mentors and mentees from the NZ program making the most of the free registration. Webinars covered multiple topics including team collaboration, effective networking, reproducible research and tips for mentoring.

The effective networking webinar was a standout for me. Kelley Kidwell from the University of Michigan shared about her conference alter ego (image displayed below). Conferences provide great opportunities for networking, but many conference attendees don't make the most of these as they hope others will initiate the conversation or they allow imposter syndrome to limit who they'll connect with. Being intentional with the connections you make at conferences and having the confidence to introduce yourself and ask questions are key components of successful networking. If you're attending the NZSA conference in Auckland in December, let your conference alter ego make some new connections and expand your network!

The fifth cohort of the mentoring program is coming to an end and there will soon be opportunities for reflection and feedback. I've had some great feedback about the conversations that mentoring pairs have been having over the past 6 months.

I also had the opportunity to share about the NZSA Mentoring Program and the value of mentoring at the Women in Data Science NZ (WiDS) event held at Victoria University in August.

"Mentoring should be a fulfilling relationship which enables both mentors & mentees to become elevated versions of themselves."

If you'd like to elevate your potential with mentoring, keep an eye on the NZSA mailing list for opportunities to get involved, or email the mentoring team mentoring@stats.org.nz



Student and Early Career Statisticians' Network

by James Bristow



Changes in Representation

The NZSA SECS Network Committee is growing!

We are excited to welcome Gali Mortimer-Webster and Nasim Sadra as our new SECS Network Representatives.

NZSA Tidy International Travel Scholarship – Second Winner Announcement!

The scholarship recipient for the second year of the NZSA Tidy International Travel Scholarship is Adam Wong-Toi from the University of Auckland. Adam will attend the Australasian Applied Statistics Conference, 30 November to 4 December 2026 (AASC26) in the Mantra Mooloolaba Beach on the Sunshine Coast. A warm congratulations to Adam, and we look forward to learning more about his experiences at AASC26. If there's a talk you'd like Adam to attend and report on, email us at secs@stats.org.nz.

This year, we received 13 scholarship applications throughout late-March to mid-April. Thank you to our generous sponsor Hadley Wickham.

Additionally, we welcome your feedback on the scholarship process. Planning for the next round (conferences from July 2027–June 2028) will begin near the end of this year – stay tuned!

Joint NZSA & SSA Reading Group

We are pleased to introduce the joint New Zealand Statistical Association (NZSA) and Statistical Society of Australia (SSA) Reading Group. The reading group will initially focus on causal inference, with regular monthly meetings, starting in September, centred on foundational and contemporary papers. The aim is to provide a space for shared learning, discussion, and collaboration among students and researchers across Australia and New Zealand. We welcome new members to join our reading group via the expression of interest form:

https://forms.gle/AgURedGKyooYaeXg8

NZSA SECS Networking Events

The NZSA Students and Early Career Statisticians (SECS) recently held a successful networking event at Victoria University of Wellington on 7 October 2026, bringing together students, academics, and professionals from across the statistics community. The event featured five speakers representing a diverse range of statistical careers, including government, industry, and academic research: Junhao Huang (Victoria University of Wellington), Alice Kim (University of Otago), Kiel Hards (Epi), Livvy Mitchell (Motu and Rockwool Foundation), and Nikolai Kondratev (Stats NZ).

We would like to thank our speakers for sharing their experiences and insights, everyone who attended, and James Bristow, Muskaan, John Haywood, and Ivy Liu for their contributions to organising the event. Looking ahead, NZSA SECS hopes to organise similar networking events at universities across New Zealand, providing further opportunities for students and professionals to connect, explore career pathways, and engage with the wider statistics community. We welcome expressions of interest from students, academics, and professionals at other universities across New Zealand who would like to help organise future events and strengthen collaboration between institutions.

Stay Connected

We're working on more exciting webinars and opportunities. If you'd like to present or suggest a topic, reach out to us! Follow the SECS network on Facebook and LinkedIn to stay up to date. Let's keep growing together!

Call for papers: Statistical Computing section, ANZJS

by Tilman Davies



The Statistical Computing section of the Australian & New Zealand Journal of Statistics (ANZJS) welcomes articles describing useful, well-designed open-source statistical software. We are particularly keen to receive papers on R packages that address an important statistical need, whether by implementing new methods or making established methods more accessible, efficient or practical.

Alongside new computational algorithms and software descriptions, contributions may include comprehensive comparisons and benchmarking of existing tools, or applications that demonstrate approaches of wider value to statistical practice. Papers should explain the statistical motivation and relevant methodology, position the contribution relative to existing software, and demonstrate its value through clear, reproducible examples.

Building on the journal's recent 25 YeaRs special issue, which celebrated R's influence on statistical research, practice and education, we welcome submissions involving R and other computing environments, from Australasia and beyond. If you, your students or your colleagues have developed a mature software package or another useful contribution to statistical computing, we warmly encourage you to consider submitting an article to ANZJS.

The ANZJS editors make every effort to provide a prompt, constructive and efficient review process.



Statistics Education

Statistics Education Research

by Maxine Pfannkuch



The School Curriculum

The new curricula for Year 11 Mathematics and Statistics, Year 12 and 13 Mathematics, Year 12 and 13 Mathematical and Statistical Modelling, Year 13 Statistics and Data Science and Year 13 Further Mathematics were released for consultation on 15 May 2026. Chris Wild led a marathon effort to give an enormous amount of detailed feedback on all these curricula except Year 13 Further Mathematics by 15 June 2026. Our feedback would suggest that major revisions need to be made. We now await the release of the final curricula in Term 4 of the school year. We also await further announcements about A new qualification for Years 11 to 13 - Ministry of Education.

The NZSA Education Committee's concern about numerous incorrect statistical and probabilistic statements in the 2026 Years 0-10 curriculum has been acknowledged by the Ministry of Education. We hope that some of the problems we identified will be rectified.

Probability | Tūponotanga - A Guide for Teaching Probability

The NZSA education committee's digital book, a guide for teachers to support the teaching and learning of tūponotanga | probability in Aotearoa New Zealand schools, is progressing nicely. Pip Arnold is leading the project. The book will have 14 wāhanga (chapters) authored by members of the NZSA education committee, other NZ educators, and international experts. The book's aim was to align with the new refreshed mathematics and statistics curriculum. Four wāhanga have been published, and a further five wāhanga have been submitted. The book is sponsored by NZSA and NZAMT.

People in Statistics Education

Congratulations to Chris Wild for receiving the Inaugural IASE Advocacy in Statistics Education Award. Below is the citation that Anne Patel, University of Auckland, gave at the ICOTS conference. Chris was not at the conference to receive the award but he did attend the conference dinner!

This lifetime advocacy award goes to a person who has changed the experience of statistics education for both teachers and their students across the Pacific and beyond. Chris Wild followed through on George Cobb's vision of an entirely new way of learning about statistical concepts through data exploration. He did this in two ways: he created technology for teaching and learning about uncertainty in data, and then he rewrote curricula and modelled best practice in teaching simulation-based ideas about chance and data. Nowadays, every student can access and learn from data while learning statistical concepts that underpin the understanding of chance and data. In Aotearoa, we see ourselves as cutting-edge in statistics education; this is largely Chris Wild's legacy to us, as well as breaking down barriers to learning statistics and making sure that data really is for everyone.



Chris Wild

In 1999, Chris co-authored a seminal paper on empirical inquiry that laid out how statistical thinking and reasoning differ from mathematical reasoning and how this difference affects the broader process of scientific inference. But Chris wasn't content with researching how statisticians work and reason; he wanted to change classroom practice and rescue students from context-free mathematical formulas. So he did what all great statisticians do: he created tools for others to explore and work with their own data. He created iNZight, a free, open-source platform that allows students and their teachers to create plots of multivariate data instantly. Most of you will remember spending hours laboriously drawing graphs by hand. Now, students can watch dot and box plots appear with a simple click, they can see how data behaves and feel variation without drowning in squared paper, rulers, and equations. We have come a long way. Chris also built Visual Inference Tools, allowing students to literally see the theory of confidence intervals and hypothesis tests unfolding. He was involved in the team that gave us Pachinkogram for conditional probability and Scampy for conceptual reasoning.

Chris was there at the beginning of the International Census at School project, and he got hundreds of thousands of kids around the Pacific arguing over high-stakes statistical questions, such as: "Does pineapple really belong on pizza?" CensusAtSchool has been running for over twenty years and is a powerful platform that connects research and educators across educational divides, from primary to tertiary education. It serves as a one-stop shop for teaching and learning statistics. Chris has led global stats education through IASE, the ISI and ISLP, always championing what he calls 'computational skills by stealth'. His YouTube channel, WildAboutStatistics, has clocked over 1.5 million views. Today, in between grandfather duties, he's tackling Generative AI, warning us to 'walk backwards into the future' so we don't lose our core reasoning.

Over his teaching career, Chris Wild didn't just model best practice in statistical thinking and reasoning; he helped democratise data science. He helped realise what George Cobb dreamed about and shifted the global paradigm in statistics education from mathematical gatekeeping to visual intuition. Please join me in celebrating Emeritus Professor Chris Wild, who proved that we should all be just a bit "Wild" about statistics!

Statistics and Data Science Education Conferences and International Involvement

The ICOTS-12 conference was in Brisbane in July 2026. Education committee members Pip Arnold, Stephanie Budget, Anna Fergusson, Marina McFarland, Rachel Passmore, and Sashi Sharma were in attendance. Stephanie Budgett, the University of Auckland, was the IPC Chair for the conference. Throughout the five days of the conference, 19 Auckland University Department of Statistics staff, including previously mentioned education committee members, and PhD students contributed in many ways – paper presentations, paper co-authorships, session chairing, panel organisation, panel participation, debate participation and, for many, combinations of these. And James Curran unleashed his WMFM

(What's My Fitted Model) – his hard look at what we are teaching in the world of LLM and what is now important. In addition one of our prior members, Sharleen Forbes, was there presenting as well.

Congratulations to Anna Fergusson, who received an honourable mention in the Early Career Paper Award category for her paper titled: "Using categorical data constructed from images to support creativity and the development of proportional reasoning within large-scale learning environments", a paper that was co-authored with Anne Patel and Camilo López. The 2030 ICOTS conference will be held in Glasgow, Scotland – Stephanie is delighted that it is in her hometown!



Stephanie Budgett introducing a plenary speaker at ICOTS

CensusAtSchool Project

The CensusAtSchool project, under the co-direction of Rachel Cunliffe and Anne Patel, launched its twelfth biennial online census for Years 3-13 students in 2025. So far, about 29,000 students from 430 schools have participated. Monthly meetings with stakeholders from the Ministry of Education, Stats NZ and the University of Auckland are now occurring to stay up-to-date with new initiatives and to share information pertaining to statistics education and CensusAtSchool. Preparations are underway for the 13th biennial online census in 2027. Pip Arnold is the resource developer and has recently initiated professional development workshop plans for teachers to facilitate within their own schools. She is also providing feedback on Ministry of Education professional development curricula materials for Years 9 and 10 teachers, and updating some resources on the CensusAtSchool website to align with the new Years 0-8 mathematics and statistics curriculum.



Malia Puloka, Rachel Passmore, Anna Fergusson, Anne Patel, and Pip Arnold enjoying the ICOTS conference

International Collaboration with NZSA Education Committee

Rhys Jones and Chris Brignell, representatives for the RSS, UK, report that The Centre for Statistics and Data Science Education was officially launched on the 3 July 2026. The Centre is currently focusing on reviving CensusAtSchool in the UK in collaboration with the NZ and Canada teams, a national peer observation scheme for statistics educators at all levels, and a collaborative teacher project with the RSS and the University of Oxford. Anna Bargagliotti, representative of ASA, USA, reports that the Statistics Education of Teachers Report (SET II) will be out at the end of August. Amanda Shaker, representative of SSA, Australia, reports that they will be running two webinars this semester for statistics educators, which we will also advertise here.

Local News

Biostatistics Centre at the Dunedin Campus, University of Otago

by Andrew Gray



While the weather has sometimes been overcast and cold in Dunedin in recent months, there have been regular reasons to celebrate since the last newsletter. These have kept us warm and in good spirits.

We are all very proud of Dr Sajeeka Nanayakkara, who graduated with her PhD on "Developing risk prediction models using regression and machine learning approaches". This was especially exciting as she was the first-ever Biostatistics Centre PhD student. Sajeeka had Professor Robin Turner as one of her supervisors. The celebrations included a lunch in Sajeeka's honour. We are excited to watch her continue to produce amazing work! We are also proud of the many other students who graduated recently under the supervision of members of the Biostatistics Centre.

Research Professor Gabrielle Davie is well known to those in the Biostatistics Centre, as well as to other biostatisticians and quantitative methodologists in Dunedin and around Aotearoa New Zealand. We were all delighted to attend her Inaugural Professorial Lecture in May, which was titled "Upcycling data: Unlocking value in national health datasets". There was plenty of celebrating afterwards, possibly even some dancing. If you missed her IPL, you can find it on YouTube. It is well worth watching for Gabrielle's insights into research, and it provides a fascinating overview of some of the many projects she has led and been involved with. We are now looking forward to Professor Trudy Sullivan's IPL in October, which is titled "Trade-offs. Choices. Decisions".

Research Associate Professor Claire Cameron, Dr Ella Iosua, Dr Nisa Widyastuti, and I presented a seminar in the Department of Public Health about our experiences at the NZSA Conference last year. This was a great opportunity to reflect on and reminisce about the conference (I'm still talking about how good the food was) as well as to communicate its importance to a broader audience.

We have continued to offer our always-popular workshops on introductory biostatistics (led by Robin) and Stata (led by Research Associate Professor Ari Samaranayaka). We marked Nisa's and our amazing administrator Janet's birthdays and are looking forward to Robin's upcoming birthday celebration.

We love to get together, often over coffee or food. If you are ever in Dunedin, please get in touch with us so that we can make plans to catch up.

Statistics Research Associates

by Robert Davies



There is nothing exciting to report from SRA. But Peter and Robert have been looking through the books we inherited from David Vere-Jones and possibly some from ISOR. Some are in Russian.

We are familiar with the English translations of some of these.

If anyone would like any of these please contact Peter or Robert.

Click here to see our website for the titles of the ones in English and photos of the covers of all of them.

Department of Mathematics and Statistics, University of Otago

by Matt Parry



There have been a number of significant milestones and achievements this year in the Maths & Stats Dept. In May, Phil Wilcox gave his inaugural professorial lecture "Navigating contested spaces" about his work at the interface of te ao Māori and gene technologies. We are looking forward to two more IPLs from Matt Schofield and Ting Wang in the next few months. Matt Schofield also took over as Head of Department this year.

At the start of the year, Katrina Sharples retired from teaching (though she is continuing her research role in Health Sciences) and we welcomed Jess Allen as a teaching fellow.

Martin Hazelton is currently enjoying a semester's study leave. It got off to an excellent start with a visit to Banff International Research Station in the beautiful Canadian Rockies as a theme leader for a meeting on statistical methods in transportation research. Martin is also spending a few weeks visiting collaborators at the University of Western Australia in Perth. Peter Dillingham is now the Head of Statistics.

Otago is hosting NZMASP conference (being organized by a great group of students), and our math colleagues are organizing this year's NZMS colloquium.

Recent PhD graduates include Taylor Hamlin and Maryam Yassi. Taylor is now working for Proteus Consulting and Maryam is a postdoc in the School of Computing. At the other end of the PhD journey, Hui Yi started her PhD late last year supervised by Xun Xiao, Matthew Parry and Conor Kresin. In July, Hui travelled to Singapore for APARM 2026, where she presented her research and received a Best Oral Presentation Award. A great start to her PhD — congratulations, Hui!

Xun Xiao has also just celebrated 5 years in the Department.

Luma Analytics

by OLIVER STEVENSON



With daylight saving back and the end of the year now in sight, it's been a busy winter at Luma. Since our last update, we've welcomed new faces across our Data Science, Engineering, and Insights teams, celebrated graduations, and said farewell to a colleague heading across the ditch.

On the modelling front, a recent highlight has been working with a bank to better understand customer profitability. In a competitive banking market, understanding how different products and customer relationships contribute to profitability can help inform decisions around pricing, growth strategy, and where to focus effort. It's also a problem where something that sounds straightforward on paper can rapidly become more complex (and interesting!) once you get into the data.

Looking ahead, we're preparing to begin a research project with an Australian healthcare provider and university researchers, exploring how data and AI can support better dementia care. Our role will bring together data engineering and statistical modelling to help make better use of information collected through routine clinical care. Modern AI tools now make it possible to turn unstructured clinical notes into structured data for analysis - a task that would previously have required extensive manual review, making research at this scale very difficult to undertake.

Beyond client work, we've continued to connect with the wider data and statistics community. In June, we hosted a Data Leaders event at our office in partnership with Databricks, bringing together people from across the industry to share observations on AI trends in the data analytics industry. We've also welcomed students to the office, where conversations about AI and careers in analytics remain a common theme, alongside the continuing importance of statistical judgement and being able to explain what an analysis does and doesn't tell us.



Oliver Stevenson sharing insights into the latest AI trends shaping the future of data analytics

Internally, we brought the team together for a strategy day in August to plan for the year ahead. It was a good chance to step back from day-to-day project work and consider where we want to focus our efforts, how we develop our team, and how we can best support our clients as their needs evolve.



The team honing their coffee-making skills at a barista course

Finally, the social club has kept us busy with everything from a barista course and go-karting to pottery and a paint and sip evening in the office, which really showcased some hidden talents amongst the team! With a few more events planned before Christmas, there should be plenty to share in our next update!



The team showing off their creations after the Sip & Paint event

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Department of Mathematical Sciences, Auckland University of Technology

by PATRICIO MATURANA-RUSSEL



The AUT Mathematical Modelling and Analytics Research Centre (MMARC) and the Department of Mathematical Sciences at Auckland University of Technology are organising the 11th AUT Mathematical Modelling and Analytics Symposium on 17–18 November 2026 at AUT City Campus, Auckland.

The symposium brings together researchers working in mathematical modelling, statistics, data science and analytics to share their work and ideas. The programme will include invited talks and contributed presentations across a range of topics and applications. We welcome contributed talks of 20 minutes.

If you are interested in presenting, please contact the organizing committee.

Confirmed speakers

- Cicik Alfiniyah, Universitas Airlangga
- Elisabetta D'Anastasio
- Prof Nicolas Privault, Nanyang Technological University
- Prof Don Kulasiri, Lincoln University.

For more information and to register, visit the Symposium Website

Milford Asset Management

by MAZEN KASSIS



'How many clients do we have?' Take an imaginary service business where one person attends two appointments. Counting appointments gives two; counting people gives one. The arithmetic is straightforward. Deciding which number belongs in the answer takes a little more care.

I lead Data, Insights and AI at Milford. Milford is a Kiwi- and employee-owned investment manager supporting people saving for retirement and other long-term goals. My job is to help colleagues ask better questions, make sense of the answers and put data to work, keeping the people behind the numbers in view. The examples here concern internal reporting and analysis, not financial advice or investment recommendations.

I'd start with the word 'client'. Does it mean anyone who has ever attended an appointment, or someone who attended an appointment this month? Are we counting people, appointments or registered accounts? Two reports can give different, valid answers because they describe different things. Before choosing a number, I want to understand the definition behind it.

Then comes the comparison. Suppose, in the same illustration, more appointments were attended this month than last month. That doesn't necessarily mean more clients attended: the same people could have attended more often. Nor does a higher total tell us whether activity increased per day, if the reporting periods differ in length.

These are familiar statistical questions. An AI interface can let us ask them in ordinary language, but ordinary language leaves room for interpretation. 'Are client numbers up?' sounds clear until we try to write down exactly what should be counted. A neatly worded answer still needs a definition, a time period and a calculation we can inspect.

For me, three habits matter.

First, define the question before refining the prompt. Write down who is included, what is counted and which period applies. In the service business example, 'clients who attended an appointment during the month' gives another analyst something to reproduce. 'Clients' alone leaves too much unsaid, however carefully we phrase the request.

Second, check both the number and its meaning. Compare the underlying measures with an agreed report, inspect the calculation and ask someone who knows the data whether the answer addresses the intended question. Reconciliation helps test the measures. It doesn't, by itself, prove that AI interpreted the question correctly: a correct appointment count is still the wrong answer to a question about people.

Third, keep the awkward questions as tests. Try wording that could mean more than one thing and check whether that ambiguity is made visible. Revisit the examples when definitions or data change. I'd rather see a request for clarification than a confident answer built on an assumption the reader cannot see.

The useful moment, for me, is when someone can explain a number, not simply retrieve it: what it includes, what it leaves out and why it answers their question. Making complex work simpler shouldn't mean hiding the choices. Sometimes the most helpful answer begins with a better question.

Bioeconomy Science Institute

by Duncan Hedderley



Greetings from the Bioeconomy Science Institute/ Maiangi Taiao. At time of writing, we are awaiting re-organisation plans. There have been some initiatives to form links between the silos of our legacy organisations; monthly Digital Research talks, and open invitation to the virtual team get-together which AgResearch runs. More news when we know anything.

Fortunately this has not stopped us doing stuff. Olivia Angelin-Bonnet has been in France, visiting collaborators on a project on the omics of fruit ripening at INRAE in Bordeaux and Avignon. Timothy Bilton attended the World Congress on Genetics Applied to Livestock Production (WCGALP) 2026 conference and associated meetings with collaborators in the USA in July. Dongwen Luo attended the International Biometric Congress in Seoul, and Olivia is off to Kyoto to the 32nd International Horticultural Congress (presenting on Machine Learning models to predict at-harvest apple quality from weather data) at the end of August.

Linley Jesson's work with John McCallum and Susan Thomson on genomic selection for kiwifruit breeding won an award at the Kiwifruit Congress 2026. Andrew McLachlan and Duncan Hedderley also received a mention in the award for Digestion & Metabolic Health work done between Zespri and Plant and Food.

"These are the voyages of the DSIR Applied Maths Division , on its continuing mission to plan appropriate studies, draw valid conclusions, and go boldly beyond the p-value"

Department of Statistics, University of Auckland

by Priya Parmar



Despite the pretty awful weather, Mānawa Mai Open Day (held Saturday August 29th) was well attended. The University reported that around 10,000 people came along, which was a great turnout (given the expectation was 7,000). Led by Azam Asanjarani and organised by David Smith along with Leila Boyle, Stephanie Budgett, Lisa Chan, Kate Lee, Anne Patel, and with student volunteers: Nazeela Aimen, Yvonne (Yuan) Li, Ping Huang, Antariksh Nag, Rena Weatherall, Hannah Yun represented the Department. A special thanks to Tarin Eccleston for giving the Statistics in Forensics talk and sharing such an engaging example of how statistics is used in the real world.

Last September's Spring graduation featured 86 statistics/data science graduates; congratulations to our PhD graduand, Adam Bartonicek supervised by Simon Urbanek and Paul Murrell and his award winning plotscaper software for interactive statistical data visualisation. Congratulations are in order for Malia Puloka who successfully defended her thesis "Exploring Year 9 students' reasoning with categorical data - with a focus on posing investigative questions" supervised by Maxine Pfannkuch and Stephanie Budgett. Alec van Helsdingen defended his thesis "Extending Self-Exciting Point Process Models with Applications in Ecology" supervised by Charlotte Jones-Todd and Russell Millar.

The Department featured heavily at the International Conference for Teaching Statistics

(ICOTS 12) held in Brisbane in July; Heti Afimemounga, Pip Arnold, Azam Asanjarani, Liza Bolton, Leila Boyle, Stephanie Budgett, James Curran, Anna Fergusson, Rachel Fewster, Charlotte Jones-Todd, Emma Lehrke, Camilo Lopez, Priya Parmar, Rachel Passmore, Anne Patel, Maxine Pfannkuch, Malia Puloka, Ben Stevenson and Lars Thomsen who held a mixture of tasks from presenting, session chairs, panel representatives and keynote discussants. Stephanie Budget held the massive role of Chair of the International Programme Committee. Emeritus Professor Chris Wild was honoured with a IASE Advocacy in Statistics Education Award for how he has contributed to changing the experience of statistics education for both teachers and their students across the Pacific and beyond. Chris Wild followed through on George Cobb's vision of an entirely new way of learning about statistical concepts through data exploration. He did this in two ways: he created technology for teaching and learning about uncertainty in data, and then he rewrote curricula and modelled best practice in teaching simulation-based ideas about chance and data. Anna Fergusson received an honourable mention in the Early Career Paper Award category.

We had a fewer number of visiting international speakers (reflecting the ever-increasing cost of fuel and travel restrictions this year) with John E. Wilcox from Columbia University presenting on "A new probabilistic reasoning bias, and its real-world implications"; Michael von Maltitz from University of the Free State discussed "The Benefits and Drawbacks of using Portfolios of Learning Evidence and Interview Assessments in Mathematical Statistics". We are hoping this will be different by the end of the year with the Department hosting the NZSA Conference 14th-16th December and the Japanese Society of Computational Statistics Symposium (17th-18th December). The Department's new HoD Beatrix Jones is chairing the conference organising committee, with keynotes to be given by Alain Vandal on "Notes on a problem gambling trial" as well as Francois-Xavier Briol from University College London on "Bayesian global sensitivity analysis almost for free". Industry keynotes will be provided by Rachel Owens from Air New Zealand and Chanatda Somchit from New Zealand Institute for Bioeconomy Science. The Department's two Thomas' will be providing the workshops with Thomas Lumley heading the Survival Analysis workshop and Thomas Yee leading the VGAM (Vector Generalised Linear and Additive Models) workshop. Thomas Yee also is part of the local organising committee for the Japanese Society of Computational Statistics, which will feature keynotes from Ross Ihaka, Thomas Lumley and Paul Murrell.