From: Statistical Society of Australia Marie-Louise Rankin To: Subject: Stats Matters & Events

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I hope you are well. No, I really mean it, I hope you are in good health, because this Sunday, 7 April, is World Health Day, a timely reminder for a quick check-up of our own health and the well-being of your loved ones.

World Health Day is a global health awareness day celebrated annually on 7 April, under the auspices of the World Health Organisation (WHO). It marks the anniversary of the founding of the WHO in 1948. Each year, World Health Day focuses on a specific theme or health concern of global significance. The day serves as an opportunity to draw attention to important health issues, promote awareness and understanding of health topics and advocate for actions to improve health outcomes worldwide. The themes for World Health Day vary each year and cover a wide range of public health issues, such as mental health, maternal and child health, infectious diseases, non-communicable diseases and environmental health.

The theme for this year's World Health Day is "My health, my right". This rather ambitious idea was selected to advocate for the universal entitlement of individuals, regardless of their location, to access high-quality health services, education and information. In addition, it emphasises the importance of ensuring access to safe drinking water, unpolluted air, nutritious food,

adequate housing, fair employment conditions and a healthy environment, while also striving to eliminate discrimination.

In Australia it's easy to take our access to doctors, hospitals and medical procedures for granted. We don't have to look far though to see that what may be normal for us may not be that straightforward even for some of our fellow Australians - those living regionally and remotely. Stories of people driving for hours to get medical help are not uncommon and there's a reason the Royal Flying Doctors provide an essential service in Australia. How lucky are we in Australia to have this access?

The "Health Inequality Monitor" and the <u>Health Inequality Data Repository</u> on the WHO website are truly eye opening. The repository is the largest global collection of disaggregated data about health and determinants of health – with nearly 11 million data points across more than 2000 indicators.

The WHO website also features an eLearning course series, 'Health Inequality Monitoring Foundations', addressing the need for capacity strengthening in health inequality monitoring.

The data collection on the WHO website provides a fountain of information, and you don't need to be a statistician to find the data utterly fascinating and occasionally shocking. Another reminder to be grateful for what we have.

Marie-Louise Rankin

Executive Officer

Read newsletter in your browser

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Science Meets Parliament 2024

Each year the SSA selects one or two lucky members to attend "Science Meets Parliament", Science and Technology Australia's signature event for facilitating deep engagement between the STEM sector and policymakers. This year's successful candidates were Lucy Conran and Michael Dymock.

Read Lucy's report on her fabulous experience here:

I attended 'Science Meets Parliament' (SmP) on Wednesday 20th and Thursday 21st March at Parliament House in Canberra as a representative of the SSA. The SSA is a member organisation of 'Science and Technology Australia' (STA) and SmP has been one of STAs flagship events since 1999.

SmP is open to all Australian STEM professionals in academia, industry, and government, from PhD students through to leaders in the STEM sector. It affords attendees an opportunity to broaden their networks and to learn how to engage effectively with policymakers.

In excess of 360 scientist delegates from academia, industry, and government attended. 90 parliamentarians took part by either speaking on a panel, holding a meeting with delegates, attending the Gala Dinner or all three. More than half of delegates were early-career researchers, more than half were female and 3.5% were First Nations STEM professionals. Attendees included current and past Chief Scientists from many states across Australia and Nobel laureate, Professor Brian Schmidt.



Having the opportunity to meet scientists from a wide range of disciplines was the highlight of SmP for me. Some were surprised to hear of the wide range of statistics applications in research. I hope to develop these relationships and continue discussions over time.

Panel session topics included: science and evidence in public policy, a parliamentary forum, STEM leadership, skills for advocacy, forging partnerships of trust between non-Indigenous and Indigenous people in scientific research, and how to promote science stories through the media.

The Minister for Industry and Science, Ed Husic and the Shadow Minister for Science, Paul Flecher welcomed delegates to the gala dinner and the US Ambassador to Australia, Caroline Kennedy close proceedings. The various activities raised many, many interesting thoughts and learning points, but a few were particularly memorable for me:

- The powerful address by the president of the STA, Professor Sharath Sriram, to the National Press Club of Australia. He highlighted dramatic downsides to not making bold investment decisions about science research funding in Australia (see a link to his address here).
- As a delegate from a member organisation, I had the opportunity to meet with a parliamentarian. I was part of a small group that met with Senator Nita Green from Queensland. As the Special Envoy for the Great Barrier Reef, she has a keen interest in how marine science research and data

analytics can be applied to meet the challenges facing Australia's coastal environment. An important part of the programme of meetings between delegates and parliamentarians was to showcase the breadth and potential of current science research in Australia. The meetings serve to remind parliamentarians of the need for continued and expanded support and funding for scientific R&D.

 And never give up!! Professor Brian Schmidt explained, in a panel discussion, how during a difficult job search after his PhD he had considered giving up a career in astrophysics. His persistence was rewarded when he had a Nobel Prize winning idea ten days into a longsought after role at ANU.

Attending SmP in Parliament House was a unique and worthwhile experience for me, and I am delighted and grateful to have had the opportunity to attend.

Lucy Conran WA Branch

Kerrie Mengersen bestowed Ruby Payne-Scott Medal and Lecture

Congratulations to SSA member and former SSA President <u>Distinguished</u> <u>Professor Kerrie Mengersen</u> from QUT's School of Mathematical Sciences, who was bestowed with one of the highest honours awarded from the <u>Australian Academy of Science</u> this week.

Professor Mengersen, who is also Director for the QUT Centre for Data Science, is this year's recipient of the Ruby Payne-Scott Medal and Lecture. She is one of 22 researchers from around Australia recognised in 2024 for their outstanding contributions to the advancement of science with Australian Academy of Science honorific awards.

Professor Mengersen's research focuses on using and developing new statistical and computational methods that can help to solve complex problems in the real world. In a career spanning 35 years, she has applied her methodology to the fields of environment, health and medicine, and industry.

Cloudy horizons: Navigating statistical insights in the digital age

The demand for timely, relevant, and trustworthy statistical insight is rapidly increasing alongside the proliferation of data in the digital age. Cloud computing services have emerged as a crucial solution, offering enhanced

capabilities for processing, storing, analysing and disseminating data to meet customer needs. However, the transition to cloud technology presents challenges for statistical organisations.

This UNECE publication "Cloud for Official Statistics" examines the opportunities and obstacles associated with adopting cloud technology, drawing insights from various statistical organisations. Five key themes are explored, culminating in guidelines for organisations to consider.

Read more and download the document here.

How a study by UC Riverside could save trillions in adaptation costs

A recent study from the University of California - Riverside significantly reduces uncertainty in climate change predictions, potentially saving trillions of dollars in adaptation costs for a warmer future. The research, published in Nature Communications, analyses various climate models' predictions of global warming due to carbon dioxide emissions. These models vary widely, with some forecasting 1.3 degrees Celsius of warming by the century's end, while others predict 3 degrees. This disparity poses challenges for policymakers aiming to limit global warming to below 1.5 degrees Celsius, as outlined in the 2015 Paris Agreement.

King-Fai Li, lead-author and UC Riverside assistant professor of environmental science and statistics and Ka-Kit Tung, the study's corresponding author at the University of Washington address this uncertainty by incorporating data from the 11-year solar cycle to refine climate model predictions. They identify eight models that align closely with observed solar-cycle responses, suggesting they provide more accurate projections of future warming. By reducing prediction uncertainty by two-thirds, the study could potentially save trillions of dollars in climate adaptation efforts.

The researchers emphasise the importance of these improved predictions for informed policy decisions and infrastructure planning. They warn of the irreversible damage and economic losses that could result from delayed climate action, underscoring the urgent need for accurate forecasting to guide adaptation efforts. Ultimately, the study highlights the critical role of better math in addressing the climate crisis and mitigating its potentially catastrophic effects.

Read the full article by Jules Bernstein, University of California, here.

Meet Australia's Rising WiDS Stars (WiDS=Women in Data Science)

As part of International Women's Day 2024, the Australian Data Science Network (ADSN) hosted a <u>special online event</u> that introduced 25 of Australia's Rising Stars in Data Science.

The event was part of the worldwide <u>Women in Data Science (WiDS)</u> movement. Five women were featured every hour – for five hours. Each woman shared their 'Data Science Journey' story on why and how they are where they are.

The videos from each of their talks is on the **ADSN website**. Some of their stories are very compelling. Please take some time to give them a watch!



Winners of the Undergraduate Statistics Project Competition (USPROC) Fall 2023 submission cycle announced

The winners of the Undergraduate Statistics Project Competition (USPROC) Fall 2023 submission cycle were announced this week.

USPROC includes the Undergraduate Statistics Class Project (USCLAP) competition which has introductory and intermediate categories, and an Undergraduate Statistics Research Project (USRESP) competition. The winners of the competitions and links to their projects may be found at the sites below:

USCLAP winners

USRESP winners

Congratulations to all student winners and their faculty mentors!

Please encourage students to submit their class projects, capstone projects, and independent research projects for our next cycle. **The new deadline is Friday, 21 June 2024.** Learn more about the project competitions at the <u>USPROC website</u>. Winners receive cash prizes and have the opportunity to present at the Electronic Undergraduate Statistics Research Conference (eUSR)!

If you're interested in **judging projects for the Spring 2024** submission cycle, <u>fill out this form</u>. Anyone interested in judging projects will be given projects to judge.

The Electronic Undergraduate Statistics Research Conference (eUSR), which runs each fall, is a **FREE online conference** where undergraduate statistics & data science students present their work, learn more about careers in statistics & data science, and acquire valuable information about applying to, and succeeding in, graduate school. **Past keynote speakers** have included Robert Santos, Director - U.S. Census Bureau and Sydeaka Watson, Senior Research Scientist (Data Scientist) at Eli Lilly and Company. All undergraduate students and faculty are invited to attend. The next eUSR will take place in early November 2024. The event is free, but registration is required. Please encourage your students to attend and participate in this year's conference. Learn more about the free conference at the <u>eUSR website</u>.

Best.

Jennifer Ward, Juanjuan Fan, Ciaran Evans, Monika Hu, Shaoyang Ning

Co-Chairs of USPROC + eUSR

From previous newsletters

Call for Expressions of Interest: Join the Scientific Program Committee for ASC25

Have you heard? The Australian Statistical Conference 2025 (ASC25) will be held in sunny Perth, WA! Would you like to get involved? Here's your chance:

We are currently inviting expressions of interest from members interested in joining the Scientific Program Committee (SPC) for next year's conference.

SSA's Australian Statistical Conference is a biennial event that brings together statisticians, data scientists, researchers, academics and professionals from

various sectors to exchange ideas, present research findings and discuss advancements in statistical methodologies and applications. The conference provides a platform for networking, collaboration and professional development.

The SPC plays a crucial role in shaping the content and quality of the conference program. Committee members are responsible for selecting and inviting keynote speakers, reviewing abstract submissions, selecting presentations for inclusion in the program, organising invited sessions and ensuring the overall scientific excellence of the conference.

We are seeking expressions of interest from members with expertise and interest in various areas of statistics, including but not limited to:

- Statistical methodology
- Applied statistics
- Biostatistics
- Bayesian statistics
- Computational statistics
- Data science
- Statistical education

Key Responsibilities of SPC Members:

- Identifying and liaising with keynote speakers
- Liaising with SSA section chairs to organise section-organised sessions/activities
- Assisting with the development of the conference program, including poster/oral presentations, lunchtime sessions and pre-conference workshops
- Working with the Local Organising Committee to promote aspects of the scientific program
- Determining the theme for the conference
- Contributing to regular committee meetings and discussions

How to get involved:

If you are passionate about statistics and wish to contribute to the success of the ASC25, please submit your expression of interest by Wednesday, 10 April 2024, COB. To express your interest, please send an email to the Chair of the LOC with the following information:

- Your full name and affiliation
- A brief statement outlining your expertise
- Any previous experience in conference organisation or scientific

committees (please note that previous conference experience is not a pre-requisite for interested members)

We look forward to receiving your expressions of interest and building a dynamic and diverse Scientific Program Committee for ASC2025.

Sincerely,

ASC25 Local Organising Committee

News from SSA's Bayesian Section

The <u>SSA Bayes committee</u> is putting out a call out for activity suggestions. The committee is currently planning webinars, sessions at external conferences and student travel scholarships for 2024. What else would you like to see or attend as a member of the section? Please fill in this <u>Google Form</u> with your ideas. Looking forward to reading all about them!

Expressions of interest - Bayes on the Beach 2025 or 2026

The Bayesian Section of the SSA is looking for expressions of interest (EOIs) to organise the next instalment of "Bayes on the Beach", which is slated to take place in 2025 or 2026. This is a national meeting of Bayesian statisticians that normally features around 70 attendees and is held at a beachside location.

The deadline for sending an EOI is 31 May 2024. Your EOI should be 1-2 pages and should include the following information.

- The planned venue, which should allow for accommodation in the vicinity at a range of prices.
- Potential dates
- The names of the conference chair(s) and at least some committee members.

The Bayesian section of the SSA will select the top 2-3 EOIs, which will then be asked to send a full proposal detailing the budget.

Please send your EOI with title "Bayes on the Beach EOI" to the section cochair <u>Leah South</u>, whom you can also contact if you have any questions.

Election of Executive Members

Members are advised that the Executive positions of Secretary and Treasurer will become vacant at the Society's Central Council Annual General Meeting in 2024.

Members of SSA are invited to submit nominations for the two positions to be vacated. Nominations must be in writing and signed by the nominator(s), and must be accompanied by a written and signed statement from the nominee accepting the nomination. Nominations should be submitted to the SSA President (president@statsoc.org.au) or to a Branch President before 1 May 2024.

Doug Shaw, Secretary

SSA Events

SSA WA April: Models for Alcohol Effects (Dr John Henstridge)

9 Apr 2024, 6:00 PM – 7:00 PM (AWST), Cheryl Praeger Lecture Room, The University of Western Australia

Whilst the harms caused by alcohol are often highly visible, the mechanism and detail of the effects is much less clear. Explorations of the effects are essentially statistical (or epidemiological) since harm is typically evidenced through increases in the level of health conditions or incidences of crime or misbehaviour. Once particular area of study is the effect of liquor outlets and whether they can be shown to affect the level of harm. Such studies have often been cited in legal cases, commonly in the context of an application for a new liquor licence.

Data Analysis Australia has reviewed many such studies, highlighting major statistical deficiencies in almost all. Recently we were asked to carry out our own such study to demonstrate how the methodology might be improved to overcome the many problems. This has involved a reasonably large dataset and a number of innovative steps in setting up a model, perhaps an order of magnitude more sophisticated than any previous study. The result demonstrates that better models are feasible and it throws more doubt upon the validity of previous studies. This work was done with a number of other Data Analysis Australia staff. Members and visitors are invited to mingle over wine and cheese from 5:30PM onwards at the venue. Following the meeting all are invited to dine at a nearby restaurant. Visitors are welcome.

For further information click here.

Statistical Consulting Network Monthly Meet-Up

26 April 2024, 12:30 PM - 1:30 PM AEST, held online

Come along with your thinking cap, maybe a problem, and some lunch!

The Statistical Consulting Network invites you to their monthly meet-up, a virtual lunchtime meeting where statisticians help each other out with problems that they aren't sure how to deal with. This virtual meeting is held on Zoom at lunchtime on the last Friday of each month, 12:30-1:30 PM (AEST). We start each meet-up with announcements, or occasionally a special topic discussion, then discuss problems that attendees have brought along with them.

We also have a Slack workspace where members of the consulting network can communicate between meetings, or post problems or relevant materials they would like to discuss during a meeting.

Zoom link

Password: 660145

Slack Workspace link

Fast Integrative Factor Models: Applications from Nutritional Epidemiology to Cancer Genomics

10 April 2024, 4:30 PM (AEST), online

The Bayesian Section of SSA is hosting the webinar: Fast Integrative Factor Models: Applications from Nutritional Epidemiology to Cancer Genomics presented by Dr. Alejandra Avalos-Pacheco. Learn about novel sparse latent factor regression (FR) and multi-study factor regression (MSFR) models, designed to tackle covariate effects and systematic biases. Explore dimensionality reduction and sparse low-rank covariance estimation techniques, while gaining insights into bioinformatics applications.

To register click here.

Early Career & Student Statisticians Conference 18th - 21st November 2024

Join us for the biennial Early Career & Student Statisticians Conference

(ECSSC). Organised by the ECSS Network of SSA and SECS Network of NZSA, this event offers invaluable insights and networking opportunities.

This year, we're excited to host local hubs in Perth, WA, Hobart, Tasmania and New Zealand, as well as a livestream option. Don't miss out on this incredible experience!

Important Dates:

• 1 July 2024: Call for abstracts

• 15 July 2024: Registrations open

• 26 July 2024: Deadline for abstract submission

Please note that these dates might be adjusted as the conference approaches. Bookmark the event website.

Also participate in our Logo Competition: Design the official conference logo for a chance to win a free registration to the conference! Submit your logo to events@statsoc.org.au.

Other events

ICRI 2024, 3 - 5 December 2024, Brisbane

Hosted biennially, the International Conference on Research Infrastructures (ICRI) is the major professional forum for the global research infrastructure community. ICRI 2024 will bring together policymakers, research institution leaders, facility operators, users and researchers, to discuss pressing topics of interest, trends and challenges facing research infrastructures around the world. Delegates will explore trends in research infrastructures, including the use of emerging digital technologies, opportunities for expanding global partnerships, and contributions to the mitigation and adaptation of climate change.

ICRI 2024 will be hosted in the beautiful city of Brisbane (Meanjin in Aboriginal language), traditionally owned by the Turrbal and Jagera People.

ICRI 2024 will be delivered by Australia's national science agency, CSIRO (the Commonwealth Scientific and Industrial Research Organisation). With a history extending over 100 years, CSIRO is focused on solving the greatest challenges through innovative science and technology. One of the largest multidisciplinary and mission-driven research organisations in the world, CSIRO works with universities, governments, businesses, industries and

communities around the country and world.

CSIRO has sites located in major city and regional centres throughout Australia, including Brisbane. It also hosts research infrastructures and scientific collections on behalf of the nation, including the Marine National Facility, the Pawsey Supercomputing Centre, the Atlas of Living Australia and other facilities. The organisation also manages major facilities for international partners, like the European Space Agency's deep space ground station in Western Australia (Norcia Ground Station) and the SKA Project, an international effort to build the world's largest radio astronomy observatory.

Find out more.

12th Health Survey Research Methods Conference (HSRMC), 4-7 March 2025

The 12th Health Survey Research Methods Conference (HSRMC) will continue the series that began 50 years ago, in 1975, to discuss innovative survey research methods that improve the quality of health survey data. The next conference will be held in Williamsburg, VA from 4-7 March 2025.

The HSRMC steering committee is seeking abstracts for papers to be presented at the 2025 conference, including: general overview papers that summarize and integrate current knowledge, papers that identify and address future research challenges, innovative theoretical essays, and other papers that describe new empirical research that advances the field of survey methods and their application to health-related issues.

Read more about the 2025 call, submit your abstracts and learn more about the history of the HSRMC at the link below.

Call for Papers | HSRM Conference

Hoping to see many AAPOR friends at HSRMC 2025!

Liz Hamel

HSRMC Steering Committee member

Current Vacancies in SSA's Career Centre

Sydney Horizon Educators (Faculty of Medicine and Health)-School of Public Health Lecturer (Education Focused)

New South Wales

The University of Sydney

Full time continuing academic Lecturer Education ...

<u>Statistician- Centre for Primary Health Care Equity (CPHCE), Faculty of Medicine & Health</u>

New South Wales

University of New South Wales

Employment Type:Part Time- 21 hours per week ...

View All Jobs

If you have news from the Australian statistical community to share in Stats Matters and Events, please get in touch $\underline{\text{with us}}!$ We love getting feedback too.

Unsubscribe