From: Statistical Society of Australia

To: Contact us

Subject: Stats Matters & Events

Date: Thursday, 28 March 2024 2:57:39 PM



This working week finishes early, with the upcoming long Easter weekend giving most of us a welcome longer break. The news outlets this morning were already reporting on the increased volume of traffic on the road, as travelers head to their long weekend destinations. My husband reported on an equally increased volume of shoppers at our local Coles supermarket earlier, after he returned with our groceries for the weekend.

I find it interesting that in a country where, according to the 2021 national census, only 43.9% of Australians identify with Christianity and 38.9% follow no religion, we all get to benefit from the most important and oldest celebration of the Christian Church.

Easter is a strange mix of Christian and pagan traditions. The Christian celebration of Easter commemorates the resurrection of Jesus Christ from the dead, as described in the New Testament of the Bible. However, the timing of Easter and some of its symbols have pagan roots.

The name "Easter" is believed to have been derived from Eostre, a pagan goddess of spring and fertility in Germanic mythology. Eostre's festival was celebrated around the spring equinox, which falls around the same time as the

Christian observance of Easter. Some traditions associated with Easter, such as the use of eggs and rabbits as symbols of fertility and renewal, are believed to have been adapted from pagan spring festivals.

Today we kick off the Easter weekend with "Gründonnerstag", the German term for Maundy Thursday. It is part of Holy Week in the Christian calendar and commemorates the Last Supper of Jesus Christ with his disciples. The word "Gründonnerstag" literally translates to "Green Thursday," though the origin of this name is uncertain. It may be derived from an old German word "greinen", meaning to weep, or from the tradition of eating green vegetables on this day. In my family my mum always included spinach with dinner on "Gründonnerstag". It wasn't my favourite day.

"Gründonnerstag" is followed by Good Friday, a day commemorating the crucifixion and death of Jesus Christ. Traditionally, Good Friday is observed with solemnity and is a day of fasting and penance for many Christians. I'm quite fascinated by the way the menu for Good Friday has evolved for many people from a day of fasting or deprivation to "seafood banquet", with seafood still considered a bit of a luxury item to put on the table. How did this happen?

I'm not religious, but I do have a favourite Easter tradition. I'm very happy to use Easter as an excuse to eat chocolate all day. Here I am in my late fifties and this tradition has not changed for me in almost six decades. I just had a look, and it seems the Easter Bunny has been already! I hope it is kind to you too.

However you decide to spend the extended weekend, may the next few days be filled with relaxation and happiness - maybe in the shape of a chocolate egg.

To those of you who celebrate Easter: Happy Easter!

Marie-Louise Rankin

Executive Officer

Read newsletter in your browser

In this newsletter:

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Out-of-field mathematics teaching in Australian schools

The Australian Mathematical Sciences Institute (AMSI) is involved with a national consortium advocating for government action on the issue of out-of-field mathematics teaching in Australian schools. The consortium has highlighted the critical importance of mathematical and statistical literacy for national innovation, economic competitiveness and informed citizenship. They noted that 40% of mathematics classes are taught by teachers not qualified in mathematics, particularly impacting disadvantaged students. The consortium proposes a joint Commonwealth-State program to support out-of-field teachers in upgrading their mathematics knowledge and teaching skills.

Read the <u>review</u> of existing up-skilling initiatives in Australia, along with a policy document outlining the consortium's position and recommendations for a way forward, endorsed by key stakeholders.

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

No silent nights - The impact of snoring on relationships and health

We've all been there: sharing a room or even a bed with a snorer, occasionally getting to a point where we are becoming dangerously close to smothering them with a pillow just to escape the sound.

As with everything, statistical research has been done on snoring. Did you now that snoring affects more than half of men and 40% of women?

In a survey conducted by Sleepfoundation.org in January 2024, among 1000 U.S. adults with snoring partners, 54% reported that their partner snores every night. 30% indicated that the snoring intensity reached level 8 or higher on a scale of 1 to 10, where 1 represents the softest and 10 the loudest.

Studies show that chronic snoring can strain relationships, with partners of loud snorers reporting higher relationship strains compared to those with lighter snorers. Sleep deprivation caused by a snoring partner can lead to daytime sleepiness, moodiness, lack of energy and trouble concentrating, affecting both physical and mental health.

Women sleeping with snorers are more likely to experience insomnia and mental health issues like depression or anxiety. Sleep deprivation can also lead to a lack of empathy and communication issues between partners.

Here are some snoring statistics to contemplate:

- 75% of individuals who share a bed with a snorer indicate that snoring has an impact on their sleep quality, while 77% report some level of influence on their overall well-being.
- Among those who sleep with snorers, 44% feel tired the following day due to their partner's snoring, 33% experience moodiness or irritability and 28% suffer from lack energy.
- The frequency and volume of snoring directly correlate with its effect on the partner's sleep quality, well-being and the overall relationship.
- Despite these repercussions, 56% of individuals who sleep alongside a snorer seldom or never opt to sleep separately.
- Concerns about potential or existing health issues resulting from their partner's snoring are expressed by 52% of respondents.

Read more on this topic in Tina Smithers Peckham's article "When Your Partner Snores, No One Sleeps".

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.

Other events

Email received by the SSA office last week and forwarded for your information:

Dear Statistical Society of Australia,

I am working on promoting one of Western Sydney University's microcredentials: <u>Commonly Used Biostatistical Methods for Analysing Longitudinal Data in Health Research</u>. Flyer is <u>attached</u>.

I am wondering if you would be able to please share / promote the course amongst your network? We are currently taking expressions of interest for this course and once we have enough EOIs, we will book a date for the course. Anyone can submit an EOI via the <u>course landing page</u>.

Who is the course for?

Epidemiologists, Statisticians, data scientists, data analysts, health economists

, demographers, clinical psychologists and quantitative social scientists. When this course was last promoted, there was strong interest from researchers/analysts amongst academia, primary health networks and local health districts.

What will the course cover?

In this course, you will learn about the commonly used regression models in longitudinal data analysis. The first day will focus on commonly used regression models (simple single level), the second day and onwards multilevel mixed effects and Generalized Estimating Equations models but there will also be examples for fixed and random effects models, hybrid and Mundlak models, the mixed-effects location-scale, conditional logistic, and segmented linear regression models.

Almost all examples will use data from population health research exploring the complexities of designing and implementing the most appropriate statistical model and providing a clear interpretation of results. From simple pretest-posttest, single baseline and cohort longitudinal study designs to more complex designs like nested, crossover, repeated measures for both covariates and the outcome, interrupted time series and ecological momentary analysis, will be covered.

How long is the course?

The is a **3-day online course delivered via Zoom** with interactive exercises and opportunities for one-on-one support from the instructor. Register your interest now!

Thanks for your support, we are really keen to get this course up and running. Please let me know if you have any questions or any additional ideas on where we could promote this course.

Kind Regards,

Montana Middleton

WesternX Senior Project Officer

Education Innovation
Office of the Deputy Vice-Chancellor and Vice-President (Education)
westernsydney.edu.au

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 ...

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

New South Wales

University of New South Wales

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

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If you have news from the Australian statistical community to share in Stats Matters and Events, please get in touch <u>with us!</u> We love getting feedback too.

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