

**From:** [Statistical Society of Australia](#)  
**To:** [Contact us](#)  
**Subject:** Stats Matters & Events  
**Date:** Tuesday, 17 October 2023 10:23:35 AM



## STATS MATTERS & EVENTS

12 October 2023

Many of us have been touched or know someone who has been touched by dementia. What is dementia? [Dementia Australia](#) defines it as “the term used to describe the symptoms of a large group of illnesses which cause a progressive decline in a person’s functioning. It is a broad term used to describe a loss of memory, intellect, rationality, social skills and physical functioning. There are many types of dementia including Alzheimer’s disease, vascular dementia, frontotemporal dementia and Lewy body disease.”

I’m sure we all think about our brain health from time to time, hoping that our brain, and the brains of our loved ones, will continue to function well as we age. What is our personal risk of developing dementia? The statistics don’t look great.

The [Australian Institute of Health and Welfare](#) estimates that over 400,000

Australians are living with dementia as of May 2023. It's predicted that the number of Australians with dementia will more than double by 2058. As of 2023, more than 1.5 million people in Australia are involved in the care of someone living with dementia. According to a report published by the [Australian Bureau of Statistics \(ABS\)](#) just last month, Dementia is the 2nd leading cause of death in Australia.

Although these statistics look grim, researchers around the globe are working tirelessly on finding better diagnostic tools and cures for the different types of dementia. Modern technology and the use of Artificial Intelligence (AI) in the health sector provide much hope. Just recently, Insilico Medicine and the University of Cambridge published a paper [outlining their AI aided research](#), which led to the identification of new drug targets for Alzheimer's and other diseases linked to Protein Phase Separation (PPS).

While it will take time for the effects of this breakthrough to reach everyday people like you and me, there are things that can be done in the meantime to nurture brain health. Risk factors, such as smoking and excessive alcohol consumption should be eliminated. Other risk factors are more difficult to address, such as diabetes, depression, obesity, high blood pressure, hearing impairment and head injuries, not to mention air pollution. According to Alzheimer's Research UK, nearly 40% of dementia cases worldwide could potentially be avoided or postponed by addressing these risk factors. One life-style risk factor that can be relatively easily eliminated by most of us is lack of physical exercise and it's one I have adopted.

I recently discovered that a very pleasant way to reduce my chances of developing dementia is dancing. Wanting to increase my exercise levels, I joined a line dancing class that meets on a Saturday morning. I found it surprisingly difficult to follow all the steps. Some of my friends laughed at me when I told them about my new sport. "You're doing what? Line dancing!?"

I didn't think about the brain health aspect at the time, so I was delighted when I read about a study undertaken with dancers in 2017, published in [Frontiers in Human Neuroscience](#). It compared two fitness routines, exploring anti-aging effects on the brain in the elderly. One routine was dancing and the other one was endurance training. Physical activity positively impacts the brain's hippocampus, a region responsible for memory, learning and equilibrium. The study revealed that both, dancing and endurance training showed anti-aging benefits for the brain. However, the dance group exhibited a larger hippocampus, indicating that those involved may be better protected against memory deterioration and dementia.

Who's laughing now?

[Marie-Louise Rankin](#)

Executive Officer

If these statistics cause distress, please contact:

[Lifeline](#): 13 11 14

[Suicide Call Back Service](#): 1300 659 467

[Beyond Blue](#): 1300 224 636

[MensLine Australia](#): 1300 789 978

[13YARN](#): 13 92 76

[Kids Helpline](#) (for young people aged 5 to 25 years): 1800 551 800

National Alcohol and Other Drugs Hotline: 1800 250 015

*Read newsletter in your [browser](#)*

---

**In this newsletter:**

[RSS's Call for Proper Use of Statistics in Lucy Letby Inquiry: A Critical Look at Medical Murder Investigations](#)

[News from SSA's Mentoring Program Committee](#)

[October issue of Significance out now](#)

[SSA events](#)

[Other events](#)

[Current Job Vacancies](#)

---

**RSS's Call for Proper Use of Statistics in Lucy Letby Inquiry: A Critical Look at Medical Murder Investigations**

Thank you to SSA member Professor Allen Chang, who alerted me to a letter written by the Royal Statistical Society (RSS) which may be of interest to other members of SSA. The letter is addressed to Lady Justice Thirlwall, who is leading the inquiry into Lucy Letby's crimes. Lucy Letby is a neonatal nurse convicted of murdering seven newborns and attempting to murder seven others. The RSS urges that the inquiry's scope should include the proper use of statistical evidence in medical murder cases.

The letter is signed by RSS president Dr Andrew Garrett and CEO Sarah Cumbers. They emphasise the difficulty of interpreting data around suspicious deaths in healthcare settings. The RSS has previously addressed this topic in

its 2022 report, "Healthcare Serial Killer or Coincidence? Statistical issues in the investigation of suspected medical misconduct."

The RSS contends that correctly applied statistical evidence could be invaluable for NHS trusts to identify criminal activities. Therefore, they offer their expertise in statistical methods to the inquiry team, aiming to ensure that such evidence is used appropriately and effectively.

Find out [more](#).

---

## **News from SSA's Mentoring Program Committee**

### **SSA Mentoring Program: Applications are now open**

Are you an early or mid-career statistician looking for support to grow and develop your career? Or are you a more experienced statistician looking to share your skills and experience with a new generation of statisticians? This program may be for you!

The SSA Mentoring Committee is planning the next program intake in 2024. We will be looking for up to 20 mentor-mentee pairs to participate in the 6-month mentoring program starting in March 2024. Training for the 2024 program will involve two facilitated group sessions on the 22nd and 23rd of February 2024.

Applications are now open and close on 30 October. The application form is available via the [SSA Mentoring website](#).

Successful applicants will be notified by early January 2024.

If you have any questions about the mentoring program, please email the [SSA Mentoring Committee](#).

Karen Lamb (Program Co-Chair), Lizzie Korevaar (Program Co-Chair), Nicole White, Andrea Peng, Julie Simpson and Taya Collyer

---

## **October issue of Significance out now**

How can you ensure your Everest expedition ends in success? Why is it so hard to find a good fit when shopping for clothes? This issue we've got statistical answers to both these questions, and a good many more besides.

We've also interviewed Robert Santos, director of the US Census Bureau, who

proudly brings his “whole self” to one of the biggest jobs in US stats. From his Mexican heritage to his previous side-hustle as a live music photographer, one unique life experience after another has helped him become the statistician and leader he is today.

As Santos explains, because stats *affects* everybody, official data-gathering organisations like his must *talk to* everybody. And two articles in this October issue pick up on Santos’ view that nurturing understanding and trust in the public is vital - whether it’s through formal education channels and focus groups or just ripping up the comms plan and starting afresh.

### **October issue highlights:**

#### **[Russia vs Ukraine](#)**

Battling through the data to calculate who’s winning

#### **[Data and getting dressed](#)**

Ever struggled to find clothes that fit properly? Part one of a statistical look at sizing problems

#### **[Climbing Everest](#)**

Planning a successful attempt with data-based evidence

#### **[Data literacy in the USA](#)**

In praise of the Data Science and Literacy Act of 2023

#### **[Measuring crime](#)**

How to improve the collection of crime statistics

#### **[Building public trust](#)**

Why do so many people roll their eyes when they hear economic stats?

#### **[Robert Santos](#)**

A wide-ranging interview with the director of the US Census Bureau

Access the digital version of *Significance* through your [membership portal](#).  
Print issues will be mailed to subscribers soon.

*Significance* is also online at [www.significancemagazine.com](http://www.significancemagazine.com)

---

## SSA Events

### **SSA QLD Branch Meeting: From uncertainty to certainty: Exploiting parameter relationships to manage uncertainty in mathematical modelling presented by Gloria Milena Monsalve Bravo**

18 Oct 2023, 5:00 PM – 6:30 PM (AEST), held at 0500D-512, 88 Creek Street, Brisbane/Online

This talk, focuses on how to identify these key parameter combinations by using a Bayesian inference-based approach to assess the sensitivity of model outputs to changes in parameter values, constrained by the combination of both data and prior beliefs (e.g., from experiments and/or expert knowledge).

For more information about this talk and to register click [here](#).

---

### **SSA Vic & Tas Hacky Hour - Building R packages**

30 Oct 2023, 12:00 PM – 1:00 PM (AEDT), online

Join the SSA Vic & Tas branch for another hacky hour! This time we'll be looking at how to creating R packages and discuss what is a good design for an R package. Current branch Vice President Emi Tanaka will cover some of the basics involved with writing your own R package and what to consider in designing your own package.

Hacky hours are informal, hour-long lunchtime sessions where we get together (via Zoom) to collaboratively work and learn together on a particular topic. These sessions are open to everyone, so if the topic interests you, come along!

If you are a student creating a package, be sure to check out the [Di Cook Award](#).

Click [here](#) to register.

---

### **Integrating Large Language Models (LLMs) into the Data Science Workflow Speaker: Rohan Alexander**

27 Oct 2023, 9:00 AM (AEDT), online

The SCV section invites you to the webinar, Integrating Large Language Models (LLMs) into the Data Science Workflow with Rohan Alexander.

This talk will begin with an overview of Large Language Models, such as OpenAI's GPT-4. He will then discuss one way that LLMs can be integrated into a data science workflow: to generate data validation tests. He will focus on the effect of different settings on the decency and consistency of the LLM responses. LLM-generated responses were found to compare well against a gold standard suite, created by an experienced data scientist knowledgeable about the dataset in question.

To register click [here](#).

---

## **Statistical Consulting Network Monthly Meet-Up**

27 October 2023, 12:30 PM – 1:30 PM AEDT, 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 (AEDT). 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](#)

---

## **Other events posted previously:**

### **[SSA Vic & Tas Belz Lecture: Mathematics, Gender and Statistics](#)**

17 Oct 2023, 5:45 PM – 7:15 PM (AEDT), Lecture Theatre 3, FBE building (105), 111 Barry Street, Carlton 3053 OR online via Zoom

### **[SSA Vic & Tas Belz Lecture dinner](#)**

17 Oct 2023, 7:30 PM (AEDT), The Woodward, University House

### **[SA Young Statistician Career Event](#)**

18 Oct 2023, 5:00 PM – 7:15 PM (ACDT), Seminar Room 214, The Braggs Building, The University of Adelaide

[\*\*ECSSN and NZSA October Webinar: An academic journey in pursuing the art of statistics\*\*](#)

26 Oct 2023, 3:00 PM (AEDT), online

---





# ASC & OZCOTS 2023

## WORKSHOPS

**ESSENTIAL SKILLS FOR  
STATISTICAL  
COMMUNICATION**

10 DEC 2023

PROF SIR DAVID  
SPIEGELHALTER, DR  
LINDEN ASHCROFT

**STATISTICAL  
CONSULTANCY -  
THE ESSENTIALS FOR  
GETTING STARTED AND  
ONGOING SUCCESS**

10 DEC 2023

PROF JULIE SIMPSON,  
A/PROF EMILY  
KARAHALIOS,  
A/PROF KAREN LAMB,  
A/PROF SUE FINCH

**DEEP STATISTICS FOR  
MORE RIGOROUS AND  
EFFICIENT DATA SCIENCE**

10 DEC 2023

PROF XIAO-LI MENG

**10 - 15**

**Dec 2023**

**Wollongong, NSW**



**ASC 2023**

**Register at: [asc2023.org](http://asc2023.org)**

[Australian Statistical Conference \(ASC\) and Australian Conference on Teaching Statistics \(OZCOTS\)](#)

Program available [here](#).

**ASC & OZCOTS  
2023**

AUSTRALIAN STATISTICAL  
CONFERENCE AND  
AUSTRALIAN CONFERENCE  
ON TEACHING STATISTICS

**Register Now!**

**10 - 15  
Dec 2023**

**Wollongong, NSW**



Register at: [asc2023.org](https://asc2023.org)

## ASC and OZCOTS 2023 Social Events

**[Early Career and Student Statisticians Network ASC Social](#)** on 12 December 2023, held at the Illawarra Brewery's outdoor terrace at WINN stadium. The ECSSN is organising a social get-together during the ASC2023! They are inviting students, early career and more senior statisticians to join them a lovely beach view and network with like-minded people you might not see very often, plus have some fun, nibbles, and drinks!

**[Statistical Conference Dinner](#)** on 13 Dec 2023, at the Grand Ballroom at the Sage Hotel. Just minutes from the beach, come and join us for a three-course dinner. (You register on the same page as the conference registration page)



8 November 2023, 23pm-24:00 AEDT

Speaker: Professor Ayse Aysin Bilgin

---



4 - 7 January 2024  
Melbourne, Australia

### **IMS - Asia Pacific Rim Meeting 2024 - Melbourne, Australia**

Details: <https://ims-aprm2024.com/submissions/>

Early bird ticket price is extended until October 14. Register [here](#)!

We are still calling for Contributed Talks, please submit here. Deadline for abstract submission is 31 October.

Three Plenary Speakers: Ruth Williams (University of California – San Diego), Bin Yu (University of California – Berkeley), Jianqing Fan (Princeton University)

---

### **International Day of Women in Statistics and Data Science**

Don't miss this year's [International Day of Women in Statistics and Data Science event](#), celebrated on 10 October 2023. Running over 24 hours, it features speakers from all over the world, including “our very own” Associate Professor Ayse Aysin Bilgin.

Read Ayse's abstract [here](#).

---

### **Bayes on the Beach 2024**

[2023 International Biometric Society Australasian Region conference](#),

27 Nov 2023 – 1 Dec 2023, Bay of Islands, NZ

[AMSI Summer School](#)

8 January - 2 February 2023, Canberra

---

## **Current Vacancies in SSA's Career Centre**

[656155 Senior Teaching Fellow - Leadership and Executive Education \(LEE\)](#)

Victoria

Senior Teaching Fellow - Leadership and Executive Education (LEE), Monash University

Senior Teaching Fellow Job No.: 656155 Location: ...

[Senior Accountant - HYBRID](#)

Tampa, FL

Taylor White

Terrific client company is continuing to expand ...

[Senior Analyst FP&A](#)

Tampa, FL

Taylor White

Dynamic client company has created a new high-profile ...

[Corporate Controller](#)

Tampa, FL

Taylor White

We have an expanding real estate client that ...

[Accounting Manager - Special Projects](#)

Tampa, FL

Taylor White

We are working with a global market leader to ...

[External Financial Reporting Manager - HYBRID](#)

Tampa, FL

Taylor White

Are you a stellar financial reporting professional ...

[Internal Revenue Agent \(Examiner\) - DIRECT HIRE \(12 MONTH REGISTER\)](#)

Multiple Locations (See Description)

Internal Revenue Service

Summary: Positions under this announcement are ...

[0110379 Lecturer/Senior Lecturer \(Teaching and Research\) - Business Analytics](#)

New South Wales

The University of Sydney

Full time continuing teaching and research postJoin ...

[Statistical Consultants](#)

New South Wales

Stats Central UNSW

Work type:Full Time / Part Time Location:Sydney, ...

[Lecturer in Applied Statistics](#)

Western Australia

Curtin University

A new role for a statistician to teach data science ...

[View All Jobs](#)

---

If you have news from the Australian statistical community to share in Stats Matters and Events, please get in touch [with us](#)! We love getting feedback too.

---

[Unsubscribe](#)