

---

## EDITORIAL

---

### NEWSLETTER: THE FIRST EDITION

This is the first issue of the Statistical Society of Australia's *Newsletter*. It has been established by the Central Council on an experimental basis for one year, in response to a perceived need for a wider outlet for news and comment than that currently provided by the News and Notes section of the Society's *Journal*. If the *Newsletter* proves successful, then it is hoped to produce three issues annually, in April, July and October.

The editors welcome contributions in any areas of interest to members of the Society. We hope to publish in each issue one or two major articles, of about 1500-2000 words, on topics which will appeal to large numbers of readers; for example, important current national and international statistical programmes; problems currently being faced by statisticians; public matters of interest to the statistical profession, such as the main article in this issue; and descriptions of practical applications of statistical techniques.

A section in each issue will be devoted to branch notes, with particular emphasis on reports of the substance of the talks at branch meetings. One of the aims of the *Newsletter* is to help make members more aware of the full range of activities of the Society, and the Branch Notes section in each issue will be a concrete contribution to its fulfilment. Branch Secretaries will be glad to receive articles and forward them to the Editors, or of course material can be sent to us directly.

The *Newsletter* will also carry regular articles on

Statistical Education; on Statistical Computing; notices of conferences; and notices of visitors to Australia in statistical areas. Items for any of these would be appreciated.

Letters to the editors will be encouraged, and we would particularly like to carry letters from practising statisticians outlining difficulties they face, to enable theoreticians to assist with solving such problems.

We are also interested in descriptions of research areas currently being investigated, and short articles describing recent developments in important fields in statistics. However, these must be essentially non-technical; research papers will be forwarded to the Editor of the *Journal* for his consideration.

Production costs are being kept to a minimum by the use of voluntary typing; by the donation by the Division of Mathematics and Statistics of CSIRO of computer time for typesetting; and by including the distribution of the *Newsletter* with the distribution of regular Branch notices.

It is also anticipated that the *Newsletter* will eventually offset costs by carrying a certain amount of advertising of, for example, statistical vacancies, calculators and statistical literature. The editors hope members who can help to bring the *Newsletter* and such sources of revenue together will do so.

If the need for the *Newsletter* does exist, we assume it will flourish. We hope that you find this first edition stimulating, that you will continue to read it and will want to contribute to it, and that it will play a part in making the Australian Statistical Society a more vital and interesting professional body for all its members.

Editors: R.L. Tweedie, Divn. of Mathematics & Statistics, CSIRO, PO Box 1965, Canberra City, ACT 2601.  
D.J. Trewin, Australian Bureau of Statistics, Cameron Offices, PO Box 14, Belconnen, ACT 2616.

The views of contributors to this *Newsletter* should not be attributed to the Australian Statistical Society.

ISSUE NO. 160

September 2017

---

Editorial	2
Events	4
Christopher Robin Heathcote, 1931-2016, and Statistics at ANU	5
QLD Branch	18
VIC Branch	19
SA Branch	19
From the Office	20

---

## From the Acting Editor

This issue of the SSA Newsletter will be the last in the quarterly format. It is sad to see a part of the fabric of the Society disappear; however, the Society is convinced that the new monthly eNewsletter will be more effective and timely in meeting the communication needs of its members. The President of SSA has written elsewhere in this issue about the Newsletter and its Editors.

Chip Heathcote died on July 18th 2016, and a short obituary written by Alan Welch was circulated to SSA members. Eugene Seneta has written an extended obituary for Chip, which he has interwoven with a history of Statistics at the ANU and with some of Eugene's reminiscences of Chip and the ANU. It is published in full in this issue; we hope you enjoy reading it.

**Doug Shaw**  
Acting Editor

This is a very special SSA Newsletter because it is the last quarterly issue. Since Dennis Trewin and Richard Tweedie set up the first Newsletter in 1977 many dedicated members of the Statistical Society have put in considerable effort in managing this important communication tool for the Society.

The list here shows the names of those who held the position of Newsletter Editor until the end of 2015. After having been SSA Newsletter editor from 1982 until 2001, Doug Shaw then took over as Acting Editor, never intending to make it a long-term role.

Due to the struggle to find new editors, and because of the introduction of the recent eNewsletter, it was decided to discontinue the quarterly SSA Newsletter after almost forty years.

Thank you to everyone who has contributed their time, expertise and writing skills. Thank you especially to the Editors, the Branch Newsletter contacts, the many, many authors of articles and the Society members who have supported this SSA icon over the years.

**Scott Sisson**  
SSA President

### Editors

**Dennis Trewin**  
(May 1977 - November 1980)

**Richard Tweedie**  
(May 1977 - February 1982)

**Chris Edwards**  
(May 1978 - August 1980)

**Bob Forrester**  
(November 1980 - May 2001)

**Ian McRae**  
(February 1981 - May 1984)

**Doug Shaw**  
(May 1982 - May 2001)

**Ray Barge**  
(August 1984 - February 1986)

**Eden Brinkley**  
(May 1986 - May 2003)

**Alice Richardson**  
(August 2001 - November 2014)

**Michael Adena**  
(August 2003 - November 2014)

**Sonia Langford**  
(February 2015 - November 2015)

SEPTEMBER 2017  
Issue 160

## SSA

PO Box 213, Belconnen ACT 2616  
Phone 02 6251 3647  
Email [eo@statsoc.org.au](mailto:eo@statsoc.org.au)  
Website [www.statsoc.org.au](http://www.statsoc.org.au)

## Editor

Dr Douglas Shaw, Acting Editor

## Correspondence

Please direct all editorial correspondence to  
Email [eo@statsoc.org.au](mailto:eo@statsoc.org.au)

## Disclaimer

The views of contributors to this Newsletter should not be attributed to the Statistical Society of Australia, Inc.

## Section Chairs

### Bayesian Statistics

Chair: Christopher Drovandi  
[c.drovandi@qut.edu.au](mailto:c.drovandi@qut.edu.au)  
<http://www.statsoc.org.au/sections/bayesian-statistics.htm>

### Environmental Statistics

Co-Chair: David Warton  
[dwarton@maths.unsw.edu.au](mailto:dwarton@maths.unsw.edu.au)  
Co-Chair: Jakub Stoklosa  
[j.stoklosa@unsw.edu.au](mailto:j.stoklosa@unsw.edu.au)  
<http://www.statsoc.org.au/environmental-statistics.htm>

### Business Analytics

Chair: Mark Griffin  
[m.griffine@adasis-oz.com](mailto:m.griffine@adasis-oz.com)  
<http://www.statsoc.org.au/sections/business-analytics/>

### Statistical Education

Chair: Peter Howley  
[Peter.Howley@newcastle.edu.au](mailto:Peter.Howley@newcastle.edu.au)  
<http://www.statsoc.org.au/statistical-education.htm>

### Official Statistics

Chair: Stephen Horn  
[srthorne@effect.net.au](mailto:srthorne@effect.net.au)  
<http://www.statsoc.org.au/sections/official-statistics/>

### Biostatistics

Co-Chair: Sabine Braat  
[s.braat@unimelb.edu.au](mailto:s.braat@unimelb.edu.au)  
Co-Chair: Karen Lamb  
[karen.lamb@deakin.edu.au](mailto:karen.lamb@deakin.edu.au)  
<http://www.statsoc.org.au/medical-statistics>

### Young Statisticians' Network

Raaj Kishore Biswas  
[RaajKishore.Biswas@usq.edu.au](mailto:RaajKishore.Biswas@usq.edu.au)  
<http://www.statsoc.org.au/about-young-stats.htm>

## SSA Central Council

### Executive Committee

President: Scott Sisson  
Secretary: Doug Shaw  
[secretary@statsoc.org.au](mailto:secretary@statsoc.org.au)

### Branch Presidents and Branch Secretaries

#### Canberra

President: Robert Clark  
Secretary: Warren Müller  
[secretary.canberrabranch@statsoc.org.au](mailto:secretary.canberrabranch@statsoc.org.au)

#### New South Wales

President: Michael Stewart  
Secretary: Thomas Fung  
[secretary.nswbranch@statsoc.org.au](mailto:secretary.nswbranch@statsoc.org.au)

#### Queensland

President: Lee Jones  
Secretary: Dimitrios Vagenas  
[dimitrios.vagenas@qut.edu.au](mailto:dimitrios.vagenas@qut.edu.au)

#### South Australia

President: Julian Whiting  
Secretary: Paul Sutcliffe  
[sutters@bigpond.net.au](mailto:sutters@bigpond.net.au)

#### Victoria

President: Jessica Kasza  
Secretary: Charles Gray  
[vic.branch@statsoc.org.au](mailto:vic.branch@statsoc.org.au)

#### Western Australia

President: Alethea Rea  
Secretary: Tom Davidson  
[tom.davidson@abs.gov.au](mailto:tom.davidson@abs.gov.au)

Further contact details for Society Secretaries and Section Chairs can be obtained by contacting the Society on (02) 6251 3647.

# Member News

SSA member Penny Robinson was awarded the "Inspiration Award for Individual Achievement (Adult)" on 27 April 2017 at the Autism Spectrum Australia (Aspect) awards.

<https://www.autismspectrum.org.au/news/congratulations-2017-recognition-award-recipients>

Congratulations, Penny!

## Events

### **WIMSIG Conference 2017: Celebration of Women in Australian Mathematical Sciences**

24-26 September 2017, Adelaide

### **Developing Your Career to Thrive in a Data-rich, Technology-driven, Reproducible Research Environment**

25 September 2017, Tweed Heads

### **Young Statisticians Conference 2017**

26-27 September 2017, Tweed Heads

### **Joint International Society for Clinical Biostatistics and Australian Statistical Conference 2018**

26-30 August 2018, Melbourne

To have your event added to this list, please forward the event details in the above format to [eo@statsoc.org.au](mailto:eo@statsoc.org.au).



The poster for the ISCB ASC 18 conference features a stylized map of Australia on the left, composed of yellow and blue geometric shapes. To the right of the map, the text reads: "ISCB ASC18" in large blue and green letters, followed by "26-30 AUGUST 2018" and "MELBOURNE, AUSTRALIA" in smaller blue text. Below this, it says "HOSTED BY:" followed by the ISCB logo (a globe with "ISCB" inside) and the text "International Society for Clinical Biostatistics". To the right of the ISCB logo is the logo for the "Statistical Society of Australia". The background of the poster is a collage of two images: the top one shows a coastal scene with large rock formations and waves, and the bottom one shows a city skyline at dusk with buildings reflected in water.

[www.iscbasc2018.com](http://www.iscbasc2018.com) Joint International Society for Clinical Biostatistics and Australian Statistical Conference 26-30 August 2018

Pages 5-13 contained an obituary which was removed on request by the family of the deceased.

## SSA-QLD Career Pathways seminar



*Left to Right: Ms Lee Jones, President of SSA-QLD branch; Ms Angela Emblen-Reeves and Ms Jo'Anne Langham, Australian Tax Office; Mr Chris Galvin, Queensland Health; Prof Gita Mishra, The University of Queensland; Ms Jeeva Kanesarajah, 2017 SSA-QLD Young Statistician Representative.*

The SSA-QLD Career pathways seminar was held on the 1st of August 2017 with a record turnout of 50 early career statisticians from universities, industry and government agencies.

Ms Jo'Anne Langham and Ms Angela Emblen-Reeves spoke about their experiences as analysts and employers in the Australian Tax Office. Ms Angela spoke about the "Smarter Data" initiative by the ATO, and the need of analyst to be able to translate key findings to suit a lay audience. "Numbers resonate with people who are making decisions" Ms Langham noted.

Mr Chris Galvin from Queensland Health spoke of his diverse background and being able to link his clinical background with his statistical work gave him a competitive edge in his career. He highlighted the importance of being able to meet work deadlines and being reliable as an important aspect government employees need for career progression.

Professor Gita Mishra from The University of Queensland discussed the importance of working with great people as a stepping stone during the course of her career. She highlighted the need for statisticians to develop content knowledge of their research area e.g. biology, epidemiology, beyond statistics alone. She emphasised learning as a life-long process, and the importance of statisticians in research to be first authors or senior authors for career progression as an academic statistician. She spoke of the rise of social media and how researchers need to use this to their advantage as a method for research translation, maximizing research impact, and to communicate the importance of the research to the broader public.

All presenters emphasised the importance of not only having subject knowledge but also the importance of interpersonal skills, the ability to write and speak well. There was robust discussions at the Q & A, followed by a networking session.

**Jeeva Kanesarajah**

## VIC Branch

### Victorian Branch July meeting: An actuary, a data scientist and a statistician walk into a bar...

Ever wondered what the difference is between an Actuary, a Data Scientist and a Statistician?

Actuaries do it until death, disability or withdrawal

Data scientists do it with models

Statisticians probably do it.

On July 27, the Victorian branch jointly hosted an event with Data Science Melbourne and the Actuary Institute, where a member from each profession (plus someone who identified as all three!) discussed what it is that they actually do. Amanda Aitken represented the actuaries, Gareth Dickenson the data scientists, and the Victorian Branch's very own Sandy Clarke represented the statisticians. In addition, Mika Alo talked about his work as an actuarial-data scientist-statistician. Through their entertaining and informative talks, each of the speakers gave an insight into how they ended up in their profession, what they enjoy about it, and what it is that they spend their days doing. Although these three careers may sometimes be thought of as being somewhat distinct, the message that we're far more similar than we are different came through strongly.

**Jessica Kasza**

## SA Branch

South Australian SSA 28 June 2017 Meeting



Murthy Mittinty

### DAGs, Counterfactuals and Data generation process

The speaker at the June 2017 meeting of the SA Branch was Murthy Mittinty from the School of Public Health, the University of Adelaide. His primary methodological research was to distinguish between association and causation in the health sciences and the study of the mechanisms by which causal effects arise. His talk "DAGs, counterfactuals and data generation process" was a piece of his current methodological research work. In his presentation, Murthy raised the point about longitudinal data which brings many challenges to modelling. He illustrated some of these challenges using directed acyclic graphs, and also presented some recent methods that have been proposed using counterfactuals theory to study such data generating mechanisms.

At the beginning of his talk, Murthy described the Directed Acyclic Graph (DAG) in detail with Simpson's paradox, local directed Markov properties, Global Markov properties and factorization of joint densities according to the structure of DAGs. Murthy also discussed the G-methods: the marginal structural models (MSM, G-formula), MSM-inverse probability treatment weights (MSM-IPTW) and the structural nested mean models (G-estimation) that have been suggested using counterfactuals theory. At the end of the DAG discussion, he illustrated with an example-DAG of a real world problem: the causal relationship between obesity and pre-eclampsia, highlighting the time dependent confounding using joint, marginal and conditional distributions. In conclusion, the DAG should be used cautiously, otherwise mistakes can be made and conclusions can be adversely affected, he said.

A dinner was held right after the meeting at an Indian Restaurant in Adelaide.

**Shahid Ullah**

## From the Office

Things at the SSA Office are usually pretty quiet, but for the past few months it's been intense, with preparations for YSC2017, hosting several workshops and getting to the tender stage for the refurbishment of our website. Many meetings, usually by teleconference, are required for the day-to-day running of the Statistical Society, but as events like our Young Statisticians Conference approach, we're suddenly looking at weekly meetings, which certainly keeps me on my toes. Our teleconferences are always a good opportunity to get to know our members- even if it's just their voice.

As mentioned before tenders have gone out to about ten different website designers, asking for submissions of proposals for a new look for our website. At this stage we have received three proposals and I can already tell that the selection process will be very difficult indeed, because the different companies all have so much to offer. This is a very exciting time and I can't wait to see the final product. Hopefully we'll have a new website up and running within the first quarter of next year, but before this can happen a lot of people will be working awfully hard to make it all happen. We can only hope that our members will like what we will have in stall for them.

As new tasks are added to my list, there'll be one less for me in the future: writing a "From the Office" column for our quarterly newsletter. It's been sometimes challenging coming up with topics to write about, but at the same time I've liked the idea of being able to call myself a bit of a newsletter "columnist". I suppose if I miss this task terribly I can always take it up again for the eNewsletter.

Thank you to all the readers who have supported the SSA quarterly newsletter for so many years.

**Marie-Louise Rankin**  
Executive Officer

## SSA Job Board

Have you seen the SSA Job Board (<http://careers.statsoc.org.au/>) yet? It was added to our website just over three years ago and while it had a slow start, people have certainly caught on now. The Job Board currently has 87 registered employers and 172 registered job seekers. 52 resumes have been uploaded and can be viewed by potential employers.

Our Job Board has many helpful features, such as tips on how to prepare a resume, what NOT to include in your resume, how to prepare for your interview, how to advance your career and how to manage in a digital world (<http://careers.statsoc.org.au/jobseeker/resources/>). Job Seekers can create job alerts so that they get notified when a new ad is listed.

Employers can view the uploaded anonymous resumes for free. If they see one that they find interesting, they can contact the Job Board managers to let them know that they would like to contact the person who posted the resume. The Job Board managers will then get in touch with that person and if he or she would like to follow it up, they will connect employer and potential employee for a fee of \$35.00, payable by the potential employer.

From the (passive) job seekers' view they have nothing to lose. Their resume just sits there waiting for the right employer to see it.

We are lucky to have this great tool on our website. It did not cost the Statistical Society anything to have the Job Board installed. We now share the fees with the Job Board managers, "Your Membership", based in the US. Our Job Board will not make the Society rich or even contribute significantly to its income. However it does provide an extra service for our members and I hope that one day it will develop into the hub for all things to do with the statistical job market.

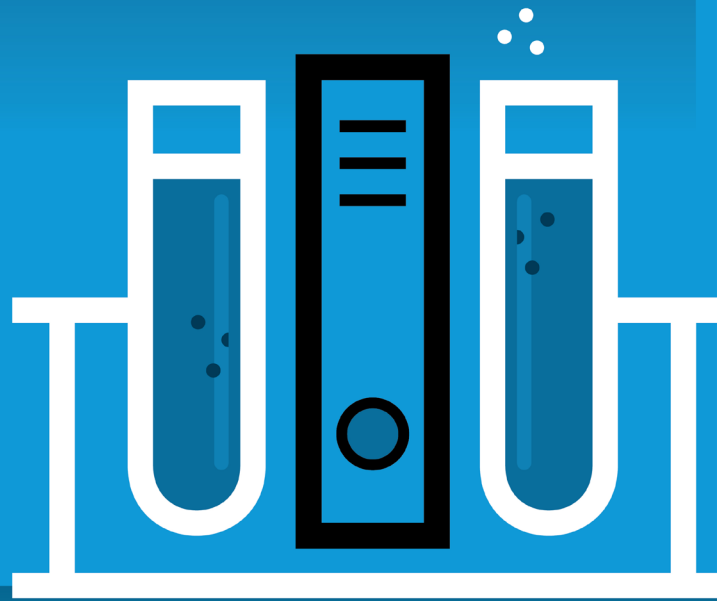




SCIENCE MEETS BUSINESS

**Bringing together leaders in**  
business and the science, technology,  
engineering and mathematics sectors.

**9 NOVEMBER 2017** ULTIMO N.S.W



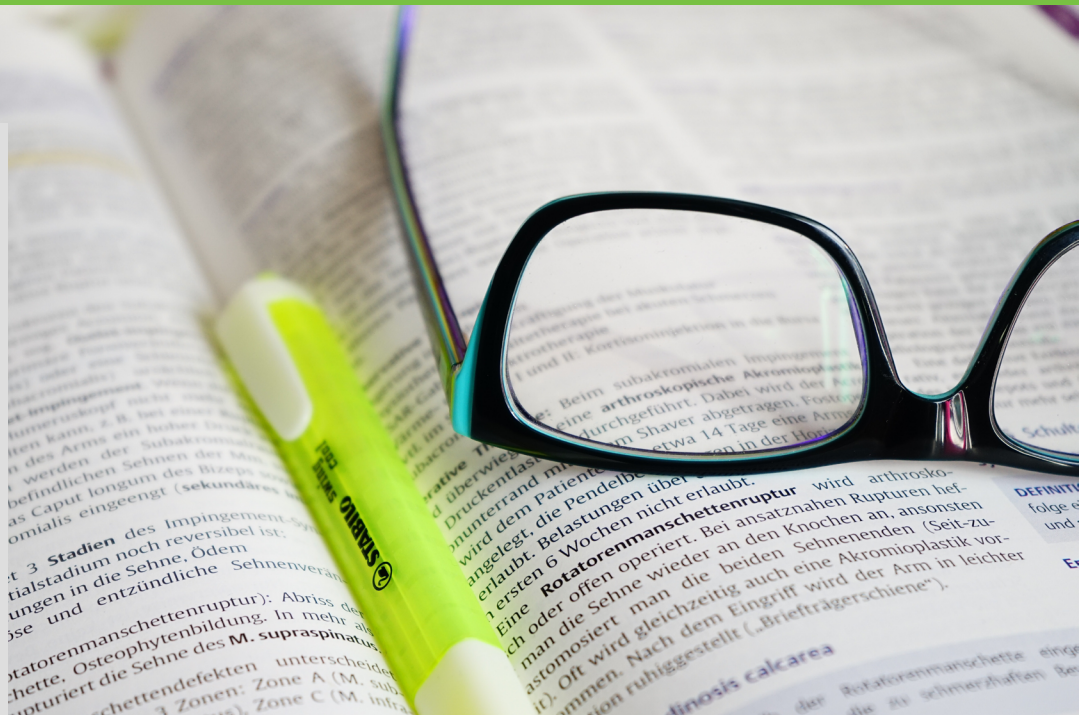
## 35% SSAI Member Discount Promotion with Wiley



Members of the Statistical Society receive a special discount of 35% on general online purchases with Wiley. A discount of 25% applies to textbooks. This offer excludes school books.

To take advantage of this benefit, please go to <http://au.wiley.com/WileyCDA/>, click on My Account at the top of the screen and start shopping.

At check-out please enter the Promo Code SDP92 to activate the discount.



For assistance, please contact Wiley:

Toll free phone (from within Australia only) 1800 777 474 Toll free phone (from New Zealand only) 0800 448 200

Other overseas phone + 61 7 33548455 E-mail: [custservice@johnwiley.com.au](mailto:custservice@johnwiley.com.au)