

Australasian Region

IBS-AR



Issue 26
August 2020

Newsletter

President's Corner



We ended 2019 with our Regional Conference, Biometrics by the Botanic Garden, which we held in Adelaide. I felt the conference was very enjoyable and successful. The Local Organising Committee chaired by Olena Kravchuk did a great job in organising the venue and the events; the Scientific Program Committee chaired by Petra Kuhnert put together a very exciting program. A feature of the program was the good number of plenary speakers, both international and from within the region, who presented in the different interest areas of the Region. I thought these were all very interesting and all presented very well. Chris Wikle dealt with the unexpected complication of a fire alarm and an evacuation during his presentation with complete aplomb. An innovation introduced this conference was that the workshops were run over two days, Sunday and Monday, and the conference ran from Tuesday to Friday. This allowed a larger than usual number of workshops and also workshops to follow on from other workshops. The workshop I attended was outstanding and the feedback on the others was also excellent. On a practical but very important level, due to very good work promoting the workshops in Adelaide and obtaining sponsors for different parts of the conference, we managed to come out slightly ahead of the budget which is wonderful. I am very grateful to the two committees and their Chairs, Olena and Petra, for organising such an excellent conference.

The AGM was held as usual during the conference. I am delighted that Vanessa Cave was elected to be the next President of the Region. She will take over from me in January 2021 and will do an excellent job. We also presented two E. A. (Alf) Cornish Awards to Emlyn Williams and David Baird. David is the first member from New Zealand to receive the award. It was very special to welcome Alf Cornish's daughter Barbara Brentzell and her husband David to the dinner and to participate in the presentation of the awards.

Another piece of excellent news is that Kaye Basford was recognised in the Australian Queen's Birthday Honours list by being made a Member of the Order of Australia in the General Division for significant service to tertiary education, to the biomedical sciences, and to scientific academies. Kaye was President of the Australasian Region of IBS for the calendar years 1997-98 and President of IBS for 2010-2011 (incoming President for the year before, and outgoing President for the year after) and is an Honorary Life Member of IBS. Congratulations to Kaye on this honour.

A sad piece of news was the passing of Sue Wilson in Sydney on 16 March, just before her 72nd birthday. This was very sudden as Sue, while getting frailer, had been attending seminars at ANU up to the fortnight before her death. Sue was IBS President from 1998-99. She was awarded the inaugural E. A. (Alf) Cornish Award by the Region for her contributions to Biometrics (2011), and Honorary Life Membership of IBS 'for outstanding contributions to the development and promotion of the discipline of Biometry' in 2012. We will miss her.

On the work front, the Grains Research and Development Corporation (GRDC) has been conducting a review of Statistics for the Australian Grains Industry (SAGI). The funding provided by GRDC through SAGI has been very important to biometrics and statistics in the region, with a number of members contracted to SAGI. We took up an invitation to make a submission to the enquiry on behalf of the Region because it enabled us to acknowledge the importance of GRDC to the Region and to encourage them to continue their involvement with biometrics and statistics. We hope for a continuing successful relationship with GRDC. Many thanks to the members of the Regional Council who contributed to putting together the submission.

Through lockdowns, restrictions on travel and general uncertainty, the Covid-19 pandemic has affected many aspects of all of our lives. On the professional side, we have seen changes to the arrangements for local and international conferences. Like many other international conferences the IBC, which was to have been held in Seoul, has been cancelled although parts of it will be run online. This has been very stressful for everyone involved in the organisation and Louise Ryan (Organising President) and Geert Verbeke (President) have done a magnificent job in steering IBS through very difficult circumstances. Of course, cancellation involves costs and IBS is out of pocket from the IBC2020 cancellation. If you possibly can, whether you participate in any way or not, it would be very helpful to register for the virtual IBC as a way of making a donation to help reduce the losses.

We are also in the early stages of planning the next Regional Biometrics Conference which we hope to hold in Northland New Zealand at the end of 2021. This is challenging as some 2020 conferences (such as the Australian and New Zealand Statistical Conference ANZSC2020) have been moved into 2021 and

it is very unclear what international travel will look like in 2021. While trying to keep all eventualities in mind, I really hope we will be able to hold our conference. If we can hold the conference, I look forward to the support of members to make it as successful and enjoyable as our Regional Conferences usually are.

Alan Welsh
alan.welsh@anu.edu.au

The Australasian Regional Council at present; notice how there are a few new members:

Australasian Regional Council

President	Alan Welsh (The Australian National University)
Vice-President	Vanessa Cave (AgResearch Ltd)
Past-President	Samuel Mueller (University of Sydney)
Secretary	David Baird (VSN NZ)
Treasurer	Ian Renner (University of Newcastle)
Membership Officer	Sam Rodgers (University of Adelaide)
Social Media Officer	Emi Tanaka (University of Sydney)
Public Officer	Warren Müller (CSIRO)
Newsletter Correspondent	Katharina Parry (Massey University)
Regional Website Manager	Hans Hockey (Biometrics Matters)
IBS Executive Board	Brian Cullis (University of Wollongong)
IBS Representative Council	Samuel Muller (University of Sydney) Alison Kelly (Queensland Dept of Ag & Fish) Kevin Murray (University of Western Australia)

The IBS-AR Member Code of Conduct can be found here:

<http://www.biometrics.org.au/docs/IBS-AR-Code-of-Conduct.pdf>

www.BiometricSociety.org.au

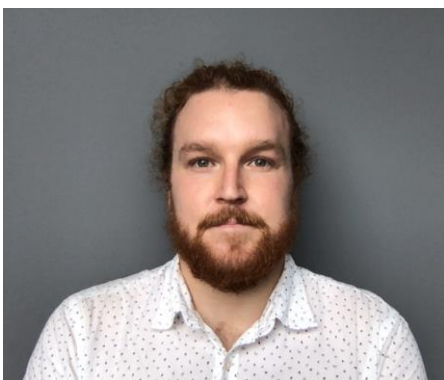


Facebook group: [IBS-AR](#)

IBS-AR Student Scholarship Recipients

To help attract enthusiastic and talented students to career paths in biometrics, the Australasian Region offers scholarships for suitably qualified students who intend to undertake a fourth or honours year of study, or a coursework Masters, in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics. We are delighted to announce the winners of this year's highly contested award: [Owen Forbes](#) (Masters in Philosophy at the Queensland University of Technology) and [Jordan Nicholaeff](#) (Honours student at the Australian National University). Congratulations!

Owen Forbes



Following my undergraduate degree in Psychology at the Australian National University, I worked for several years as a Research Officer at the Research School of Population Health in the areas of mental health, ageing and dementia, and epidemiology. I have recently started a Master of Philosophy degree under the supervision of Distinguished Professor Kerrie Mengersen at Queensland University of Technology, working on data from the Longitudinal Adolescent Brain Study led by Professor Daniel Hermens at the University of the Sunshine Coast. This study is unique in the rich variety of data being collected on a population in this age group (ages 12-17 years), with much more frequent sampling than is common for longitudinal studies of population health. I will be researching novel methods for analysing complex longitudinal datasets, with an applied emphasis on analysing EEG and other neuroimaging modalities and relating them to health and distress outcomes over time. The initial phase of my project will focus on methods for clustering and feature extraction based on EEG data from this age group, and relating this clustering structure to transdiagnostic mental health outcomes.

After completing my postgraduate studies, I am driven to pursue a career in biostatistics research and innovation. I aim to work across the domains of academic research and entrepreneurship/innovation to pursue statistical applications in neuroscience. Biostatistics applications in mental health and wellbeing, brain disease and neurostimulation are all exciting avenues in which I believe great strides will be made in the coming decades. I intend to position myself with a unique skillset, having strong foundations in biostatistics and data science as well as content-specific knowledge in the cognitive sciences, to craft a career advancing biostatistics research to take on challenging and important problems in the world.

Jordan Nicholaeff



Jordan grew up in the lower North Shore of Sydney, moving down to Canberra in 2017 to attend the Australian National University. Pivoting to a focus on statistics in the latter half of his bachelor's degree, he chose to pursue further study of the discipline with a honours year in 2020.

At the undergraduate level, his study has primarily been focused on mathematical statistics, whilst his current research interests and the focus of his thesis is on asymptotic distributions of penalised maximum likelihood estimators.

Outside of academia, Jordan can be characterised as a cheerful, energetic individual. He has always been a passionate football player and follower, in addition to an avid supporter of basketball and rugby union. His time in Canberra has been by a strong involvement in his college community, Bruce Hall, having spent a third and final year there in 2019. In his spare time, he likes to do a lot of things he lacks talent for: cooking, swimming, cycling around Lake Burley Griffin and making people laugh. His all-time favourites reading list is dominated by Michael Lewis and Irvin D. Yalom. He hopes to become a competent surfer one day.

You can learn more about the prizes and awards the Australasian Region offers on our website: <http://www.biometricsociety.org.au/prizes.html>

E.A. Cornish Award recipients 2019

Established in 2011, the E. A. Cornish award is presented by the Australasian Region in recognition of a member's considerable contribution to biometry and the society. The award is named after Alf Cornish, the region's first Vice President and IBS President from 1956 to 1957. At the [2019 IBS-AR](#) conference dinner in Adelaide the two most recent awardees, Emlyn Williams and David Baird, were named. Congratulations!

[Photos](#) and [videos](#) from the award ceremony are available on the IBS-AR flickr page <https://www.flickr.com/photos/australasian-biometrics/albums>

Citation for **Emlyn Williams**, written by Kaye Basford and Mario D'Antuono:

Emlyn's efforts and productive outcomes have provided statisticians and non-statisticians, researchers and practitioners (from academia and industry) with

invaluable assistance in efficient experimental design and the analysis of data collected from an extensive range of experiments. During his illustrious career, Emlyn has:

- Developed the methodology for the “alpha” class of designs for use in field, glasshouse and laboratory experiments and subsequently further developed latinized, row-column, spatial and p-rep designs.
- Developed and promulgated three software packages to assist users with research and practical application of these designs.
- Provided training and education nationally and internationally on experimental design and analysis.
- Distinguished himself as a leader, building and mentoring a team of statisticians at the Australian National University (ANU) which was responsible for providing support to all departments and PhD students.
- Continued to contribute to the advancement of biometry internationally following his retired in 2013. Emlyn is currently an Emeritus Fellow at ANU and a co-editor on the forthcoming special issue in JABES on “*Recent advances in the design and analysis of experiments and observational studies in agriculture*”.

Emlyn has been a prolific writer, having published 3 books, 8 book chapters, 138 journal articles, and manuals for various versions of 3 software packages, as well as editing 39 proceedings. While CycDesigN is probably the most well-known of his software packages (with licenses in 18 countries), DataPlus (an effective interpretive system currently used in 31 countries) and OutMap (software to produce genetic linkage maps) are also widely used. He has collaborated extensively nationally and internationally, particularly with Nye John and more recently with Hans-Peter Piepho. Emlyn was an invited speaker to the IBC in Barcelona in 2018.

Emlyn’s role as a statistical consultant (both within CSIRO and ANU) has meant that he has always been user focused with excellent communication skills. His ability to develop innovative statistical solutions either by adapting existing procedures or developing new methodology has been outstanding.

As a long-term member of the Australasian Region of the International Biometric Society (IBS-AR), Emlyn has made major contributions through holding office (at both the international and regional levels), organizing meetings (again at both the international and regional levels) and serving as Associate Editor of our IBS flagship publication, *Biometrics*.

In particular, he has been a member of the IBS Central Council, Secretary of the IBS-AR, a member of the Scientific Program Committee and Session Organizer for International Biometric Conferences and a member of the Scientific Program Committee for IBS-AR meetings.

Not only has Emlyn contributed to the IBS, he has contributed to the Statistical Society of Australia by being Treasurer of the Canberra Branch and Associate Editor of the *Australian and New Zealand Journal of Statistics*. In addition, he has been a session organizer for various Symposium and Conferences (e.g. Business and Industrial Statistics in Palm Cove, Queensland in 2005 and IBC in Florianópolis, Brazil in 2010) and a member of Scientific Program and Organizing Committees (e.g. Genstat in Busselton, Western Australia in 2002 and the Australasian Applied Statistical Conference, Port Lincoln, South Australia in 2014).



E. A. Cornish award recipient Emlyn Williams (right) pictured with Mario D'Antuono.

Citation for **David Baird** written by Warren Müller and Alan Welsh:

David has particular expertise in and has made fundamental contributions to statistical computing. He is internationally recognised for his contributions to the statistical package Genstat which is used by over 10,000 scientists around the world. In particular, he helped modernise and ensure the continuing relevance of Genstat through introducing greater functionality and developing new procedures in Genstat. For many years he has had primary responsibility for

responding to Genstat user questions posted on the Genstat list, and has always done this in a timely and thorough manner.

David has demonstrated expertise in experimental design, statistical modelling and statistical analysis. Working for AgResearch in New Zealand and more recently running his own statistical consulting business, David has contributed to a range of critically important agricultural and environmental problems including the modelling and analysis of biosecurity incursions, plant breeding analysis and the analysis of microarray and DGGE data.

David developed a simulation package and applied statistical theory to assess climate variability and the possible effects of climate change on New Zealand agriculture. He analysed the climatic data on the 1998 East Coast drought and prepared a New Zealand Government Cabinet paper on this for the Minister of Agriculture. He was a member of a team working on the DDT residue problem in Canterbury soils, designing and analysing experiments and developing models for DDT residues in Canterbury soils and their accumulation in grazing ruminants. He developed the NZ Dairy Group's protocol for DDT testing of farms.

David was a member of the Tussock Moth Science Advisory Committee, playing a key role in the Operation Evergreen programme that successfully eradicated the White Spotted Tussock Moth from the eastern suburbs of Auckland. He worked on the optimization of the spray programme via a stochastic computer model, and the estimation of the population dynamics of the Tussock moth. He has also given advice to the New Zealand Government on other bio-security programmes including those for the Painted Apple Moth, Gypsy Moth, Fall Webworm and Pitch Canker (through being on Scientific and Technical Advisory Groups (STAGs) for these programmes) and the Gum Leaf Skeletoniser. Pitch Canker is a fungal disease that affects many species of pine tree; the other pests are moths which are potentially destructive invasive species. The gypsy moth is listed as one of the 100 most destructive invasive species worldwide.

David has a sustained and ongoing record of service to the Australasian Region of the International Biometric Society (IBS-AR) and to Biometry in the Region. He was the main organiser of the 2001 IBS-AR conference in Christchurch, has been involved in the organization of 3 other IBS-AR conferences.

He has been the President of the Australasian Region (2013-2014) and is the current Secretary (from 2016). He spent 4 years on the IBS International Representative Council and chaired the Strategic Committee for 2 years.

As part of his commitment to Genstat, David has also had a close involvement with many of the Australasian Genstat conferences, which commenced in 1988. These conferences evolved into the Australasian Applied Statistics Conference, held on even years. David's involvement has continued, most recently as Chair of the Organising Committee for the 2018 conference in Rotorua, NZ.



E. A. Cornish award recipient David Baird (left) pictured with E.A. Cornish's daughter, Barbara Brentzell, IBS-AR President Alan Welsh, and past Treasurer Warren Müller.

Recent Papers

The International Biometrics Society publishes two journals, Biometrics and, jointly with the American Statistical Association, the Journal of Agricultural, Biological, and Environmental Statistics. There were no papers recently published by our members in these journals but please feel free to submit manuscripts using either of the links:

<https://biometrics.biometricsociety.org/>

or

<http://www.editorialmanager.com/jabe/>

If your paper has been inadvertently omitted from this list, please email the editor (k.parry@massey.ac.nz) so that it can be included in the next edition.

IBC 2020 goes virtual!

In response to the global COVID-19 pandemic, IBC2020 has gone virtual this year. By the time you read this newsletter, most of the virtual IBC will have already taken place, but there are two more events in August to look out for:

4 Aug 2020 from 09:00 to 10:45 AM (ET- Eastern USA Time - NY)

This is an invited Session Presentation on the topic "*Spatial and spatio-temporal confounding in biometrical applications: ubiquitous undesirable effects and alleviation proposals*". Session Chair and organiser is Lola Ugarte, Public University of Navarre. If you are interested, check out more details under the link [Invited session 17](#).

19 Aug 2020 from 2:00 to 4:00 AM (Australian Eastern Standard Time - Sydney)

This is a Biometrics Showcase Session with Speakers: John D. Rice, Robert L. Strawderman, and Brent A. Johnson on the topic: "*Regularity of a renewal process estimated from binary data (Biometrics, 74, 566-574)*". For more details, please contact Kristina Wolford under the email conference@biometricsociety.org.

The top priority of those hosting the virtual IBC2020 is to provide you with some useful sessions. For those that are able, they are asking for a modest fee to participate, with options for waived and reduced fees for members.

New Members

Welcome to:

Owen Forbes (Queensland University of Technology)

Jordan Nicholaeff (Australian National University)

Shih Ching Fu (Curtin University)

Julian Taylor (University of Adelaide)

Inge Koch (University of Western Australia)

Adriano Polpo de Campos (University of Western Australia)

Membership as of 2nd July 2020:

Life Member	2	Australia	156
Regular Member	158	New Zealand	42
Senior Retiree	15	Vietnam	2
Student Member	24	USA	2
Supporting Member	6	Europe	3
Grand total	205		