

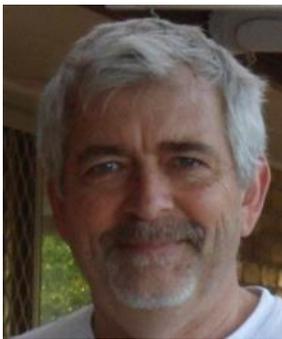
Australasian Region

# Newsletter

Issue 18  
January 2016

<http://www.BiometricSociety.org.au>

**From the President's desk, Ross Darnell** ([Ross.Darnell@csiro.au](mailto:Ross.Darnell@csiro.au))



We finished the year on a big note with a very successful Australasian conference in Hobart. I will repeat my gratitude to the members of the local organising committee and the scientific programme committee for their efforts. We had around 50 people attend the workshops held on the Sunday. The feedback I got from these workshops was very encouraging. I thank the workshop presenters. The invited speakers gave excellent presentations. The venue for the conference dinner was one of the most pleasant I have experienced. Scott Foster and his team have set a high standard for future meetings!

I congratulate Samuel Müller, elected as Vice President for 2016. He will take up the President's role in 2017 for a period of 2 years. I am looking forward to working with Samuel. As well I would like to thank Kathy Ruggiero for her role as Secretary. Kathy is to take up a role as Chair of the IBS Committee on Communications in 2016. Congratulations to David Baird who was elected incoming Secretary. We should all thank our other regional council members Warren Müller, Vanessa Cave, Hans Hockey, Alan Welsh and Ken Russell for their efforts throughout the year.

It was my privilege to present E A (Alf) Cornish awards to Kaye Basford and Brian Cullis (via Skype) at the conference dinner. It is interesting to note that both Kaye and Brian are Professors of Biometry in Australian Universities. These awards were initiated by past president Mario D'Antuono and you can see the previous awardees on our [website](#). The award is for recognition of a member in the Australasian Region who has given "longtime" service to the Biometric Society and to the advancement of biometry.

We were fortunate to have John Hinde attend the conference. John's role as IBS President ended in December and he is now Vice President to the incoming president Elizabeth Thompson. John mentioned there is some discussion in the IBS of linking with neighbouring regions. We might consider this as a way of "borrowing strength", a term familiar to our mixed model proponents. One close country, to Australia at least, is Indonesia. There are many IBS members in Indonesia and I know there have been many Indonesian biometry and statistics students that have attended Australian universities. We are looking at connecting with all IBS members based in Indonesia initially by informing them of our activities. We will also look at the possibility of obtaining funding to help Indonesian members to attend our next conference. If you have any suggestions on how this might operate, please contact me. Again I thank John for coming all the way from Ireland just to attend the conference. His

remarks at the opening of our conference gave a good overview of the Society. He congratulated our region as one of the strongest across the IBS.

This leads me to suggest that you mark in your calendar with a thick grey crayon the last week of November and the first and second weeks of December 2017 as the approximate dates for the next IBS-AR 2017 meeting somewhere near Brisbane. Firm dates and venue will be determined as soon as possible so that we can begin the planning process. We are looking for members in Queensland to help in the local organising committee and from the broader membership to act on the scientific program committee. I would be keen to hear suggestions for invited speakers.

---

## **Australasian Region - Council**

---

The regional council is comprised of:

**President:** Ross Darnell (CSIRO)

**Vice-president:** Samuel Müller (University of Sydney)

**Secretary:** David Baird (VSN NZ)

**Treasurer:** Warren Müller (Retired)

**Newsletter correspondent:** Vanessa Cave (AgResearch)

**Regional website manager:** Hans Hockey (Biometrics Matters)

**IBS Executive Board:** Alan Welsh (Australian National University)

**IBS Representative Council Members:** Ken Russell (Charles Sturt University)  
Katya Ruggiero (University of Auckland)



New this year is our very own [Facebook group, IBS-AR](#), which has photos uploaded from conference attendees and much more!

---

## **Contents**

President's Report	1	Student Scholarships	7
Regional Council	2	Treasurer's Financial and Membership Report	8
E A (Alf) Cornish Award	3	NZ Statistical Association Awards	11
Introducing Samuel Müller	5	Upcoming Conferences and Workshops	12
Biometrics by the Harbour	6		

## E.A. (Alf) Cornish Awards

---

The [E.A. \(Alf\) Cornish](#) award is conferred in recognition of a member's "long-time" service to the Biometric Society and to the advancement of biometry. At the 2015 conference dinner the two most recent awardees, Kaye Basford and Brian Cullis, were named. Congratulations!

### Brian Cullis

Professor Brian Cullis received the E. A. Cornish Award in recognition of his long-time service to the Biometric Society and to the advancement of biometry.

Brian has over 35 years of experience in statistical consultancy, research and leadership, taking him from biometrician and then Senior Principal Research Scientist with NSW Industry and Innovation, to his current position as Professor of Biometry at University of Wollongong where he has been since 2010. He received the Vice-Chancellor's Award for Excellence in Research in the category Outstanding Achievement in Research Partnership in 2013.



Brian has made an outstanding contribution to statistics in agriculture, and particularly in grains and plant breeding research. This is through his pivotal role in the development and implementation of advanced linear mixed modelling technologies, for which he is considered an authority both nationally and internationally; his productive partnership with the Australian Grains Research and Development Corporation since the day the GRDC was founded in 1990; his mentoring of young and/or new recruits to biometry with an impressive list of honours, masters and PhD graduates; more than 150 published scientific articles with over 2400 citations to date; and ultimately, his passion and unwavering commitment in fostering best practice statistics within the Australian grains industry.

Two of Australia's largest plant breeding companies have commented on the industry significance of Brian's work. From Steve Jefferies, CEO, Australian Grain Technologies:

*I honestly believe that Brian Cullis and his team have done more for improving rates of genetic gain in Australian plant breeding than any other research group in the country. He and his team are clearly international leaders in their field and they keep raising the bar and setting new standards. Brian's research has revolutionised the way we go about plant breeding at AGT. We plan our breeding strategies around what can be achieved in terms of novel design, analysis and interpretation. We at AGT, led by Haydn Kuchel, have always been very early adopters of Brian's latest technologies as we know they add value.*

And from Tress Walmsley, CEO of Intergrain and her team:

*Brian and his team have revolutionized the approaches taken by Australian breeders and the broader grains industry to design and analyse research trials. Brian has excelled in his ability to translate academic theory into applied methods that are both statistically advanced and*

*practically achievable. His direct engagement with members of the grains industry has been a critical component of this success. As a result, the increased confidence with which breeders are now able to identify elite lines is delivering high-value to Australian farmers through improved varieties and agricultural research outcomes. We congratulate Brian on his achievements and as always are looking forward to his part in the next advancement in the application of statistics in the grains industry.*

Sincere thanks to Brian for his extraordinary contribution to biometrics and the Australian grains industry and every best wish on receiving the E. A. Cornish Award at the IBC Australasian Region, Hobart in 2015.

**Beverley Gogel**

### **Kaye Basford**

Kaye Basford is Professor of Biometry in the School of Agriculture and Food Sciences, University of Queensland (UQ). She was President of the UQ Academic Board (2012-2014) and Head of the School of Land, Crop and Food Sciences (2001-2010), and has obtained an extensive publication record through research at the interface of applied statistics, quantitative genetics and plant breeding, co-authoring two books (McLachlan and Basford 1988, Basford and Tukey 1999) and supervising over 25 research higher degree graduates.



Her achievements have been recognised by various awards and fellowships in several professional societies, most notably the Australian Medal for Agriculture from the Australian Institute of Agricultural Science and Technology (1998) and Fellowship of the Australian Academy of Technological Sciences and Engineering (2006). She is also a non-executive director of not-for-profit entities, such as the International Rice Research Institute.

Kaye has made major contributions to the statistical community. While she was President/Vice-President of the Statistical Society of Australia (2004-2007), it is to the International Biometric Society (IBS) that she has provided the most service. Her many roles include being Chair, Organising Committee for the Australasian Region Meeting in Coolangatta (1995); President/Vice President, Australasian Region (1996-1999); Associate Editor, Biometrics (2000-2003); Chair, Local Organising Committee for IBC2004 in Cairns (2004); President/Vice-President, IBS (2009-2012).

Both during and after her time as IBS President/Vice-President, Kaye was the driving force in the major governance restructure of the IBS to allow more effective member participation. In summary, Kaye has achieved an outstanding academic record and exemplary service to the IBS and the broader scientific community. She is a most worthy recipient of the Australasian Region ALF award for 2015.

**Warren Müller and Alan Welsh**

## **Introducing Samuel Müller**

---

**At the AGM Samuel Müller was elected President for 2017-18.**



It is a great honour to be able to serve the IBS-AR as the next president. The majority of its members might not know me personally so I will briefly introduce myself. I am currently an Associate Professor in the School of Mathematics and Statistics at the University of Sydney. I love statistics and its applications, the creativity and openness of my colleagues, and the social aspects that come with the collaborative nature of our profession. Currently my research is very diverse, from learning more from different 'omics platforms in improving the prediction of disease outcome of cancer; using regularisation methods to identify what microbes explain obesity; to more theoretical work on model selection in mixed models, generalised estimating equations or in studying the bootstrap for dimension reduction, to mention just some of my ongoing projects.

Sydney is my home since 2008, after academic appointments in Bern (Switzerland), the Australian National University and the University of Western Australia. Mentorship was and is always very important to me, both receiving and providing. I learned and I am still learning a lot from Alan Welsh, Neville Weber, Ray Carroll and others and in return hope to support my mentors, colleagues and mentees as well as I possibly can.

On a personal note, I am married to Martina who is my best friend since our high-school years and partner in crime since. We became Swiss-Australian a couple of years ago and will not be extradited. We can still act young but admittedly managed to go beyond the 40 mark last year. Travelling, swimming, watching ABC, sharing a glass of red, cooking and eating are some of our hobbies. I also volunteer in the New Apostolic Church through various roles.

My vision for the Australasian Region of the IBS is that it is the natural networking and meeting platform for all with a passion for biometrics and its related fields. My three key objectives for the next four years are 1) to increase the standing of women in the society overall, 2) to increase the attractiveness of IBS-AR for mid-career researchers through recognition of their work, and 3) to increase the value of the society for early career professionals through mentoring and career development opportunities. These objectives build on the excellent work done by the current president Ross Darnell and his predecessors.

## Biometrics by the Harbour

---

[Photos](#) and [talk slides](#) are available online.

### Conference Report by Daisy Shepherd

Attending a conference as a student can often seem a little overwhelming and daunting. We are very much at the early stages of our career in research, and our path has not necessarily been set. However, the AR conference had such a positive and welcoming atmosphere that quickly squashed any worries of attending as a student. The friendly and supportive IBS community made for a very pleasant conference experience. It truly was an amazing environment to be part of.

The conference was an outstanding success for a number of reasons. Firstly, the presentations illustrated the strong diversity in the field of biometrics. Talks ranged over topics such as agricultural science, genetics, statistical models and ecological statistics. Whether you were listening as an expert or newcomer to the subject, the high standard and accessibility of talks truly captured your interest. In addition, the diversity of attendees ranged from students to experienced professionals, which made for many an engaging conversation amongst everyone present.

Much of the conference's success lies heavily with its perfect organization and excellent execution. The program was structured and conducted seamlessly. The social program was likewise successful. The day excursions provided an excellent opportunity to socialize and explore Hobart, with the conference dinner successfully rounding off the experience. The organized student dinner was a huge success, allowing students to connect and share experiences amongst fellow peers.

As it was the first IBS conference I had attended, I was a little unsure of what to expect in Hobart. Saying that, the conference not only exceeded any expectations I had a priori, but also left me excited to attend many more in the future. The IBS community really is unique, and undoubtedly one of the most supportive and positive to be part of.



Ten IBS-AR Presidents pictured at Biometrics by the Harbour. From lower left: Jeff Wood (1982-1983), Peter Johnstone (2001-02), Kaye Basford (1997-98), Ken Russell (1999-00), Ann Cowling (2005-06), Melissa Dobbie (2007-08), Graham Hepworth (2009-10), Mario D'Antuono (2011-12), David Baird (2013-14), Ross Darnell (2015-16).

## Best Student Presentations

On the final conference day [Daisy Shepherd](#) and [Louise McMillan](#) (both from the University of Auckland) were announced as joint student talk award winners, and [Anna Norberg](#) (University of Helsinki) was the student poster award winner.



Daisy Shepherd

"Presenting work as a student can sometimes seem challenging and a little overwhelming. However, the friendly conference environment helped me to overcome this, making for a very enjoyable and worthwhile experience."

Talk: Sliding Through Phylogenetics [\[pdf\]](#)



Louise McMillan

"Biometrics by the Harbour was great - fun gatherings but also many interesting talks. I'm glad people thought mine was one of them!"

Talk: Visualizing Population Genetics [\[pdf\]](#)



Anna Norberg

Anna being congratulated by John Hinde, IBS President.

Poster: Analysis of community data - how well do different statistical frameworks predict species occurrences and community patterns

---

## Scholarships for Honours and Coursework Masters

The Australasian Region of the International Biometric Society wants to attract enthusiastic and talented graduates or near graduates to career paths in biostatistics and biometrics. Therefore we are offering scholarships for suitably qualified students who intend to undertake a fourth or honours year of study or a Masters degree in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics. The deadline for application for Scholarships for Honours and coursework Masters students is **Monday 7th March 2016**. For more information, and to apply, visit: <http://www.biometricsociety.org.au/studentprizes.html>.

---

## From the Treasurer...

At the regional conference in Hobart in November-December 2015 I presented a financial and membership report at the Biennial General Meeting. For the information of all members this report is reproduced here.

### Finances

The 2015 finances had yet to be finalised so I presented the summary income expenditure and assets amounts over the previous eight years:

Year	Income	Expenditure	Profit/Loss	Assets
2007	22340	27627	- 5287	9456
2008	39284	22586	16698	26154
2009	30062	33414	- 3352	22802
2010	16421	22856	- 6435	16367
2011	88798	92861	- 4063	12304
2012	31089	24804	6285	18589
2013	105525	95006	10519	29108
2014	15924	30170	- 14245	14863

These figures are highly variable, due to conference income and expenditure being split over two years since conferences are held near the end of the odd numbered years; it all depends on what income (generally sponsorships) and expenditure (generally invited speaker expenses) remain unpaid at the end of the year.

A more informative summary can be obtained by ignoring conference transactions. I have done this for 2009 to 2014:

Year	Income	Expenditure	Profit/Loss
2009	14962	18171	- 3209
2010	16421	19596	- 3175
2011	15979	16155	- 176
2012	15739	18856	- 3117
2013	17855	19774	- 1919
2014	15924	19844	- 3920

These figures are much more even across the years and show a loss in every year. The levels of expenditure vary according to when certain regular items occur and with the exchange rate with the US dollar. Our major expenditure items are:

- Dues to IBS Business Office in USA each year - covered by membership fees BUT influenced by exchange rates;
- 4th year student scholarships - 2 to 4 each year @ AUD 1500 - number depends on quality of applicants;
- Travel grants to AR members to attend IBCs - 1 or 2 every second year @ AUD 1500 to 3000;
- IBS Award Fund donations - we aim to give USD 1000 every second year (also influenced by exchange rates).

So how do we cover these losses? Basically this is done from profits from our biennial conferences. Running a conference involves a certain level of financial risk. We tend to budget conservatively, which generally generates some profit. For the past four conferences this has been:

Year	Location	Profit
2009	Taupo	Large (NZD 30000 approx.) Funds still in a NZ account
2011	Kiama	5208
2013	Mandurah	1635
2015	Hobart	> 8000 (estimated)

The final figure isn't available yet for the Hobart conference. I will report that in the next newsletter.

So the general principles are

- make sure we cover or nearly cover the membership dues payable to IBS each year from our membership fees, but in years of more favourable exchange rates put aside the extra for the poorer years rather than moving the membership fees up or down each year depending on the exchange rate;
- budget conservatively for conferences so that we make a profit (and the local organising committee don't get too stressed);
- use profits from conferences for scholarships and grants to invest in the future of biometrics and the IBS.

Our current position is very sound, with AUD 14863 assets at the end of 2014, a profit of >AUD 8000 from the Hobart conference, and around NZD 30000 still sitting in the bank in NZ from the 2009 conference.

## Membership

The table below was presented in Hobart, but I have updated the membership data for 2015 to the final numbers on 31 December:

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Regular	153	152	157	163	165	169	190	186	192
Life	0	0	0	0	0	0	1	1	1
Associate	15	18	21	-	-	-	-	-	-
Senior Retiree	-	-	-	10	14	15	16	16	18
Student	9	15	16	13	12	8	13	22	14
<b>Region total</b>	<b>177</b>	<b>185</b>	<b>194</b>	<b>186</b>	<b>191</b>	<b>192</b>	<b>220</b>	<b>225</b>	<b>225</b>
Supporting	7	6	6	8	7	7	7	7	7
<b>TOTAL</b>	<b>184</b>	<b>191</b>	<b>200</b>	<b>194</b>	<b>198</b>	<b>199</b>	<b>227</b>	<b>232</b>	<b>232</b>

Our Life Member is Susan Wilson. In 2010 the Associate category ceased and was replaced with Senior Retiree - for members for 10 years or more who have retired and are no longer receiving a salary income. Supporting members are members of other regions who have some historic association with our region and want to keep in touch. They are not charged a fee, receive all our emails, but don't have normal membership rights in the region (e.g. standing for office and voting).

The surge in membership in 2013 was due to a few hard-working WA members who signed up lots of new members before the conference in Mandurah. I am happy to report that most of those people have retained their membership, and that we have been successful in steadily recruiting new members from other locations to offset loss of members through resignation or just failure to renew.

I am happy to answer any questions on finance or membership that members may have.

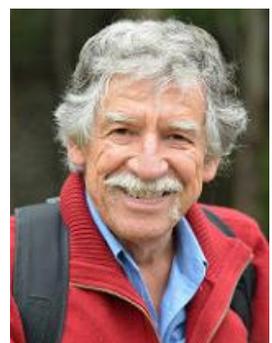
**Warren Müller**

**Treasurer**

**Australasian Region**

warren.stats@internode.on.net

+61 (0)407916868



## **New Zealand Statistical Association Awards**

---

The [New Zealand Statistical Association](#) awarded its three named prizes at their annual joint conference with the [Operations Research Society of New Zealand](#). The awardees were:

Dr Blair Robertson from the University of Canterbury, Dr Mark Holmes from the University of Auckland and Associate Professor Maxine Pfannkuch, also from the University of Auckland.

Dr Robertson received the Worsley Early Career Award for his novel application of numerical optimization to various aspects of statistics and for his very productive publication record since graduation.

Dr Holmes received the Littlejohn Research Award for outstanding contributions in the field of probability theory in the last 5 calendar years. This body of work comprised of publications in 14 different journals in various areas of theoretical and applied probability, combinatorics and statistics. These 14 journals include 5 A\*-ranked and 8 A-ranked journals.

Associate Professor Pfannkuch received the Campbell Award for publication of an exceptional body of original statistics research undertaken within NZ in her subfield of statistics education; a prolonged and outstanding contribution to statistical education as a curriculum and teaching leader over many, many years; leading major and innovative research projects that have direct relevance to NZ; and making a leading contribution to the promotion of statistics within NZ by making real and relevant statistics more accessible to a wider spectrum of students throughout our country.



Blair Robertson (left) pictured with James Curran

**James Curran**  
**Convenor of Awards, NZSA**

## **Upcoming Conferences and Workshops**

---

### **Australasian Biometrics Conference 2017**

The next IBS-AR conference will be held Nov-Dec near Brisbane. Date and venue TBA.

### **International Biometrics Conference 2016**

The next IBC will be held in Victoria, British Columbia, Canada, 10-15 July 2016.

<http://biometricconference.org/>

### **Short Courses in Statistics from the Statistical Services Centre, Reading University, UK**

The Statistical Services Centre is a self-financing unit within the School of Mathematics and Physical Sciences at the University of Reading. We provide short courses in statistics and data management to clients external to the University.

We offer a range of advanced practical courses for statisticians, covering both traditional and modern methods. To enable such a wide range of courses the Statistical Services centre utilises a number of guest speakers. Our short course programme, to July 2016, for statisticians is listed below.

<b>Course title</b>	<b>Days</b>	<b>Dates</b>
Analysis of Mixed Models	3	14-16 March 2016
Introduction to Multiple Comparison Methods	1	12 April 2016
Practical Bayesian Data Analysis	3	13-15 April 2016
Statistical Modelling and Graphics using R	2	8-9 June 2016
Advanced Topics in Survival Analysis	3	12-14 July 2016
Bayesian Survival Analysis	1	15 July 2016

To book your place on one of our courses, for more information and an up-to-date list of courses please view our website: <http://www.reading.ac.uk/ssc/> or email [statistics-courses@lists.reading.ac.uk](mailto:statistics-courses@lists.reading.ac.uk).