



The New Zealand Statistical Association  
stats.org.nz

# Newsletter

Number 73

June 2011

NZSA 2011 Conference  
28-31 August

## NZSA 2011 Conference University of Auckland 28 - 31 August 2011

We are delighted to invite you to the 62nd annual meeting of the New Zealand Statistical Association which will be held in the world-class Owen G. Glenn Business School at the University of Auckland, New Zealand, from Sunday 28th to Wednesday 31st August 2011. Full details of the conference are available at [www.nzsa2011.org.nz](http://www.nzsa2011.org.nz)

### Themes

Papers are invited from any field of probability and statistics. Student presentations are especially welcome. Submissions from academia and industry on all topics of statistical methodologies are welcome. The topics include, but are not limited to the fields of applied statistics, biometrics, bioinformatics, biostatistics, data mining, ecology, experimental design, genetics, probability and stochastic processes, statistical computing and statistical graphics, sample surveys, statistics education, quality improvement and industrial statistics. There will be a special session celebrating the contributions of Professor Alan Lee to the field and to the statistical community.

### Travel Grants and Student Prizes

The NZSA has some funds available to support students at New Zealand universities travelling to the conference. There will be financial awards for the best student presentations, sponsored by Hoare Research Software.

### Sponsors

The New Zealand Statistical Association gratefully

acknowledges the financial support of this conference from SAS, Travelex and the University of Auckland as platinum sponsors.

### Keynote and Invited Speakers

#### Trevor Hastie

Professor of Statistics and Biostatistics, Stanford University

#### Xihong Lin

Professor of Biostatistics, Harvard School of Public Health

#### Robert Gentleman

Senior Director, Genentech

#### Nick Fisher

ValueMetrics Australia

#### Alan Welsh

EJ Hannan Professor of Statistics and the Head of the Centre for Mathematics and its Applications at the Australian National University.

See <http://www.nzsa2011.org.nz/speakers.php> for more information.



## Registration

Registration is at [www.nzsa2011.org.nz](http://www.nzsa2011.org.nz). Student registrations receive a 50% discount. Members of the NZSA and SSAI also receive a discount.

## Conference Dinner

The conference dinner is to be held on the Tuesday evening (August 30th) at the Bluestone Room in the city centre. The cost is included in the registration. Extra tickets may be purchased for \$90 per person.

## Accommodation and Travel

Delegates are asked to make their own arrangements as soon as possible. New Zealand will be hosting the Rugby World Cup approximately a week after the conference. Auckland also has performances of Cirque Du Soleil at the same time. Hotels expect to be extremely busy and conference attendees are advised to make bookings early. The conference organisers have reserved a small number of rooms at the Quest on Eden which may be booked through Alexandra Miliotis ([a.miliotis@auckland.ac.nz](mailto:a.miliotis@auckland.ac.nz)).



## Editorial

Firstly I'd like to express my deepest sorrow and condolences to Roger Littlejohns' family. Whilst putting this newsletter together it's so clear that Roger touched the lives of many individuals in the statistics community with his kindness, generosity, and willingness to go the extra mile. There is a dedicated page for Roger overleaf, but in no way is this the sum of our respect - there is a common theme running throughout many contributions expressing not only his achievements but how valued he was.

Secondly, I want to thank those same contributors from the bottom of my boots. This newsletter would naturally be nothing without the effort that many people make to gather information, stories and pictures. This month an extra effort was made, and I can't say how much I appreciate this. This newsletter has been a pleasure to put together, and that is purely



thanks to you all!

Finally, in lieu of a "numbers in the news" contribution, I'd like to draw your attention to a piece by David Winter from the University of Otago. David's article, entitled "Ken Ring can't predict earthquakes" is too long to reproduce here, but the link is <http://www.nbr.co.nz/article/ken-ring-can%E2%80%99t-predict-earthquakes-ck-87640> for any interested individuals.

I look forward to seeing many of you at the conference.

*Esther Meenken*

## President's Column

In my last column I wrote about the Christchurch September earthquake and described the important role statistics played in informing the public. Statistics was in the visual displays of data in the newspaper graphs, the earthquake website that were constantly updated, and modelling of risk and damage impact.



In this column, my message is the same, statistics and earthquakes, but I am writing this with such a feeling of grief, loss and sorrow. What a tragic time it has been over the last few months. In Christchurch there has been so much loss and now there is the ongoing daily grind of life here. My daily challenge is how to get across town with damaged roads, how to avoid the dust and potholes on my bicycle, how to lecture in a tent, how to hold together our department here at University when we have no building access, how to support friends in businesses that are struggling, and how to deal with my own grief for friends who have died.

In the midst of this, Roger Littlejohn passed away. Roger was a friend to everyone – he was a champion for statistics and we will all miss him so much.

Yet despite this rather sombre tone, I am still writing the same as I wrote in September – once again, I am humbled by the actions of the statistics community. In Christchurch we received so many messages of support from statisticians in New Zealand and overseas. The NZSA is a community. We share our love of statistics, but we are all people and that is why we are members. We are here for each other and for the support we all give and we all receive.

Thank you.

*Jennifer Brown*

## ANZJS Corner

### ANZJS Editors' Column

In New Zealand, the end of the current six year period for the Performance-Based Research Fund (PBRF) is fast approaching, with its publication cut-off at the end of 2011. In Australia, there is currently a journal re-ranking exercise through the Australian Research



Council (ARC). Such events impinge not just on authors submitting papers, but on journals too through submission rates, impact factors, and A\* and A journal ratings. For further detail, see, for example, <http://www.tec.govt.nz/Funding/Fund-finder/Performance-Based-Research-Fund-PBRF/> [http://www.arc.gov.au/era/tiers\\_ranking.htm](http://www.arc.gov.au/era/tiers_ranking.htm) [http://www.arc.gov.au/era/era\\_journal\\_list.htm](http://www.arc.gov.au/era/era_journal_list.htm)

These measures create a framework in which performance both of authors and journals is assessed. The measures are all internal in the sense that it is agreement within a profession or discipline rather than reference to consequence outside this arena that determines "success".

But is this all that is needed?

To use a yacht racing analogy, rating rules determine boat design, but do not guarantee sufficiently strong links to the external world. The Fastnet tragedy in 1979, where 23 yachts were lost or abandoned in appalling conditions because seaworthiness was not a sufficiently explicit part of the rating requirements, provides a tragic example.

Of course, the consequences in academic publishing are not so obviously dire, but the question of external validation, and even validation outside a particular discipline when there is overlap with another, still remains.

Journals are ranked using various measures. One of the most common is impact factor (IF), determined by the number of citations of papers published in a journal within some specified time window. In Statistics, there is a longer time lag than in many other disciplines because published papers take longer to absorb, and new ones longer to write and be reviewed. IF is a fickle beast, with marked annual fluctuations very much affected by the presence or absence of the comparatively few papers that get high numbers of citations (at least for journals like ANZJS that publishes relatively few papers). For an interesting discussion of this and related issues,

see Van Nierop, E. (2009) Why do statistics journals have low impact factors? *Statistica Neerlandica*, 63, 52–62. There are other internal measures such as eigen analysis, but these are no more comprehensive, even given their additional complexity.



During assessment exercises for individuals, such as the PBRF, the journal rankings derived from IF and categorisation into A\*, A, B and C journals are perhaps too often interpreted to apply to all papers published in a given journal. There is also a regrettable absence of external validation or even any obvious interest in considering external measures.

This is particularly difficult for applied statistics papers, the best of which may have considerable and even immediate practical consequence, even if they do not always develop substantive new statistical theory. At the other end of the spectrum, theoretical papers may take considerable time to be recognised as important. Student's seminal paper on the t-statistic provides a well-known historical example. For further detail on Student see Boland, P.J. (2000). William Sealy Gosset (Student) 1876-1937. In: Ken Houston (eds). *Creators of Mathematics: The Irish Connection*. Dublin: UCD Press.

Nevertheless, despite the difficulties of measurement, recognition of impact needs to be extended beyond internal measures. Sound assessment measures also need to acknowledge that not all papers in an A\* journal are excellent, nor all papers in a B journal mediocre. In essence the problem in using journal rankings to assess individual papers is statistical - measuring the importance of a paper only by the journal in which it is published is to use a population measure of impact without proper recognition of the large variation in importance between published articles even in the same journal.

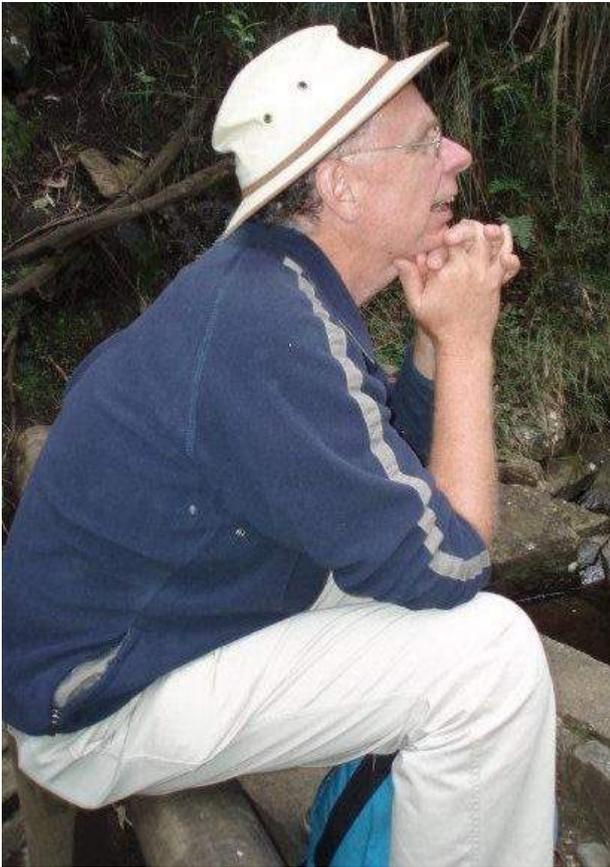
However, as authors and editors, we currently need to work within the established system. So, as its managing editor, I encourage you to support ANZJS by submitting good papers soon. We can currently offer fast publication for accepted papers. We want to publish more, relevant local material. We currently receive very few PhD student submissions. We want to encourage these (although they will of course still have to meet the necessary standard to be published).

Stephen Haslett  
Managing Editor, ANZJS  
[anzjs@statsoc.org.au](mailto:anzjs@statsoc.org.au)

# Obituary

**Roger Littlejohn**

**(26 February 1955 - 6 March 2011)**



It is with sadness that we report that Roger Littlejohn died on the morning of 6th March, 2011, following a battle with secondary melanoma, having just turned 56. Vanessa Cave is putting tributes on the NZSA web <http://stats.org.nz/> and there is a growing collection of photos of Roger. Email Vanessa if you'd like to add a tribute.

Roger Littlejohn was employed as a statistician with AgResearch (formerly Ministry of Agriculture and Fisheries), based at the Invermay campus, from August 1983 until his death. He was an expert in the analyses of time series and in the application of hidden Markov models, and made major contributions in the analysis of hormone profiles and data on animal positions through time. He devised practical solutions to the diverse range of problems that were presented to him and was greatly appreciated by his workplace colleagues. He contributed to over 200 publications.

He contributed to the wider statistical community in a number of ways, including being a committee member of the NZ Statistical Association. Roger was the Editor of the NZSA newsletter September 2002-March 2006, President of the NZSA from 2006-8, and NZSA Webmaster January 2004-February

2010. For the last few years Roger has been the ANZJS Non-Editorial Management Representative and on the Awards Committee. He was a member of several conference and workshop organising committees, as well the board of directors for the NZIMA Hidden Markov Models and Complex Systems programme. He also contributed a number of time series procedures to the GenStat procedure library.

Roger was always ready to help and promote others, as can be seen in his mentoring of a number of project and thesis students. He instigated and edited a festschrift for Peter Johnstone to celebrate Peter's 65th birthday. His own contribution on writing workplans is a testament to his eloquence and humour.

Away from work Roger was an active member of the dramatic society, and of his church. He was a devoted father and husband. He leaves his wife Annette and two school-aged children, Jeremy and Tabitha.

Roger will be missed as a colleague and friend by us all.

*AgResearch Stats Team*

## Tributes for Roger

A tribute page has been set up at <http://www.stats.org.nz/RogerTributePage.shtml>. If you would like to contribute please email Vanessa Cave at [vanessa.cave@agresearch.co.nz](mailto:vanessa.cave@agresearch.co.nz). A collection of photographs of Roger at conferences, meetings and events through the years has been compiled by Harold Henderson.



So far tributes have been added by many individuals and organisations; David Baird, David Fletcher, Shirley and Ken Pledger, Sharleen Forbes, Angela Anderson, Peter Hall, David Scott, David Vere-Jones, Mario D'Antuono, Jennifer Brown, Estate Khmaladze and Geoff Lee. Four are reproduced here.

Roger is someone who I will always remember as generous - he was generous with his time he dedicated to NZSA, generous with his willingness to help me as a new President and to help others, generous with his caring and fun personality, and generous with his enthusiasm for statistics. Roger, I will miss you so much.

*Jennifer Brown  
NZSA President*



Roger was a committed member of NZSA quietly but willingly doing a heap of work (often in the background).

He was always smiling with a keen sense of humour and a knack of making people around him feel comfortable.

He was such a regular attendee at annual conferences that I'm having trouble reconciling myself to the fact that he won't be at the next one.

I am one of the many that will miss him - one of the well-known personalities of New Zealand statistics.

Haere ra Roger. Haere ra i te rangimaire.

*Sharleen Forbes  
General Manager, Statistical Education  
Statistics New Zealand*

It is with great sadness to hear the news that Roger has passed away. A respected and gentle giant amongst his colleagues and friends he is a great loss to the Biometrics community.

On behalf of the committee and members of the Australasian Region of the International Biometric Society, we extend our sincere condolences to his wife Annette and two children, Jeremy and Tabitha.

On a personal note, he was a poet as well and composed a poem with that typical Roger humour after my talk in Marysville, 2008.

Young Mario from Perth was a teazza  
Of Italian, life and statistizza.  
He knew how to cook  
Up a book, pasta, and chook,  
GenStat-R code and a pizza.

A special thanks to special man who travelled to all corners of the region to support biometrical activities.

Rest in peace.

*Mario D'Antuono  
President IBS-AR  
Perth, Western Australia*



It was very sad news to hear of Roger's death, and especially that he left a wife and young children.

I did not know much of his statistical work, but I knew him through his contribution to the NZSA and through conferences. He took over from me as NZSA webmaster, and was later President. Roger exhibited virtues which are perhaps considered old-fashioned. He was hardworking, enthusiastic, gentle, good-humoured and modest. He will be missed.

*David Scott  
The University of Auckland*

### **And Finally**

“Statistics is a Cinderella amongst the Sciences, cleaning, sweeping, bringing order, but rather ill-equipped for the Ball”

*Roger Littlejohn  
President's Column, NZSA Newsletter 65*

### **Farewell Roger**

## Awards

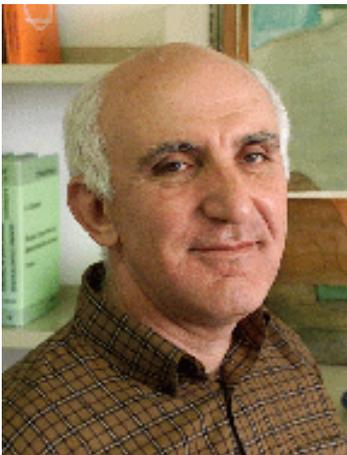
It has been a quiet six months for the Awards Committee, with the only business being the assessment of applications to the Campbell Bequest Fund. Two awards were made. The first was to John Harraway (University of Otago) to fund travel costs associated with a project on the development of bootstrapping and randomisation in New Zealand high schools. The second was to support the organization of the 2011 New Zealand Mathematics and Statistics Postgraduate Conference, which will take place at Silverstream Retreat (near Upper Hutt) in November. Both fit very well with the educational focus of the Campbell Bequest Fund, and with Professor Campbell's interests.

NZSA members are invited to submit applications to the Campbell Bequest Fund at any time of the year. Details can be found on the webpage [http://stats.org.nz/Campbell\\_Bequest\\_Fund.shtml](http://stats.org.nz/Campbell_Bequest_Fund.shtml)

The Association recently called for nominations for its premier honour, the Campbell Award.

*Martin Hazelton*

### Congratulations to Professor Estate Khmaladze



Congratulations to Professor Estate Khmaladze, School of Mathematics, Statistics and Operations Research, Victoria University of Wellington, who has been elected a Fellow of the Royal Society of New Zealand. Estate is "regarded as a

leading international expert in statistical models, making significant contributions in not only theoretical work, but also for statistical problems in finance, insurance and other related fields".

### Ross Haines named Woolf Fisher Scholar

Congratulations to Ross Haines, an Otago University graduate with a BSc (Hons) degree in statistics, who has been awarded a Woolf Fisher Scholarship. Ross will travel to Oxford University to undertake doctoral studies. He'll be researching medieval manuscripts from the 13th and 14th centuries, applying mathematical models to pinpoint the manuscripts' origins and their historical context.

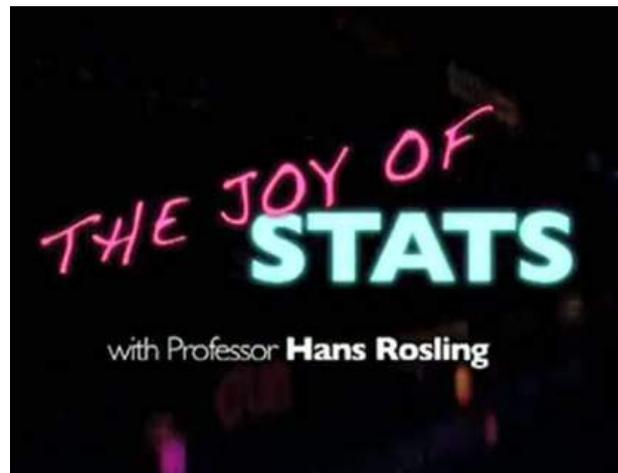
### Kit Withers, DSc



The University of Auckland awarded a DSc to Kit Withers on May 4, based on 76 of his papers in Mathematical Statistics. The chair of the committee was Peter Hall of ANU. See <http://homepages.slingshot.co.nz/~kitw> for a list of Kit's papers.

This was the only DSc awarded this year by the University of Auckland, and the first in the mathematical sciences, although there was one in mathematical physics 20 years or so ago.

### The Joy of Stats



Hans Rosling says there's nothing boring about stats, and then goes on to prove it in a one-hour long documentary by BBC 2010. You can see it at <http://www.gapminder.org/videos/the-joy-of-stats/>

Swedish academic superstar Hans Rosling uses

the power of statistics to change our understanding of global development over the last 300 years, and he'll be your guide through *The Joy of Stats*. From the bowels of some of the world's greatest supercomputers to the frontlines of scientific discovery, Hans exposes the explosive growth of an extraordinary new method of understanding ourselves and our Universe.

Six short *Joy of Stats* films are on the Open University web at: <http://www.open.ac.uk/openlearn/whats-on/the-joy-stats>

In one segment "200 countries, 200 years, 4 minutes", Hans Rosling takes us through 200 years of global development, using top-quality data visualisation.

## Stats Chat

Stats Chat, the University of Auckland Department of Statistics' blog, <http://www.statschat.org.nz/> has lots of interesting things, so check it out.

### Join the NZSA

A membership application/change of address form is available at <http://stats.org.nz/form.php>

## NZSA Membership rates

These rates apply from April 2011 - March 2012 and are in NZ\$.

	NZ	Overseas
Ordinary	80	85
Student & Retired	40	45

There is a \$5 discount for electronic-only access to the journal.

## New members

We welcome new members:

Hilary Seddon, Claire Forsythe, Nieves Felipe, Rong Hu, Andrew Black, Nicole Herdina, Lena Rodnyanskiy, Felibel Zabala, Eleni Matechou, Matthew Pawley, Emily Kawabata, Jessica Adams, Raazesh Sainudiin, Alain Vandal, Thomas Lumley, Peter Ellis, Luo Lei, Markus Landvogt, Pete McMillen, Iverson Zhou, Feronika Lemon and Ruth Read;

and new student members:

Sabariah Saharan, Xian Zhang, Wenxu Zhou, Andrew Fordyce, Michael O'Connor, Jfone Wang, Lin Bi, Kemmawadee Preedalikit, Rebecca Green, Kate Richards, Marina Zahari, Peter Jaksons, Jacquelyn Parente, Insha Ullah, Dominic O'Halloran.



## Submissions to the Newsletter

The Newsletter welcomes any submissions of interest to members of the NZSA. News about New Zealand statisticians, statistical meetings, statistical organisations, statistics in education, or statistical curiosities are suitable for inclusion. Letters that raise issues of importance to statistics in New Zealand are also welcomed. Photographs of recent gatherings and new appointees are of particular interest. Electronic submissions are preferred.

*Next deadline 23 September, 2011*

## Advertising In the Newsletter

The Newsletter accepts advertising of interest to statisticians in New Zealand. Advertising is placed subject to space considerations. Personal advertising by NZSA members will be published free. Other advertising is \$250 per page, \$140 per half page, and \$75 per quarter page. Other sizes can be quoted on request. All advertising requests should be directed to the editor.

### Editor

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## Newsletter on Web

An online version of this newsletter is available at

<http://stats.org.nz/Newsletter73/index.htm>

It will be regularly updated with information and your letters.

Email: [vanessa.cave@agresearch.co.nz](mailto:vanessa.cave@agresearch.co.nz)

## Back Copies of NZ Statistician

A CD archive of "The New Zealand Statistician" is available from the NZSA. For details see [http://stats.org.nz/archive\\_NZS.shtml](http://stats.org.nz/archive_NZS.shtml).

Copies of this CD are available for

Current members \$5

Past members \$25

Non members and libraries \$55

To order a copy email Harold Henderson ([Harold.Henderson@agresearch.co.nz](mailto:Harold.Henderson@agresearch.co.nz)).

# Women in Statistics Conference

The Conference, hosted by the Victoria University's School of Government and held at Victoria University, was well attended with 55 registrations and a number of one-the-day attendees from a range of backgrounds. Statistics New Zealand, the New Zealand Statistics Association, the New Zealand Institute of Mathematics and its Applications (NZIMA), the Statistics Department and Faculty of Science of Auckland University, the Department of Mathematics and Statistics at University of Canterbury and the School of Mathematics, Statistics and Operations Research at Victoria University all provided sponsorship. This covered administrative costs, attendance at the conference and catering (morning and afternoon teas and a light lunch).

Hon Pansy Wong, Minister of Women's Affairs, opened the Conference and enthusiastically promoted the importance of statistics. As well as acknowledging pioneers in gender equity in statistics education she instanced statistics of direct relevance to women, such as the gender pay gap. The Chair for the Conference was Kim Hill who unfortunately was available for the afternoon only. However, she was a lively interjector often providing an alternative perspective and an air of levity. The six speakers presented a range of papers and perspectives designed both to convey information and to stimulate discussion (a copy of the programme is at <http://stats.org.nz/Newsletter73/WISCPprogramme.pdf>).

Professor Natalie Jackson's paper, made parallels between the life of Rita, in the 1983 film 'Educating Rita' (a 26 year old Liverpoolian who enrolled in Britain's Open University in an attempt to improve her situation) and New Zealand women at that time. She made the point that women have increasingly embarked upon further education as their families grew older, showing graphically the gaps between early study and further tertiary education for successive cohorts. However, increasing education and decreasing reproduction has not necessarily advantaged women with the burden of student debt taking longer to pay off with the gender pay gap.

Lisa Davies, discussed the use of statistics to inform Maori development policy focussing on the research behind the Closing the Gaps initiatives in 1998 and 2000 that Maori had poorer outcomes than the rest of the population. She pointed out some of the controversies that arose from this 'deficit-model' and how it led to the concept of Whanau Ora (based on the logic that service delivery was the key impediment to improving Maori outcomes and that the whanau



*From left to right: Associate Professor Jennifer Brown, Lisa Davies, Hon Pansy Wong, Adjunct Professor Sharleen Forbes, Associate Professor Megan Clark, Professor Natalie Jackson.*

not the individual should be the focus of public policy). She advocated tertiary institutions providing statistics as a core component of qualifications as evidence-based policy would require a growing pool of statisticians.

Sharleen Forbes stressed the importance of visualising data and provided examples from currently available sources including [www.worldmapper.org](http://www.worldmapper.org) and [www.gapminder.org](http://www.gapminder.org) together with a range of tools in current use by national statistics offices. These included population pyramids, a tool for looking within the CPI, and the application of GeoVista software to 2006 Census data in Auckland city. She also cautioned that new ways of looking at available data were often not useful for small populations or when not sure of the data quality.

Megan Clark's talk covered the use of statistics by organisations where a minor statistic can be blown-up by the media to become an item. However, quantification where none is necessary can be interpreted as attempts to mislead. She warned of the danger of using statistics in isolation and that throwing in numbers to 'authenticate' policy was becoming increasingly common and that the production of statistics by government agencies was occupying increasing numbers of staff positions.

Jennifer Brown presented some of her statistics research in environmental monitoring of endangered and pest species, both here in NZ and overseas. In a very visual talk she discussed the use of adaptive and spatially balanced sampling in possum monitoring and the estimation of rare and endangered populations (such as the Pyrenees Desman or the Crau Plain grasshopper) or early detection of threats to our biosecurity (such as weeds).

The day was rounded off by Rachael Milicich giving a personal account of how statistics have influenced her life and how they continue to do so. She presented birth, marriages and employment

figures at the time of these events in her life and compared them with other time periods. She also discussed her work managing National Accounts and with the Sustainable Development indicators in Statistics New Zealand.

That the attendees enjoyed the day was evidenced by the number who stayed to chat for an hour or so after the conference had formally ended and from the emails since received. A number of requests have already been made for copies of the presentations (including from the Minister of Women's Affairs) and these are available from [lu.folau@stats.govt.nz](mailto:lu.folau@stats.govt.nz)

I would like to offer my personal thanks to all of the people and organisations that contributed to the success of this conference.

*Sharleen Forbes*

## NZMASP 2010

The award-winning Ricky who holds the title of "best bus driver in New Zealand" transported the postgraduate students on a five hour coast-to-coast adventure, from Christchurch to Westport, to the New Zealand Mathematics and Statistics Postgraduate (NZMASP) conference. This year it was held at the University of Canterbury field station in Westport from 22-25 November 2010. There were 34 participants (enrolled for masters and doctoral degrees) from all over New Zealand. There was also a good spread of subjects with approximately one third from each of applied mathematics, pure mathematics and statistics.

The student-run and organised conference was a great success. All participants enjoyed the relaxed atmosphere and supportive environment in which to network among fellow postgraduates, gain new and up-to-date knowledge about cutting edge research by their peers, and present their own research in a well thought-out, high quality presentation.

At this year's conference we were privileged to hear plenary presentations from Gaven Martin (Massey University at Albany) whose talk was entitled "Quasiregular mappings, curvature and dynamics", Esther Meenken (Plant and Food Research) who spoke about the transition from academia to industry and David Wall (University of Canterbury) who talked about Harry Potter and his invisibility cloak!

Each participant gave a presentation on their research at the conference. We had two parallel sessions at the conference and held a poster session on the Tuesday evening. As in previous years, all the presentations were of an extremely high quality, covered a diverse range of subject matter and were

thoroughly enjoyable. Awards were given for the best presentation in each discipline. This year's awards went to Emily Harvey (University of Auckland), Edoardo Perischitti (University of Auckland), and Anna MacDonald (University of Canterbury) with the people's choice award going to Timothy McKenzie (Victoria University of Wellington).

The conference organisers would like to thank the sponsors of this event for encouraging and enabling the professional development of postgraduate students throughout New Zealand. The sponsors this year were: New Zealand Mathematical Society (NZMS), New Zealand Statistical Association (NZSA), Australia New Zealand Industrial and Applied Mathematics (ANZIAM), New Zealand Institute for Advanced Study (NZIAS), New Zealand Institute of Mathematics and its Applications (NZIMA), Hoare Research Software Ltd (HRS), and SAS.

For the first time, we held a session discussing the future and benefits of the NZMASP conference. It was a great opportunity for delegates to reflect and give feedback on previous conferences and where the future of this event lies. Some of the main ideas which came from this discussion included the following.

- Often mathematics and statistics are treated very separately and this is one of the few conferences which unifies the deeply related subjects.
- It is an opportunity for postgraduates to go through the process of preparing and presenting a talk which builds skills essential for other conferences including the NZMS and NZSA conferences.
- The conference builds a postgraduate "community" so that students from different universities can come together and share mathematical experiences and ideas about the research process.

As well as these points, it provides participants with a supportive environment and also gave students responsibilities, such as being a session chair, which they otherwise would not have the opportunity to do until they become an academic.

We would like to thank the organising committee for all their support during the organisation process. They included: Peter Green (University of Otago), Michael Snook (Victoria University of Wellington), Katie Sharp (University of Auckland), Haydn Cooper (Massey University of Albany). A special thanks also to last year's organisers, Luke Fullard and Atheer Matroud (Massey University of Palmerston North) for their guidance. We look forward to seeing the conference continue for many years to come.

*Shannon Ezzat  
Anna MacDonald  
Rachael Tappenden*

# Focus on Education

## International News

### USCOTS 2011, 19-21 May, North Carolina

The fourth biennial conference US conference on Teaching Statistics, hosted by the Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) was held on 19-21 May 2011. Wayne Stewart (Auckland University) was a plenary speaker. See: [www.causeweb.org/uscots/](http://www.causeweb.org/uscots/)

### International Statistical Literacy Poster Competition 2010-2011

New Zealand schools have been invited to participate in this competition, which is sponsored locally by the NZSA, Waikato University and Auckland University. The best posters will be submitted to the international competition, the winners of which will be announced at the ISI-2011 meeting. Sashi Sharma (Waikato University) is the organizer. For more information see: <http://aucksecmaths.wikispaces.com/> and [www.stat.auckland.ac.nz/~iase/islp/competition-second](http://www.stat.auckland.ac.nz/~iase/islp/competition-second) Photos of the two winning groups are on page 12.

### The 7th International Research Forum on Statistical Reasoning, Thinking, and Literacy (SRTL-7), Utrecht University, Texel Island, The Netherlands, 17-23 July, 2011

Researchers in statistics education from eight countries around the world have been invited to share their work, discuss important issues, and initiate collaborative projects. The theme of the Forum is on New approaches to developing reasoning about samples and sampling in informal statistical inference. See: <http://srtl.info>

### IASE Satellite Conference to ISI Conference, Dublin, 18-19 August, 2011

Continuing the successful tradition of IASE satellite conferences immediately before the biennial World Statistics Congress of the International Statistical Institute, the International Association for Statistical Education will hold its 7th IASE Satellite Conference in Dublin, Ireland. The theme of the conference is "Statistics Education and Outreach". Submission of abstracts has closed. Registration is open until the end of July. See:

<http://www.stat.auckland.ac.nz/~iase/conferences.php?show=iase2011>

### Volcanic Delta 2011. The 8th Southern Hemisphere Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics, Rotorua, New Zealand, 27 Nov–2 Dec, 2011

The statistics keynote speaker for this conference is Assoc. Prof. Jennifer Brown, University of Canterbury. Important submission dates are: 30 May for refereed papers, 21 August for communications papers and 31 August for oral presentation abstracts. For more information see: [www.delta2011.co.nz](http://www.delta2011.co.nz)

## Local News

### CensusAtSchool Project

This project, sponsored by the Department of Statistics of The University of Auckland, Statistics New Zealand, and the Ministry of Education, is focusing on launching the 2011 school census (Rachel Cunliffe) on 2 May 2011. The project is directed by Chris Wild and aims to give 10 to 18 year-old students the experience of participating in a census. New features are Facebook and Twitter to get up to date information and resources such as "7 Billion: Are you typical? – National Geographic Magazine." See: [www.censusatschool.org.nz](http://www.censusatschool.org.nz)

### Statistics Teachers Day, 2 December 2010, Auckland

This annual day is run jointly by the Department of Statistics, The University of Auckland and the Auckland Mathematics Association for teachers under the direction of Ross Parsonage. The theme for the day was: NCEA 2011 – Hitting the ground running. Interest from teachers was so high that registrations had to be limited to 200. Resources and some presentations from this day are available at: <http://www.censusatschool.org.nz/> under new curriculum, then informal inference. A new free software package iNZight, created by Chris Wild and Dineika Chandra, was introduced with resounding success to teachers. The menu-driven software is built on R and allows a drag-and-drop analysis of data. More information on this development and how

to access it will be in the next newsletter.



*Maxine Pfannkuch  
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## NZSA Education Committee

The last six months have been dynamic in various ways, as you'll see below. Our main local interests continue to be the new NCEA standards and free interactive software for schools. Our December meeting was the biggest yet, with 19 people in five locations.

### The new NCEA achievement standards in Mathematics and Statistics

The country's achievement standards in the learning area that was renamed Mathematics and Statistics are being rewritten, so that assessment does promote the new focus of the Curriculum (2007). This year, the new Level 1 standards are in use. Level 2 comes in next year. For Level 3, we put several meetings worth of work into getting the concepts right. The last of these meetings was on 21 Feb, and on the next day the earthquake intervened in our activities. We're concerned about what skills we really want to assess. There's a great opportunity to shift this skill set further towards thinking about what the data is saying and how useful the tools are, and away from the skills of persuading reluctant software to produce results. For Level 3, the updated draft should appear in August.

There are several people who are very active in statistical education in Christchurch. We'd like to wish them all sympathy for the disruption to their lives and work.

This site lets people access standards and assessment exemplars: <http://www.tki.org.nz/e/community/ncea/mathematics.php>

Members of the committee continue to comment on associated curriculum work, such as the key ideas underpinning each strand and level of the statistics curriculum. A recent paper was about how the probability concepts link together, from the first year at school to the last. For this and many other papers that background the curriculum, see [http://www.nzmaths.co.nz/key-mathematical-ideas?parent\\_node](http://www.nzmaths.co.nz/key-mathematical-ideas?parent_node)

### Statistical software for schools

John Harraway reports on progress for GenStat for Teaching and Learning (GTL Schools): A growing number of schools are discovering GTL Schools. A successful Saturday workshop was held for the Auckland Mathematics Teachers Association in mid March. The session was presented by Freya Broughton-Ansin who is teaching on the North Shore this year having completed her honours degree in Statistics at Otago in 2009 followed by a year at the College of Education in Dunedin in 2010. Freya helped develop the GenStat lessons to match the videos on the University of Otago Dept of Mathematics and Statistics website. Freya is being

approached to present another workshop to the Auckland Mathematics Teachers Association and to present the workshop in Whangarei. Reports indicate that GTL Schools is being used in place of Excel in some schools and also being used by Year 13 biology teachers to help with project work.

Dinieka Chandra, who is part of the authoring team for iNZight, reports from Auckland: iNZight was a hit at the 2 Dec Teachers' day. I nearly laughed when I heard several oohs and ahhs when Ross Parsonage was doing the demonstration. Teachers were running to the lab to make sure they got seats at the workshop session. They liked how easy it was even with the many features. Overall, they totally enjoyed playing with it and the response was very positive!

### World Statistics Day

20/10/2010 was World Statistics Day. The "informal inference" paper by Maxine Pfannkuch, Matt Regan, Nick Horton and Chris Wild was the "read paper" at the Royal Statistical Society in London on the day. It was well received.



*Chris Triggs, Nick Horton, Maxine Pfannkuch, Matt Regan, and Chris Wild at the Royal Statistical Society meeting*

### Statistics in the Media books win inaugural educational publishing awards

Copyright Licensing Limited and Publishers Association of NZ have set up some inaugural educational publishing awards, with categories for primary, secondary, and higher education. The two recent Statistics in the Media books won the primary award. They were developed by Learning Media, with input from some members of the committee. The committee congratulates the authors, Lisa Darragh and Jasmine Hardy, and Learning Media.

### Roger Littlejohn

As NZSA president, webmaster and executive member, Roger was always strongly supportive of statistical education, and very understanding of this committee's activities. We are very sorry that we are now without him.

*Mike Camden*

## ISLP Poster Competition



A grant of \$500, from the NZSA Campbell Fund, was made towards the national prizes for the International Statistical Literacy Project (ISLP) International Poster Competition. The mission of this ISI organisation is to support, create and participate in statistical literacy activities and promotion around the world. The aim of the poster competition is to promote statistics learning and education at school level.



Congratulations to Asha, Swashna and Sasha (Mission Heights Junior College), pictured above, and Megan, Jack and Mitchell (Cashmere Primary School), pictured below, for coming first equal in the National section for the International Statistical Literacy Project (ISLP) International Poster Competition.



## Conference Brief

For upcoming events in statistics and related fields, Australasia and worldwide, visit

[www.statsoc.org.au/other-events.htm](http://www.statsoc.org.au/other-events.htm)  
[www.conferencealerts.com/statistics.htm](http://www.conferencealerts.com/statistics.htm)  
[www.kmining.com/info\\_conferences.html](http://www.kmining.com/info_conferences.html)

### **Australasian Applied Statistics Conference (GenStat and ASREML)**

*Palm Cove, North Queensland, Australia*

11-15 July 2011

<http://aasc2011.science.qld.gov.au>

### **World Statistics Congress of the International Statistical Institute (ISI)**

*Dublin*

21-26 August 2011

<http://www.isi2011.ie/>

### **Optimal Design of Experiments - Theory and Application**

*Vienna*

25-30 September, 2011

<http://mzvtagung.boku.ac.at/index.php>

### **Biometrics by the Blowholes**

Australasian Region of The International Biometric Society

*Sebel Harbourside Hotel, Kiama, New South Wales*

4-8 December 2011

<http://www.biometrics.org.au/conferences/kiama2011/index.html>

### **International Statistical Ecology Conference**

*Sundvolden Hotel, Krokkleiva, Oslo*

3-6 July 2012

<http://www.cees.uio.no/isec2012/>

### **Australian Statistical Conference**

*Adelaide, SA*

9-12 July 2012

<http://www.sapmea.asn.au/conventions/asc2012/index.html>

### **8th World Congress in Probability and Statistics**

*Istanbul, Turkey*

9-14 July 2012

<http://www.worldcong2012.org>

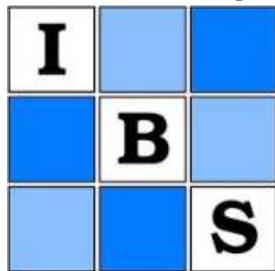
### **International Biometric Conference**

*Kobe International Conference Center, Kobe, Japan*

26-31 August 2012

<http://www.secretariat.ne.jp/ibc2012/index.html>

## Biometrics by the Blowholes



4-8 December 2011

Kiama, New South Wales

<http://www.biometrics.org.au/conferences/kiama2011/index.html>

The Australasian Region of The International Biometric Society (IBS-AR) will hold its biennial meeting from Sunday, 4 December to Thursday, 8 December 2011 at the Sebel Harbourside Hotel in Kiama, New South Wales, Australia. Kiama is about 120 kilometres south of Sydney on the coast.

Invited speakers include: David Balding, David Clayton, Brian Cullis, Montserrat Fuentes, Hans-Peter Piepho, Louise Ryan and Matt Wand.

### Satellite Courses

Two satellite workshops/courses have been organised to take place before the main conference:

Friday December 2, *Sydney*

Spatial analysis of public health data: a practical introduction to the analysis of geocoded and areal health data.

Professor Montserrat Fuentes (North Carolina State University)

Saturday December 3, *University of Wollongong*

Modern applications of linear mixed models with case studies.

Professor Brian Cullis (University of Wollongong)

### Introductory Statistics Courses

Dave Saville, a consulting agricultural research biometrician, will be running his annual winter statistics workshops at Lincoln in July/August:

(A) Basic statistics/analysis of variance,

Tues-Thurs, July 12-14

plus a repeat Wed-Fri, August 3-5;

(B) Simple regression and analysis of covariance,

Wed-Thurs, August 17-18.

The courses use a hands-on, interactive method, and have been especially developed for applied researchers. Both assume little knowledge of statistics. For more information email Dave at [savillestat@gmail.com](mailto:savillestat@gmail.com) or phone him at (03) 325 2520.

## Population Association of New Zealand (PANZ) 2011 Conference

28 and 29 November 2011

*University of Auckland*

**New Zealand's Demographic Futures:**

**Where to from here?**

New Zealand is undergoing a time of significant demographic, economic and social change that provides fodder for a range of interesting papers and discussions. <http://panz.rsnz.org/>

## 3rd Wellington Workshop in Probability Theory and Mathematical Statistics

28 - 30 November 2011

*Victoria University of Wellington*

Programme Committee: Estate Khmaladze, David Vere-Jones, Ilze Ziedins

This year's Workshop will include a session on "Point processes and applications" in honour of David Vere-Jones' 75th birthday.

All presentations are by invitation only, but the Programme Committee welcomes expressions of interest from participants.

<http://msor.victoria.ac.nz/Events/WWPMS2011/>

### 2012 NZMRI/NZIMA Summer Workshop: Random Media and Random Walks

8 - 13 January 2012

Nelson



New Zealand Institute of Mathematics & its Applications

This workshop will consist mainly of 6-8 mini-courses (three 50-minute talks) presented by distinguished international speakers, on some of the many interesting topics in probability theory and statistical physics. The workshop may be of interest to mathematics PhD students in probability, statistical physics, analysis, and discrete mathematics.

There will also be an evening of seminars (and celebration, including dinner) in honour of Prof. Peter Whittle, on the evening of January 7 or 8, 2012. The theme of the seminars will be Stochastic modelling in physics, geophysics and communications.

<http://www.stat.auckland.ac.nz/~mholmes/workshop/>

### Summer Workshops in Probability

23-27 January, 2012

*University of Auckland*

Part 1: New Zealand Probability Workshop

(Local organiser Mark Holmes)

Part 2: 2nd Australia and New Zealand Applied

Probability Workshop

(Local organisers Jeff Hunter, Ilze Ziedins)

Organising committee: Nigel Bean, Mark Holmes, Jeff Hunter, Yoni Nazarathy, Joshua Ross, Peter Taylor, Ilze Ziedins.

The workshop will run for 5 days. There will be 2 days of probability theory ("NZ Probability Workshop") and 2 1/2 or 3 days of applied probability ("Australia and New Zealand Applied Probability Workshop").

Please contact Ilze Ziedins ([i.ziedins@auckland.ac.nz](mailto:i.ziedins@auckland.ac.nz)) for further information or if you wish to be placed on the mailing list for this workshop.

## Local Scene

### AgResearch

Earlier this year Neil Cox and colleagues celebrated 40 years of Neil's valuable service to science in AgResearch and its predecessors. Neil is pictured here with his AgResearch statistical colleagues at Ruakura in a 2004 photo. Congratulations, and Well Done, Neil! Recently Neil re-located south to our Invermay campus near Mosgiel.



*Clockwise from top left: John Waller, Vanessa Cave, Barbara Dow, Martin Upsdell, Catherine Cameron, Harold Henderson, Neil Cox.*

Chikako van Koten was fortunately in Japan when the Feb 22 Christchurch earthquake struck, and she found her house with no damage when she came home on the 24th. She also managed to miss the big earthquake in Japan on March 11th, and after one nervous night of waiting she found out by email that all of her family, relatives and friends in Japan are O.K. She said one lesson learned from this experience is that the Internet and email seem more reliable than telephone in the case of a big disaster like this, in order to communicate with the loved ones overseas. She still could not make voice contact even on Monday the 14th, three days after the earthquake!

Verina Yuan left our team at Invermay to do other things. She had been there for 2 years. At last report she is working for the IRD.

Dongwen Luo was the sole AgR representative at the IBC in Brazil in December, and presented a poster regarding an aspect of "Linear Mixed Effects Models for Large-scale Datasets".

Our biggest piece of news is by far our saddest. Roger Littlejohn passed away on March 6th, and you can read a tribute to him elsewhere in this edition. His absence leaves a large gap in our group, and he will be greatly missed. He was a fine person as well as a fine statistician. Our sympathies go out to his wife, Annette, and children, Jeremy and Tabitha, for their enormous loss.

*John Koolaard*

### University of Waikato

There have been big changes in the Waikato staff since our last input into the NZSA newsletter. Both Murray Jorgensen and Bill Bolstad have retired from full time work and are currently working part time.

We now have a full time tutor, Carolyn Munro, to run our first year tutorials. Carolyn started early 2010.

We welcome Chaitanya Joshi who starts work with us in July 2011.

We recently hosted Stephen Senn from Glasgow University, who gave a seminar "Control in clinical trials – lessons from 2 very different case studies".

Judi McWhirter, Lyn Hunt and Steven Miller went to the Australian Statistical Conference/OzCots conference in Perth in December 2010, where both Lyn and Steven presented papers.

Judi stayed on in Perth after the conference with the intention to explore Western Australia and travel across the continent. But her plans were interrupted as she was hospitalized due to a pulmonary embolism, originally thought to be caused by the flight from Auckland to Perth. Fortunately, she has recovered now.

*Lyn Hunt*

### University of Auckland

Our thoughts go out to colleagues affected by the Canterbury earthquake.

Here in Auckland things have been relatively quiet over the summer. We have welcomed our new Professor of Biostatistics, Thomas Lumley, who joined us from the University of Washington last year. We're also pleased to welcome our very-own NZSA newsletter editor, Esther Meenken, who is studying part-time towards her PhD while she continues her work at Plant & Food Research.

Congratulations to Ross Ihaka, who won the Catalyst Lifetime Achievement in Open Source Award at the NZ Open Source Awards 2010, for his development of R. This is just the latest in Ross's long list of awards for his achievements - however it may be the first and last time that he shares an award platform with the IRD, who were also open-source winners!

Maxine Pfannkuch won a \$200K grant from the NZ Council for Educational Research's Teaching and Learning Research Initiative, entitled 'Bootstrapping statistical inferential reasoning', in partnership with Sharleen Forbes of VUW and John Harraway of U Otago. The project aims to deliver a better understanding to first-year and Year 13 students of how inference works, using bootstrapping and randomisation methods as a central foundation. The

approach will be trialled on a small group of students first, and we are all very interested to hear how it progresses.

Special congratulations to Nancy Wong of our admin staff, whose cheerful face is the first point of contact for visitors to our department. Nancy's never-ending efficiency, innovation, and cheerfulness was recognised by a university General Staff Excellence Award for 2010. A handful of awards are given each year, and typically go to teams developing large-scale software systems for the university, so it was a real delight to see Nancy recognised on the same platform. Nancy, Alexandra and Karen in the office go to huge lengths to make our lives run smoothly, and awards like this are a great way to show how much we appreciate them!

And at last, for the first time in 7 years, someone in the department has succeeded in producing a baby girl! Congratulations to Nick Shears on the birth of Calla Ann, and to PhD students Sam McKechnie and Jonathan Briggs on the births of daughter Madeleine and son Theo, respectively. Our total is now 25 boys and 6 girls born since 2000. Watch out boys, we now have enough for an all-girl five-a-side AND one referee....

*Rachel Fewster*

## **Auckland University of Technology**

In February 2010, Professor Jeff Hunter was appointed to a part-time position as Head of Research in the Mathematical Sciences. In July he accepted secondment to a full-time position as Head of Mathematical Sciences, in order to assist the School to undertake a major change in its staffing structure, where his background proved to be of considerable assistance.

At the end of last year, five staff in the Mathematical Sciences in the School of Computing and Mathematical Sciences (Neil Binnie, Helen Petersen, Peter Watson, Rowena West, Stuart Young) took early retirement. This brought about the appointment of five new permanent lecturers from the beginning of 2011 (Drs Hyuck Chung, Robin Hankin, Jeong (Kate) Lee, Guanghua (Andy) Lian and Jiamou Liu). We are delighted to have them join us to strengthen the degree offerings and research activity within the School.

Dr Hyuck Chung - Lecturer in Applied Mathematics. Hyuck was appointed last year on a fixed term contract, following post doctoral experiences at the University of Otago, University of Auckland and University of Illinois Urbana-Champaign. His PhD is from the Department of Mathematics at the University of Auckland.

Dr Robin Hankin - Lecturer in Statistics. Robin joined the School from the Department of Land Economy at the University of Cambridge where he was a Senior Research Associate. He has had teaching experience at the National Oceanography Centre in Southampton and a five year period at the University of Auckland in the School of Environmental Science. His PhD is from the Engineering Department at the University of Cambridge.

Dr Jeong (Kate) Lee - Lecturer in Statistics. Kate joined the School from the University of New South Wales in Sydney where she has been a Research Associate following the completion of her PhD at Queensland University of Technology under the supervision of Professor Kerri Mengersen. Kate also has a MSc with First Class Honours in Applied Mathematics from the University of Auckland.

Dr Guanghua (Andy) Lian - Lecturer in Applied Mathematics. Andy completed his PhD in Mathematical Finance from the University of Wollongong early last year and has recently been a post doctoral research Fellow at the University of Adelaide. Andy also has an MA in Business Management from Huazhong University of Science and Technology at Wuhan, China and a BSc in Applied Mathematics with a minor in Computer Science from Sichuan University, Chengdu, China. In addition he is completing studies as a Chartered Financial Analyst having qualified for a Certificate of Quantitative Finance.

Dr Jiamou Liu - Lecturer in Computer Science. Jiamou joined the School from University of Leipzig, Germany, where he has been a research fellow. Jiamou completed his PhD from the University of Auckland in the field of Theoretical Computer Science. During his PhD he also studied in Cornell University, USA and worked in Microsoft Research Asia, Beijing, China.

In addition to the above permanent appointments, a number of fixed term full-time appointments were



*Robin Hankin, Jiamou Liu, Jeong (Kate) Lee, Hyuck Chung, Guanghua (Andy) Lian*

made to Joy Fouchee, Martine MacGregor-Reid and Dr Alana van der Merwe to be involved primarily in the pre-degree certificate programmes. This enabled us to reduce the number of part-time casual appointments and will ensure that from the beginning of Semester 2 all academic staff teaching into degree programmes will be research active and returnable in the PBRF exercise.

Assoc Prof Paul Cowpertwait attended the ANZIAM Conference in January 2011, and presented a paper on the empirical analysis of a continuous-storm-type spatiotemporal stochastic rainfall model fitted to data from the Roma region, Italy. This work has recently appeared as a featured “spotlight” article in *Water Resources Research*. Paul is currently engaged in a large overseas research contract that aims to develop spatially representative rainfall and extreme events for a decision support system in Europe.

### Seminars

David Welch (Pennsylvania State University), “Estimating parameters of a contact network for epidemic data”

Robin Hankin (AUT University), “Getting something from nothing: the emulator”

*Jeffrey Hunter*

## Massey Albany

*Marti’s bit...*

It has been an eventful few months for the statistics group at Massey Albany.

Oliver Hannaford has successfully completed confirmation for his PhD, entitled “The effects of environmental heterogeneity on the evolutionary mechanisms and ecological patterns of biodiversity”.

Meanwhile, John Xie has now successfully completed his PhD thesis and is now off to greener (or at least soggy) pastures in Brisbane, Australia. His sparkle and enthusiasm will be sorely missed! We are also drying our eyes after learning the news that Marie Fitch will be leaving our group to take up a new position at University of Auckland. She is looking forward to new challenges working with our esteemed colleagues “over the bridge”, so renowned for their expertise in Teaching Statistics, which is certainly one of her passions. But oh how we will miss her!

In other personnel news, Marti Anderson has moved from the Institute of Information and Mathematical Sciences (IIMS) over to the NZ Institute for Advanced Study (Gaven Martin’s group) here at Massey Albany, which will provide excellent

new research opportunities, while still allowing her to keep close ties with the stats group.

The up-shot of all these movements is that two new academic positions have been advertised for Statisticians with the Albany group.

In other news, the summer has been filled with diving expeditions, as Adam Smith’s PhD research, using the RV Poisson (our 4.3m rigid inflatable) develops in full swing.



*RV Poisson*



*Prof Anderson blatting around*

Adam is combining hands-on marine field work with Bayesian statistics to give us better models of the effects of marine reserves on fish communities. How much fun can one lot of statisticians have counting fish? We are pushing the boundaries on this one, along with colleagues David Raubenheimer (in the Institute of Natural Sciences) and Russell Millar (University of Auckland). Colleague Dr Mat Pawley is trying to beat us by having fun counting shellfish on beaches, having landed a new Ministry of Fisheries contract for the privilege. We think we saw him taking a surfboard along the last time he went sampling...

We recently hosted Dr Tim Langlois, a former PhD student of Marti’s, who is now working as a postdoc with the Oceans Institute at the University of Western Australia. Tim came out for a dive with

us and also gave us a couple of interesting seminars, outlining his current research on bio-geographical gradients in fish diversity along the Western Australia coastline.

Several international workshops in multivariate analysis, to be given by Marti Anderson, are in the cards for 2011 - in Portugal, the UK, New York, and Brisbane, which continues to provide a source of joy and new collaborative activities.

#### *Marie's bit...*

Beatrix Jones is currently on sabbatical, but just over the bridge (at UoA), which means we are fortunately able to continue to prevail upon her for her inputs into our research meetings (for research purposes only, mind!) This February Beatrix also took time out from a family trip to her hometown of East Lansing, Michigan, to give a talk entitled "Challenges in Gaussian Graphical Models" to the statistics department at Michigan State University. The talk went well, despite an audience well sprinkled with the parents of high school classmates!

Howard Edwards and Beatrix Jones (with a small amount of input from Marie) have been awarded an Ako Aotearoa grant to create a Data and Story library of datasets suitable for use in business Statistics courses. Before he left John Xie was employed to begin gathering data. Contributions of suitable datasets are welcome and can be emailed to [bizdatasets@massey.ac.nz](mailto:bizdatasets@massey.ac.nz). The resulting collection will be freely available online.

In February Barry McDonald attended MISG (Mathematics and Statistics in Industry study Group) at RMIT in Melbourne. He, along with (ex NZ) Professor Bill Whiten from UQ, was moderator for a problem submitted by Transpower on wind farms.

*Marti Anderson and Marie Fitch*

## **Massey Manawatu**

Alasdair Noble left us for Plant & Food Research at Lincoln in February, arriving just in time to experience the February 22 Christchurch earthquake.

Alasdair has made a huge contribution to the Stats group over the years and will be sorely missed – especially by those taking over his teaching. Ganesalingam has reduced his time to 50% by taking up a Teaching Fellowship. This has left us even more under-staffed, though we did manage to get the other 50% of Debbie Leader who has now moved to a full-time appointment.

Three of our postgrads: Penny Bilton, Tian Mao and Bill Grant recently completed the Master of Applied Statistics. Penny achieved First Class Honours, won a Massey University Vice-Chancellor's

Doctoral Scholarship and has now started a PhD with Steve Haslett. We had a particularly good crop of Honours students last year: Rebecca Green, Kate Holland, Emily Kawabata and Kate Richards all of whom obtained First Class Honours.

Rebecca won a Massey Doctoral Scholarship and has started a PhD with Mark Bebbington, Kate H has been given a Fullbright to study Public Health in Arizona, and Kate R is due to start a PhD with Martin Hazelton. Emily is weighing up her options but will probably be starting a PhD with somebody soon.

PhD student Tilman Davies recently returned from an extensive European excursion, made possible by funding as part of his Top Achiever's Doctoral Scholarship. Much time was spent working with Prof Jesper Møller, a world leader in research concerning spatial point processes, at Aalborg University in Denmark. Visits were also made to departments at the University of Warwick and Lancaster University in the UK, the University of Jyväskylä in Finland, and the University of Göttingen in Germany. As a result, several exciting collaborations with a number of these institutions are currently underway.



*Tilman Davies out for dinner with the Finns.*

Martin Hazelton presented at the 2010 Wellington Workshop on Probability and Mathematical Statistics in November. He attended and gave a talk at the 2010 Australian Statistics conference in Fremantle (Western Australia) in December, and presented a satellite workshop on R in conjunction with A/Prof Berwin Turlach.

Doug Stirling attended the ENBIS conference in Antwerp in September and OZCOTS in Fremantle in December. A lecturer in Germany is currently translating CAST into German and a translation into Serbian is also underway. Doug has been busy making changes to CAST's structure so that it will be easier in the future to produce customised and translated e-books.

Jonathan Godfrey's flight to Christchurch in February was diverted to Auckland because of the earthquake. Nothing particularly unusual about this except that he was on his way back from Sendai in Japan. We wonder what Ken Ring would make of this.

*Geoff Jones*

## Plant and Food Research

At the start of February, Alasdair Noble joined us as our team leader, based at our Lincoln site. Alasdair probably needs no introduction, since he has been involved with NZSA (particularly the Education committee) for a number of years; but for those who don't know him, Alasdair has qualifications in engineering and education and, until the mid-1990s, taught mathematics, physics and science to Head of Department level at several secondary schools. He then completed M. Applied Statistics and PhD degrees at Massey University in Palmerston North, and joined the staff of the Institute of Fundamental Science where he was a Senior Lecturer in Statistics with a strong element of consulting for research projects.

We would like to thank Peter Alspach, who did an excellent job as our acting team leader. I imagine he is distinctly relieved there won't be any pressure to continue in the role.

Alasdair's start in the job has been somewhat disrupted by the February earthquake. Fortunately all our team in Lincoln got through unscathed.

We are very pleased to congratulate Andrew Wallace on his recent award for 40 years service with Plant and Food and its precursors. Andrew started work at the State Services Commission in Wellington, and in 1967 did a Diploma in Science (Statistics) course at Otago Uni. This was the inaugural year of this diploma course, and at the time it was the only post-graduate course in NZ. He then moved to DSIR at Lincoln, and has worked with scientists there ever since.

Esther attended the IBC conference in Brazil in December 2010. IBC is the international conference for statisticians working in biological fields, and this year attracted over 800 delegates from around the world. Esther writes: "Many talks at the conference covered the recent huge developments in research around statistical genetics and genomics in a wide range of agricultural, medical and ecological applications. There were several talks that were relevant to my PhD research, including work handling crop models, and applications of Bayesian methods. I also got some great ideas for analyses coming up."

In other news, Sammie Yilin Jia was married on the 22nd of March. Congratulations Sammie and Michelle!

Finally, the team had a two day meeting on April 14-15. We discussed our team strategy within the organisation, and heard some interesting talks around sensory testing from Nihal, Mark and Duncan. Additionally, Peter shared recent work with blueberry breeding with which he has been involved. The meeting was a great opportunity to catch up with team members, particularly at the dinner on Thursday night at the very busy Speights Alehouse!

*Duncan Hedderley*



*Plant and Food Research Biometrics Team with Science Group Leader Brent Clothier. From top right in serpentine fashion: Brent, Marcus, Esther, Peter, Andrew M, Mark, Nihal, Andrew W, Duncan, Patrick, Sammie, Ruth and Alasdair.*

## Department of Conservation

We were saddened by news of Roger Littlejohn's untimely death. Ian travelled with Jennifer Brown and David Baird to attend the celebration of Roger's life in Mosgiel. Ian and Roger studied together at Victoria Uni in the mid 1970s and worked together a lot in NZSA activities, particularly in relation to our journal. Roger will leave a big gap in our association.

Ian was much more affected by the 22 February earthquake than previously. This one caught Ian in the middle of town - in fact in the city library. It quickly became obvious that damage in the central city was much more severe than in September. A rapid trip back to the evacuation area at the back of DOC's offices in Kilmore St involved passing through some of the destruction in the northern CBD, crossing cracks in Victoria Square, avoiding cars negotiating scattered bricks and severely broken road surfaces on Kilmore St, and finally picking a way over a pile of bricks, remnants of what had been the neighbouring Caledonian Hall. Fortunately, none of the few staff in the building at lunchtime were injured or missing, much more fortunate than those in the Pyne Gould building less than 500 meters away. However, at this stage it looks as though we will never be in

that building again, and it remains to be seen if we will be able to rescue much if anything beyond the computers and servers that have been retrieved by special teams. A quick trip home revealed less and less damage when travelling west, and no injury and repairable damage at home. Ian is currently working mainly from home.



*Ian's office after February 22 Earthquake*

Earthquake aftermath has disrupted planning somewhat but we are preparing for a busy season of training at DOC, but without our main venue in Christchurch. Main emphasis is on five sessions of a 3-day course on designing observational studies which has created wide interest in DOC and beyond plus a session each on GLMs and mixed models. In addition we will be involved in training local DOC staff to lead sessions on data handling in Excel, based on material originally prepared for us by Neil Cox at AgResearch. Current registrations for that number 333 - more than 1 in 6 DOC staff!

We are also fitting in some overseas travel. Rohan is attending a modelling workshop in New Caledonia in April, and has been invited to present an R workshop at an International Statistics Conference in Colombo, Sri Lanka at the end of the year. Ian is a keynote speaker at the International Conference on Health Statistics in the Pacific Islands in Fiji in July, with presentations on a couple of pet subjects -- data handling, and data visualisation, following his interests in teaching statistics to non-statisticians. The conference is the first major project of the newly formed Friends of Australasia group in the American Statistical Association, and more details are available at [http://community.amstat.org/AMSTAT/Friends\\_of\\_Australasia/ICHSPI2011/Default.aspx](http://community.amstat.org/AMSTAT/Friends_of_Australasia/ICHSPI2011/Default.aspx)

And to finish with our most important and positive news - Rohan has now completed his PhD with Murray Jorgensen at Waikato. His thesis introduces a new method to compute the Robust statistics for the model parameters and their influence functions, under the title "Using Finite Mixtures to Robustify Statistical Models".

*Ian Westbrooke (Christchurch)*

## Scion

Rod Ball reports on IBC 2010 held in Florianopolis, Brazil:

There were 989 contributed abstracts, and 62 invited abstracts, covering a range of statistical application and methodology areas, including experimental design, genomics, bioinformatics, high dimensional data and Bayesian methods. With up to 5 concurrent sessions, it was not possible to attend even all the genomics or genetics interest sessions.

The organisers kept us busy with buses arriving to take us from the hotels to the conference venue as early as 7am. This made it difficult to get over jet lag especially after lunch in the darkened lecture rooms.

There were some interesting conference tours: Esther, Said, Mario and I were on Tour 8 (the only one not full) because we didn't book in advance. This turned out to be the best (we think) - a boat cruise to the fortaleza (island forts) in the Florianopolis bay, which is very large, with lunch at a beach restaurant on another island. Some of the people had swims at the beach and from the boat later when it stopped in the middle of the bay!

There was a large number of creditable contributions from the local region including talks and posters, particularly of applied work. They are however, short of qualified statisticians to teach in universities in Brazil, and are even hiring engineers to teach statistics, according to one Brazilian professor I met.

*Rod Ball*

## Science Fairs

Our association has supported the regional science fairs run in most regions around the country in August and September each year. I coordinate the prizes and help with getting judges for these events. There are a few areas which have held science fairs in the past which I have had difficulty in contacting recently. If anyone knows of a science fair in the following areas could they contact me (Alasdair.Noble@plantandfood.co.nz, note I have moved from Massey University) or if you know of a contact in a reasonably large Intermediate school as they generally enter the fairs. The areas are: Waitakere City, Hawkes Bay, Wanganui, Wairarapa, Kapiti Coast and Southland.

Thanks for your help.

*Alasdair Noble*

