



The New Zealand Statistical Association
nzsa.rsnz.org

Newsletter

Number 71

April 2010



NZSA 2010 Conference

Massey University

Palmerston North

June 29 - July 1

You are warmly invited to attend the 61st Annual Conference of the New Zealand Statistical Association, to be hosted by Massey University, Palmerston North, Tuesday 29 June - Thursday 1 July 2010. http://nzsa_cdl_2010.massey.ac.nz

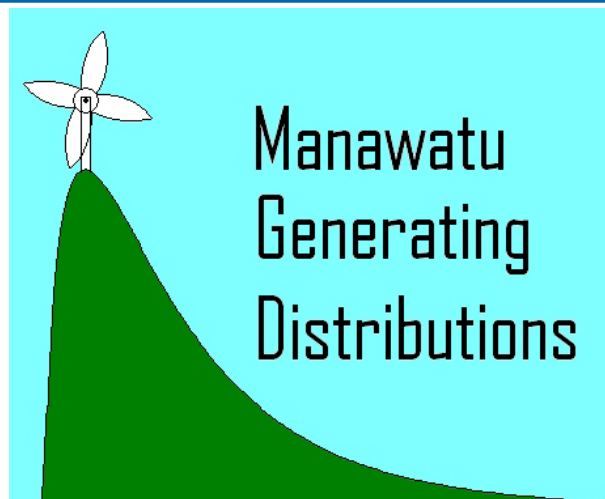
Themes

Papers are invited from any area of probability and statistics: please submit an abstract now! 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:

- Statistical distributions (univariate or multivariate)
- Statistical quality control
- Reliability and survival analysis
- Design of experiments

One or two sessions will be set aside for Statistics Education on the last day.

There will be a strand running through the conference celebrating the work of Professor Chin Diew Lai from Massey.



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.

Confirmed speakers include:

Ingram Olkin
Professor of Statistics and of Education, Stanford University

N. Balakrishnan
Professor, McMaster University, Hamilton, Canada

Ching-Shui Cheng,
Professor of Statistics, University of California, Berkeley

Abstract Submission

Abstracts may be submitted online in LaTeX format (template provided) to Jonathan Godfrey via the conference website. Submission by April 30th is preferable, the deadline is May 28.

Registration

Registration is now open. See the conference website for more details. 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 Wednesday evening (June 30) at the Palmerston North Convention Centre in town. The cost is \$55 per person.

Accommodation and Travel

Delegates are asked to make their own arrangements. An extensive list of suitable accommodation providers and travel/tourism information, including a map of Palmerston North, is provided on the conference website.

Other Details

Further details, including key dates (such as early bird registration deadlines, abstract submission deadlines, etc), online registration procedures, the full programme (including the time of the New Zealand Statistical Association AGM), will all be available shortly via the conference website. Please bookmark that page at http://nzsa_cdl_2010.massey.ac.nz

There are a number of overseas people who have expressed an interest in attending. We hope to see as many of our members in sunny Palmerston North at that time. The organising committee would ask you to pass this invitation on to any others who may be interested.

NZMASP 2009 Report

For three days in November the normally quiet seaside township of Foxton Beach became a hive of mathematical and statistical enterprise with the 3rd annual New Zealand Maths And Statistics



Lyndon Walker receiving the award for the best statistics talk at NZMASP from Jonathan Godfrey

Postgraduate conference, NZMASP, held from 23rd-26th November 2009. As in previous years, the conference was well attended (57 students enrolled from honours, masters, and doctorate degrees) and most New Zealand universities were well represented. There was a good spread of subjects with approximately 1/3 each of the talks split between pure mathematics, applied mathematics, and statistics.

The student presentations were very enjoyable and the attendees gained valuable experience and an opportunity to test out and refine their talks ahead of bigger events such as the New Zealand Mathematics Colloquium. Of particular note were talks from Shannon Ezzat (University of Canterbury) who took out the best pure mathematics talk, Rachael Tappenden (University of Canterbury) who presented the best applied mathematics talk, Lyndon Walker (University of Auckland) who won the best statistics talk, and Yousaf Habib (University of Auckland)



Participants at November 2009 NZMASP

who was voted the “peoples choice” for 2009. Also, two members of the “Calcium Mafia” (their words, not mine!), Emily Harvey and Katie Sharp, from the University of Auckland were highly commended.

The meeting was co-directed by Atheer Matroud and Luke Fullard of the Institute of Fundamental Sciences, Massey University and organised by Haydn Cooper at Massey Albany, Brigid Betz-Stablein at IFS, Massey, Christopher Ball at Victoria University, Shannon Ezzat of the University of Canterbury, and Aidin Jalilzadeh of the University of Otago.

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:

NZMS
 NZIMA
 ANZIAM
 NZSA
 Hoare Research Software Ltd.
 Statistics New Zealand
 SAS
 Institute of Fundamental Sciences, Massey University
 Mathematics and Statistics Department,
 University of Canterbury
 Mathematics and Statistics Department,
 University of Auckland
 School of Mathematics, Statistics and
 Operations Research, Victoria University

Student feedback received from the NZMASP conferences included:

“NZMASP was a good opportunity to network with other maths and stats postgrad students. On both a social and professional research level this was very valuable.”

“Getting to see stats, applied maths and pure maths talks gave students the opportunity to see what was being done in related disciplines. There were actually strong links between some of the work done in applied maths and stats, i.e. work in genetics and

biomath/stats modelling. I think there was definitely value in having the 3 groups together.”

“NZMASP was a good opportunity for more senior postgraduate students to have the experience of chairing sessions, organising and running a conference, evaluating abstracts etc.”

We all look forward to the 2010 event. We hope this conference becomes an institution for the mathematics and statistics postgraduate students of New Zealand.

Luke Fullard

Conference Brief

See Gordon Smyth’s Australasian conference list
<http://www.statsci.org/conf/index.html>

International Statistical Ecology Conference 2010

University of Kent, Canterbury, UK

6-9 July 2010

<http://www.creem.st-and.ac.uk/ocs/index.php/isec/isec2010/>

European GenStat and ASReml Applied Statistics Conference 2010

Rothamsted Research, UK

14 July 2010

<http://www.vsni.co.uk/resources/events/european-genstat-and-asreml-applied-statistics-conference-2010/>

RSS International Conference 2010

Brighton Centre, Brighton, UK

13-17 September 2010

<http://www.rss.org.uk/main.asp?page=3171>

International Biometric Conference

Federal University of Santa Catarina, UFSC, Florianapolis, Brazil

5-10 December, 2010

<http://www.rbras.org.br/~ibcfloripa2010/>

Australian Statistics Conference

Esplanade Hotel, Fremantle, Australia

6-10 December 2010

<http://www.promaco.com.au/2010/asc/>

The 2010 IEEE International Conference on Data Mining (ICDM 2010)

Building 5 (at Haymarket Campus), the University of Technology, Sydney

13-17 December 2010

<http://datamining.it.uts.edu.au/icdm10/>



Participants at a talk

President's Column

Welcome to the New Year and 2010. Every year I set resolutions for myself, I rarely keep them, but at least I try. This year's resolution was to stay in touch with friends. The statistics community in NZ is really like a group of friends for me. We are supportive, we are committed and we do an excellent job in connecting with science, industry, education and management. Statistics is fundamental to almost every aspect of society and we should be proud of what we do.



Can we do more? Yes. One other resolution I made was to raise the profile of statistics in NZ science. Where do we rank in measures of science peer esteem? How many of our members are Fellows of the Royal Society, members of the Marsden Panel, and members of the PBRF panel? I want our profession and individual members to be recognized for excellence. This year let us take every opportunity we can to promote statisticians for their excellence in science.

A new award in mathematical science, initially proposed by the NZ Mathematics Society, will be offered for the first time in 2010 by the Royal Society. The Jones Medal will be for "Lifetime Achievement in the Mathematical Sciences". The intention is to offer this every two years. This year nominations will be called for in April, with a 1 August close date. I hope to see some strong statistics nominations.

One of the changes in NZ science is the reorganization of the Royal Society. For many years there has been a Mathematics and Information Sciences committee. This was disbanded earlier this year. New advisory panels are being established for three discipline areas. We will sit within the Physical Science, Mathematics, Engineering and Technology discipline. The panel will be chaired by the discipline vice president – currently this is Professor Keith Hunter. The panel will comprise the presidents (or nominees) of the constituent organizations. In addition there will be expert panels set up for specific issues and tasks. There has been little opportunity for involvement from NZSA in deciding on this reorganization despite attempts from some of the executive, however personally I feel the change is understandable and we should view the reorganization positively.

The forthcoming big event for NZSA is the

conference at the end of June. I hope you can all attend and help make it a conference to remember. The organizing committee has been working very hard. I think they have designed a conference that will be another example of statistical excellence!

Jennifer Brown

Editorial

Well, the old Monty Hall problem seemed to be fairly well received, so I'll present another puzzle. I hadn't heard of this problem until recently when a software designer posed it to me.



This puzzle is attributed to Dr Todd Ebert, a computer science instructor at the University of California at Irvine, who introduced it in his PhD thesis at the University of California at Santa Barbara in 1998. There are several variations of the problem, but the most well known (and simplest) seems to be the 3 hat variant. The problem is this:

Three people are in a closed room, and each is assigned a random hat, either red or blue. They cannot communicate with each other, but each person can see the hats of the two others (not their own). They each have to guess their own hat colour or pass. The whole group wins if at least one person guesses the colour of their hat correctly, and none guessed incorrectly (passing is neither correct nor incorrect). This puzzle doesn't have a 100% winning strategy, so the question is: What is the best strategy? Which strategy has the highest probability of winning?

Clearly it is possible for the group to win 75% of the time. 75% of the time, two of the players will have hats of the same colour and the third player's hat will be the opposite colour. The group can win every time this happens by using the following strategy: Once the game starts, each player looks at the other two players' hats. If the two hats are different colours, they pass. If the hats are the same colour, the player guesses their own hat is the opposite colour.

This problem and its many variations have applications in game theory and coding theory, and discussions available on possible solutions includes Hamming codes. Note that as the number of participants increases, the possibility of the group winning also increases. There is more information for those interested at http://en.wikipedia.org/wiki/Prisoners_and_hats_puzzle and http://www.brooklynclub.org/gc/cgi-bin/disp_topic_iphtml?topic_id=51

I hope you enjoy this newsletter!

Esther Meenken

ANZJS Corner

ANZJS Editors' Column

The ANZJS editors held their annual face-to-face meeting in Melbourne on 22-23 February. It was the first time the current editors have met face-to-face and as expected it proved a very useful forum for issues that are hard to resolve by phone and email. It also allowed us to meet with the ANZJS publishers, Wiley-Blackwell, to discuss journal-publisher links and issues, and to link up with Neville Bartlett who is a member of the ANZJS Management Committee (which consists of people from both the Statistical Society of Australia, SSAI, and NZSA). Another major benefit was that the meeting allowed us all to test out ScholarOne Manuscripts, the new electronic submission system for submitted manuscripts, which is being adopted by ANZJS in 2010, and which has the potential to greatly improve the current paper tracking system.



The meeting held over the two full days covered a range of issues. These are listed, and in some cases detailed below.

Wiley-Blackwell provided a useful summary of their annual report on ANZJS; there was discussion of marketing plans, impact factors (the 2009 impact factor is not yet available), copyright, the new system at Wiley-Blackwell for publication of supplementary material for published papers on web, the joint venture between SSAI and NZSA for publication of ANZJS (which is separate from SSAI and NZSA, and for which finances are currently healthy), the publication contract renegotiations with Wiley-Blackwell, quality of papers in ANZJS, the need for clear direction for ANZJS, i.e. focused issues / invited papers / Australian and NZ content / and good book reviews. Even the occasional special issue may be a possibility. New style guides, author instructions, and key words for editors and people submitting papers were discussed; all these will need to be finalised before ScholarOne Manuscripts can go on stream. Attracting more and better papers and where possible maintaining the distinction between Theory and Methods and Applications papers were also discussed. We also considered any new Associate Editor requirements, publication ethics, evening out the flow of papers (which will be a benefit of ScholarOne Manuscripts, as will being able to acknowledge referees), succession planning for the Editors, and whether ANZJS should include obituaries.

The ScholarOne Manuscripts session on the Tuesday included both training and discussion of a number of related issues including:

- consistency and assignment of paper tracking numbers
- point in process at which authors notified
- linking of editors paper progress information
- acknowledgements from editors to managing editor of receipt and choice of AEs
- acknowledgements from AEs of receipt (with reminders)
- names of referees from AEs
- knowing who has sent what to whom and when: AE loads overall
- monitoring turnaround times for reviewing papers detail and overall
- acknowledgement of receipt process
- line spacing, font size, maximum length specifications
- reporting by AEs of paper receipt
- setting changeover date and notification to authors from <anzjs@statsoc.edu.au>

These developments are at present background ones in the main, but nevertheless I hope to provide you with some sense of the editors' role and the direction in which ANZJS is moving.

Stephen Haslett
Managing Editor, ANZJS
anzjs@statsoc.org.au

Australasian Region International Biometric Society Awards Scholarships

Each year the Australasian Region of the International Biometric Society awards scholarships to students doing either Honours (fourth year) or Masters study in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics. The recipients this year were Ross Haines (University of Otago) and Elizabeth Ryan (Queensland University of Technology). Ross has been a summer intern at AgResearch, where he developed a resource on time series methods, and will be doing his honours dissertation with Prof Richard Barker (on summarizing key features from gaze behaviour studies in sport). Elizabeth has done work on modelling dengue fever, including a period of work experience at Oxford University and a project funded by AMSI and CSIRO. Congratulations and best wishes to both of them (and my thanks to Rachel Fewster, Olena Kravchuk and John Carlin for helping judge the applications).

Duncan Hedderley

Obituaries

Emeritus Professor Al Rae (1923 - 2009)



Al Rae, Emeritus Professor of Animal Breeding and Genetics at Massey University, died on October 16, 2009, in Palmerston North.

Al was a member of the New Zealand Statistical Association, an Honorary Life Member of the New Zealand Society of Animal Production, a Fellow of the Royal Society of New Zealand, and a Companion of the New Zealand Order of Merit.

AgResearch Note

It is with sadness that we note the passing of one of the great icons of New Zealand agriculture. This morning Professor Al (Alexander) Rae died in Palmerston North.

Professor Rae was one of the founders of modern animal breeding. The foundations that he laid, both theoretical and practical, underpin the present industries represented by LIC, the Landcorp animal breeding schemes and other programs in sheep, beef cattle and poultry.

He had the rare ability to contribute to theoretical population genetics at the highest level, yet could also appreciate (and deal with) the practical problems of actually implementing the theory on-farm. Al held the chair in Sheep Husbandry at Massey University until his retirement.

There are many people in AgResearch who will have been influenced by Al's teaching. He will be greatly missed.

Andy West

Irene Goodwin (1949-2009)



It was with great sadness that the Department of Mathematics and Statistics said farewell to Irene Goodwin, who died on 27th October, just a few short months after being diagnosed with cancer. Irene was a much-loved colleague who was a mentor and friend to staff and students, and her passing has left a huge gap in the Department. She joined the Department in 1988, and spent much of her time as secretary to the Professor of Statistics and the CASM Unit. Irene was always efficient, well organised and willing to undertake new work. We still hear comments from past visitors about how well they were looked after by Irene during their visit (more than one expressed a strong interest in taking Irene back with them!).

Irene had a genuinely caring manner that was never sentimental. Her attitude was that she was there to help others; one that we could all learn from. Her office was often busy, with people starting their day by coming in to share their joys or woes. Irene was a great listener and always discreet. She also knew how to use humour to lighten things up or for gentle admonishment.

Despite several health problems over the years, Irene never complained and had a very positive attitude toward life. She showed this most clearly in her last few months, in a manner that those who knew her will never forget.

Irene was full of wonderful tales from her earlier life on the ocean as a ship captain's wife. One story involved a description of being in the centre of a hurricane lying on the floor of the cabin trying to catch one of her pot-plants as it slid from one side to another: even when surrounded by chaos, Irene could always attend to a small but essential detail.

Irene was especially fond of conference organisation and is well-known to many of our

colleagues around the world as a consequence. Thanks to Irene our conferences always ran smoothly and at a profit. One of our favourite conference stories comes from the 2007 EURING conference. Pertti Saurola, a Professor from Helsinki, had considerable airline-related problems in getting to Dunedin. Irene provided her usual abundance of help and solved his problems. At the conference dinner, Pertti somehow managed to get Irene seated in a chair in the centre of room and proceeded to serenade her with a rendition of *Goodnight Irene*.

Irene Goodwin: Always cheerful, Always thoughtful, Always with the interests of others at heart. An example for us all.

David Fletcher

Back Copies of NZ Statistician

A CD archive of "The New Zealand Statistician" is available from the NZSA. For details see http://nzsa.rsnz.org/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).

Join the NZSA

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

NZSA Membership rates

These rates apply from April 2010 - March 2011 and are in NZ\$.

	NZ	Overseas
Ordinary	80	85
Student & Retired	40	45

New members

We welcome new members: Peter van der Logt, Joanne Bartlett, Peter Dawson, Jane (Yueguang) Wang, Michelle Feyen and

Student members: Haizhen Wu, SH Sathish Indika, Sweta Baldawa, Tiangang Cui.

This brings current membership to 421.

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 17 September, 2010

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://nzsa.rsnz.org/Newsletter71/index.htm> It will be regularly updated with information and your letters.

Email: esther.meenken@plantandfood.co.nz

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 27-29

(B) Simple regression and analysis of covariance,
Tues-Wed, 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 or phone him at (03) 325 2520.

Focus on Education

International News

The Eighth International Conference on Teaching Statistics, Ljubljana, Slovenia, 11-16 July 2010. John Harraway (Otago University) is Chair of the International Programme committee and John Shanks is webmaster, so Otago is really running the show. There is a stunning list of plenary speakers for this conference (Hans Rosling, Gerd Gigerenzer, Cliff Konold, Jessica Utts, Anuska Ferligoj) and a plenary panel coordinated by Chris Wild. Many New Zealanders are attending and presenting at this conference. For more information see: <http://icots8.org/>.



CAUSE webinars: <http://www.causeweb.org/webinar/> To listen to some really interesting statistics education talks or learn about teaching activities go to the CAUSE (Consortium for the Advancement of Undergraduate Statistics Education) website.

The Seventh International Research Forum on Statistical Reasoning, Thinking and Literacy conference will be held at The Freudenthal Institute, Utrecht, The Netherlands, 17-23 July 2011. The theme of the forum is: New approaches to developing reasoning about samples and sampling in the context of informal statistical inference. Conference attendance is by invitation. Inquiries may be addressed to: Arthur Bakker, Freudenthal Institute, a.bakker@fi.uu.nl.

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 preparing the 2010 census (Rachel Cunliffe) in conjunction with the NZ census (Lesley Hooper). The project is directed by Chris Wild and aims to give 10 to 18 year-old students the experience of participating in a census. See: <http://www.censusatschool.org.nz/>.

National Numeracy Conference, 16-19 February 2010, Auckland. At the annual numeracy conference Chris Wild and Maxine Pfannkuch gave a joint keynote

address on “Building Students’ Inferential Reasoning” which is now on the CensusAtSchool website at: <http://censusatschool.org.nz/2009/informal-inference>

Statistics Teachers Day, 24 November 2009, Auckland. This annual day run jointly by the Department of Statistics, The University of Auckland and the Auckland Mathematics Association focused on building students’ inferential reasoning at the Year 10 level in preparation for the introduction of the new statistics curriculum this year. See <http://censusatschool.org.nz/2009/informal-inference> for videos of talks and resource materials.

The Teaching and Learning Research Initiative (<http://www.tlri.org.nz/>) under the auspices of the New Zealand Council for Educational Research is currently funding two projects in statistics education: “Building students’ inferential reasoning: Statistics curriculum levels 5 and 6” led by Maxine Pfannkuch; and “Developing secondary school students’ understanding of statistical literacy in a data-analysis environment” led by Sashi Sharma.

Masters Theses in Statistics Education.

Jason Florence, The University of Auckland, has recently completed his thesis entitled “Year 10 students’ thinking and reasoning about probability”.

Maxine Pfannkuch

*National Correspondent for IASE
Department of Statistics*

NZSA Education Committee

The committee wrapped up 2009 by meeting with the Ministry of Education’s specialists in ‘mathematics and statistics’: Ian Stevens and Angela Jones. They are on the same wavelength as ourselves, in seeing that the needs of teachers and learners in statistics are very different from the needs for the rest of mathematics. We are all very aware that suitable software is essential for 21st century learning of statistics.

In February a small group of us, including both John Harraway and David Baird, met the Ministry team again, this time to demonstrate a version of GenStat that may be made available free to NZ schools.

Our first committee meeting of 2010, in March, was a large one, with about a dozen of us connected by video (courtesy of Statistics NZ) and phone. The main topic again was software. The word ‘free’ seems to engage the interest of people in the school education sector very well. Besides GenStat, there are possibilities for R, and R-Commander or other interactive packages. There’s also the other home-grown product CAST, which would serve a different function.

Free interactive graphical software could support two other innovations: resampling methods for inference (which is in the new curriculum), and informal inference. NZ could lead the world in both these developments. They both involve plenty of learning for all: ourselves, teachers, and students. We plan to draft a policy statement for NZSA, about software for schools. This is likely to say that software is essential, from an early age, for concept development and for data exploration. We would support any software that meets the learning needs as stated in the curriculum. This software would need to be interactive and visual, with quality graphics. Please see the separate entry below for more about the GenStat opportunity.

Chris Wild and Dineika Chandrananda at the University of Auckland are investigating the possibilities for an R package that will meet the needs of NZ school students. It would be menu-driven, very graphical, and as interactive as possible.

Doug Stirling is investigating development of a set of CAST resources to support teachers and learners of statistics for the new curriculum, and the forthcoming new NCEA standards that will derive from it.

The contents of the new curriculum in 'mathematics and statistics' are due to be assessed at NCEA levels 1, 2 and 3 in 2011, 2012, and 2013. We have had some input into the ongoing process of writing the achievement standards and unit standards, and the support materials for them.

Doug has just released a new CAST e-book about experimental design for agriculture and biology. As with previous CAST e-books, it makes extensive use of dynamic diagrams (applets) to help teach concepts - it has 189 pages and 168 applets. Other recent improvements are an e-book of interactive exercises and removal of the requirement to register before using CAST. The latest release can be accessed at http://cast.massey.ac.nz/collection_public.html and can be either used directly from there or downloaded and run locally.

Mike Camden

2009 Royal Society of New Zealand Teacher Fellow

Tauranga Boys' College HOD Mathematics and Statistics teacher Andrew Ferguson has spent a year out of the classroom. During this time he has been based at Te Puke with the Plant and Food Research (PFR) kiwifruit breeding team. The aim of his project was to investigate the use of statistics in the PFR kiwifruit breeding programme, specifically, to examine if the number of neighbours a kiwifruit seedling had affected its phenotype. This opportunity, which was co-hosted by the Statistics Department



Andrew Ferguson out of the classroom

of the University of Auckland, has allowed him to experience first hand the challenges of modelling and applying statistical tools to data gathered by the kiwifruit breeding team.

Highlights for Andrew included the opportunity to work with and be assisted by experienced PFR scientists, statisticians, research associates, technicians and casuals in the biggest kiwifruit research orchard in the world. Visits to the other PFR orchards involved in kiwifruit research in Kerikeri and Motueka was another enjoyable learning experience for him. He also visited the PFR Mount Albert research centre which has close links to these research orchards. The Mount Albert centre is where more sophisticated research is done, such as gene mapping and identifying the locations in China where the different kiwifruit varieties occur.

Spending time in Auckland at the Statistics Department gave him the opportunity to attend some lectures and explore the skills that are required to be a statistician. Professor Chris Triggs mentored him as he took up the challenge of attempting to model the neighbour effect.

Learning about statistics outside the classroom has given him greater insight into the need to view statistics as a process. This process, called the PPDAC cycle, involves a problem, plan, data, analysis and conclusion which may loop back to asking new questions or refining the initial question. He anticipates positive learning outcomes when he returns to teaching by using the PPDAC cycle to address relevant, complex and authentic problems that relate to issues, such as exercise, obesity, pollution of the local environment, the greenhouse effect, and carbon footprint. These topical issues provide students with opportunities to critically analyse the strengths and weaknesses of their approach and to refine their questions. Such topics are also best suited to ongoing work and discussion over several terms rather than in a block of two or three weeks.

While teaching statistics Andrew had faced the challenge of finding suitable contexts for which he could access appropriate data with enough background information, so that his students could fully understand how the statistical process is applied. At times he had ended up manipulating the data for assessment or teaching purposes or providing data without full background information. This manufactured data without full information made it difficult for students to critically evaluate the statistical process in any depth.

He is looking forward to returning to teaching in 2010 despite the probable increase in his stress levels. This is because:

- Statistics has greater emphasis in the new curriculum with the subject Mathematics now renamed Mathematics and Statistics.
- There is ongoing development and refinement of Statistics teaching and learning in New Zealand schools with the associated professional development.
- There is an opportunity to take advantage of the 'Census at Schools' website as an interactive learning tool with his classes.
- There are opportunities to work collaboratively with teachers and students of other subjects, such as senior biology students with their project work.
- He is looking forward to sharing best practice with other teachers both within the school he is teaching, and with other schools.
- He will continue to enjoy networking opportunities in the future with scientists, statisticians and academics that he has met during 2009.

Andrew Ferguson

GenStat free for school use in New Zealand

The company VSN in the United Kingdom has offered to develop a free-to-use menu driven schools version of their latest software. This will include all of the graphics of their full version plus appropriate options for the remaining sections of the school statistics syllabus. David Baird, in conjunction with VSN, is developing the options in the new menu for use in New Zealand high schools. Currently mainly Excel is being used in schools for statistics at the higher level.

A meeting was arranged by John Harraway in Wellington in early February at Statistics New Zealand where the new package was shown to Ian Stevens and Angela Jones from the Ministry of Education, Roger Harvey from Victoria University, and others including

Alex Neill and Mike Camden. The presentation was well received and it was decided to move to the next step of developing the new program by enlisting the help of mathematics school teachers in Dunedin and the Otago Mathematics Association to get their feedback and to trial the new system in some local schools.

A meeting with 12 teachers was held in Dunedin on 9 March. David presented the teachers and several other interested people with copies of two lessons which he had developed for use in the classroom. Feedback was positive and the program is currently being used locally.

A capable statistics honours student at Otago, Ross Haines, has been employed to develop further lessons to accompany the statistics education videos which John Harraway has developed over the last two years. These lessons will be developed with the help of teachers. It is hoped that in about two months there will be a set of 12 lessons, with more to come, showing the use of GenStat schools version on the video data. But this is only one source of data. Any data files can be loaded into GenStat which means that CensusAtSchool files could be analysed, Statistics New Zealand SURFs, and one's own data. Data files can also be uploaded easily from Excel or from R.

It will be easy to install the software in any school that chooses to use it. Multiple copies can be used in the classroom and all students will be able to take the software home for home use. There is no limit on the number of cases or the number of variables. The graphics are excellent with many options available once a student has worked through the lessons which are being developed. One local school mathematics head of department believes the program has use down to at least year 9 in our schools.

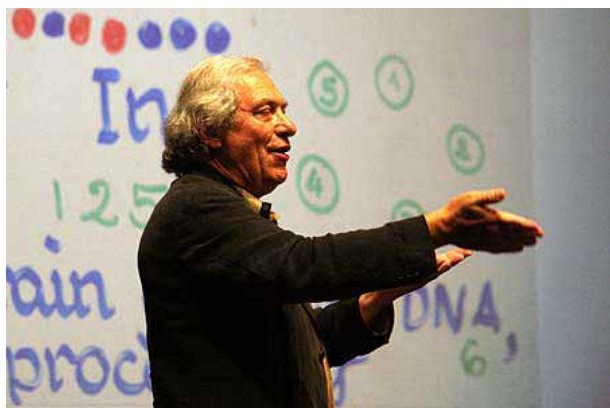
The Campbell Fund has supported this teaching initiative by making a grant to John Harraway to cover some of the initial travel costs to the meetings but more importantly to assist with payment to Ross Haines for his development work.

Mike Camden



Happenings

Math-magician enthrals audiences



Professor Persi Diaconis

More than 1200 people filled Palmerston North's Regent Theatre on the 14th of January this year to hear the Sir Neil Waters Lecture given by Professor Persi Diaconis.

A former professional magician, Professor Diaconis is now a Professor of Mathematics at Stanford University in California. He gave up a career in music and magic to study mathematical statistics at Harvard University, completing his PhD in 1974.

The lecture revealed secrets of popular magic tricks, with the audience participating in a card trick and then hearing how maths was used to pull off the elaborate ruse. Other subjects, such as how spy codes are encrypted, were touched upon.

300 people packed the Sir Neil Waters lecture theatre at Massey's Albany campus for Professor Diaconis' first New Zealand lecture on Wednesday night.

The huge demand for seats at the Albany lecture has prompted a review of the event and future possibilities include a move to a larger venue or video streaming to adjacent lecture theatres to accommodate increased numbers.

The Sir Neil Waters Distinguished Lecture Series was inaugurated in 2004 to honour the achievements of Sir Neil Waters, former Professor and Vice-Chancellor of Massey University. It is held annually by the Institute of Fundamental Sciences and brings a leading international scientist in the fields of mathematics, chemistry or physics to give a series of lectures at Massey University.

Massey University News

Science Fairs

The Science Fairs run throughout the country between July and October. NZSA, in conjunction with Statistics New Zealand, sponsors prizes for statistical content in the entries. It is an interesting task coordinating the contact with Science Fair organisers throughout the country and also with judges prepared to give up a little time to go and look at the entries.

Some Science Fair organisers are very difficult to contact so if you are aware of a Fair in your area I would really appreciate an email from you with as much information as possible. The name and contact details of an organiser would be ideal. I am in touch with most of them but tracking down the last few is not easy.

I would also like to thank those members who have judged Science Fairs and ask them and any members who have not judged but would like to, to please contact me. The data I have is a bit sketchy and I suspect quite out of date so I would like to improve this and ensure that as many Fairs have suitable judges as possible. The information I have will appear on the NZSA web site shortly.

Alasdair Noble

Tax statistics now available online

Inland Revenue has launched a new statistics section on its website, giving customers access to a wide range of data about tax revenue and social entitlements.

The information on the website includes 19 sections with data about customers, revenue collection, donation rebates, child support, Working for Families Tax Credits entitlements, and income distribution by income bands. Tax statistics include only data collected by Inland Revenue and do not duplicate statistics separately available from other sources such as Statistics New Zealand, or The Treasury.

The revenue statistics cover the years from July 2001 to June 2008, and customer statistics are available from April 2001 to March 2008. The figures will be updated every year.

Each page on the website contains a link to a downloadable spreadsheet and to a convenient "printer-friendly" window. Links to definitions are also provided, so that each table or graph can be understood and the statistics used effectively. All published statistics are chosen to meet Official Statistics System criteria and to allow robust analysis. In developing the publishing procedure, Inland Revenue collaborated closely with Statistics New Zealand.

Brian Bond

Local Scene

Massey University, Albany

In November 2009 Marti Anderson spent a week at the US National Centre for Ecological Analysis and Synthesis (NCEAS) in Santa Barbara, California, as part of a “think tank” working group entitled “A synthesis of patterns, analyses, and mechanisms of beta diversity along ecological gradients”. She will have two more visits there before the end of 2010, with the next trip scheduled for April. She discovered that, yes, they really do still hula hoop to funky music on the beach in Southern California! Marti also spent time with colleagues at the Plymouth Marine Lab, UK, working on the evolution of multivariate tools for the PRIMER and PERMANOVA+ computer programs. No sooner does one package get finished than it feels out of date and it is time to move on to another!

In December Marti gave a one-week international course on multivariate analysis at Flinders University in Adelaide, South Australia, for biologists and ecologists, hosted by Sabine Dittman at Biological Sciences.

In January it was time to do the diving for the annual biodiversity surveys of rocky reef fish communities along the north-east coast of New Zealand for Marti, Adam Smith and colleague Russell Millar from the University of Auckland. With the help of the RV Hawere (University of Auckland’s research vessel) and skipper, Brady Doak, the trip was completed in record time this year. This is the tenth year running - quite a nice observational dataset for examining natural patterns in spatial and temporal variation of fish.

Barry McDonald gave a talk “Estimating the lifetime of marine concrete” at the Engineering Mathematics and Applications Conference in Adelaide, 7-10 December 2009.

From February 8-12 he was a project co-moderator at the Mathematics and Statistics-in-Industry Study Group (MISG) at RMIT in Melbourne. The project was Taxonomic analysis of marine phytoplankton from pigment data.

Assistant Professor Byungsoo Kim, from the Department of Data Science at Inje University, Korea, is visiting IIMS for the 2010 year, and doing some research with Barry.

Mat Pawley featured in Massey’s news for his work for the Ministry of Fisheries. He calls it: “getting paid to go to the beach”, but others call it: “counting shellfish across the entire North Island”. Mat has developed some nice methods of spatial sampling that will yield good estimates of the state

of play for shellfish in many coastal areas.

Our PhD students have also been busy. Katharina Parry had a successful confirmation for her PhD research (Bayesian Inference for Traffic Network Models). Oliver Hannaford is currently working on a boat off the Three Kings Islands with colleagues from Te Papa (Vincent Zintzen and Clive Roberts) as part of a Marsden project to get video footage and also some collections of fish species, going down to depths of up to 1200m. We’re quantifying the changes in fish community structure with depth and latitude across New Zealand. They’ve already uncovered what look like two new species of hagfish in their work. Marie Fitch gave a talk on her PhD research (High dimensional graphical models) at the Australian Young Statisticians conference in September 2009 and was relieved to note she wasn’t the oldest ‘young’ statistician!



Daniel Walsh and Beatrix Jones with Albert and new baby Sadie

In other news, Beatrix and Danny had baby Sadie on 14 October! Paul Cowpertwait has (sadly) left us to find new horizons at AUT, but we are reassured by the fact that he will be in good company with Jeff Hunter there as well and, hey, it is not that far away! He is maintaining links with our group through his graduate students as well. And finally we look forward to welcoming Kirsten Rodgers who has landed a Massey University doctoral scholarship to work with Marti Anderson and will be joining us to start her PhD in April of this year. The topic for her work is: “Natural tags to reveal ‘sources’ and ‘sinks’ for New Zealand’s coastal marine species” and will include interactions with our colleagues, Nick Shears (University of Auckland) and Tom Trnski and Wilma Blom (Auckland War Memorial Museum).

The last weekend in November Beatrix Jones attended the New Zealand Molecular Ecology conference. This is a fun, informal conference held each year at a beautiful, ‘wild’ location, featuring many short talks with high student representation. Beatrix presented a paper entitled “Blocks of Linked

SNPs for Parentage Analysis”. There was also an exciting optional excursion: rafting on the Kaituna river!

During the summer Paul Cowpertwait visited his colleague Andrew Metcalfe in the School of Mathematical Sciences, University of Adelaide, to complete a book on using R for the analysis of time series.

In January Marti was an invited plenary speaker at the International Temperate Reefs Symposium at the University of Adelaide, where she presented a talk entitled “When the plot gets muddy: models for environmental management in estuarine systems”. Mat Pawley also spoke at the conference about long-term monitoring data from Long Bay, the results of contract research for the Auckland Regional Council.

Marie Fitch

Auckland University of Technology

At the end of 2009 Neil Binnie retired from AUT after 23 years on the staff teaching Mathematics and Statistics. Previously he had taught for 17 years in secondary schools during which time he had a year as a visiting teaching fellow in Computer Sciences at the University of Auckland. He maintained his interest in Secondary School Mathematics, serving as the A.P.N.Z. rep on the NZQA Mathematics Advisory Group for several years and presenting regularly at NZAMT. The last four years he has been involved in a partnership with Shanghai Institute of Technology. Staff from AUT teach the third year papers in a BAppSc in Analytical Chemistry and Neil has taught a paper called Quantitative Statistics for Research. With a cohort of 70 students, this has been an interesting, challenging and rewarding experience. Neil continues with some part time teaching at AUT and in his spare time is property manager for 20 properties for the Bays Community Housing Trust.

Murray Black was awarded a Vice Chancellor’s Doctoral Study Award to spend six months (Semester 1) working on the completion of his PhD from Deakin University in Geelong completely free of his teaching and administration activities.

Paul Cowpertwait joined the School in March as an Associate Professor in Analytics to spearhead the development of this new major. Paul joins us from Massey University where he had been since 1996 as a member of the Institute of Information and Mathematical Sciences.

Jeff Hunter continues on a part-time basis as Head of Research (Mathematical Sciences). In February he attended the ANZIAM 2010 conference at Queenstown and spoke on “Coupling and Mixing in Markov chains”.

Jeffrey Hunter



ANZIAM 2010 Conference Dinner. Left to right: Robert McKibbin (Massey), Helen McKibbin, Charles Pearce (Adelaide), John Butcher (Auckland), Jenny Butcher, Hazel Hunter, Jeff Hunter (AUT)

University of Otago, Maths and Stats

Last November we welcomed Dr Aleksandar Radu (National Centre for Sensor Research, Dublin City University) to the department for a two week research visit. Alex worked with Peter Dillingham on the statistical modelling of ion-selective electrodes, which are low-cost chemical sensors capable of detecting submicromolar concentrations of contaminants.

In December and January, David Fletcher visited Simon Childerhouse at the Australian Antarctic Division in Hobart to work on the estimation of New Zealand sealion demographic rates. Whilst there he also enjoyed seeing a New Zealander skipper the winning boat in the Sydney-Hobart yacht race.

On the education front, a group of Otago high school maths teachers met with John Harraway and David Baird in March. David showed them the new free-to-use, menu-driven “GenStat for Schools” package. A working group was formed to develop lessons showing analysis of the data described in case study videos developed by John.

David Fletcher

Victoria University School of Mathematics, Statistics and Operations Research Te Kura Mātai Tatauranga, Rangahau Pūnaha

The School celebrated its first birthday, on New Year’s Day 2010. So Happy Birthday to us - it was a great first year! In particular, the school enjoyed much success from Marsden applications, with five separate projects being funded. Our successful PIs were: Noam Greenberg, Estate Khmaladze and Matt Visser who were each awarded full Marsden grants, plus B D Kim and Dillon Mayhew who each got Marsden Fast Start grants. Well done!

Estate Khmaladze was the driving force behind

the Wellington Workshop in Probability Theory and Mathematical Statistics, held on 3 and 4 Nov 2009 at Victoria University. The workshop went very well and several members of the School helped with organisational details. For a full list of abstracts for the presented talks and some photos of the event, please see the workshop web page: <http://msor.victoria.ac.nz/Events/ProbabilityWorkshop>. Among the presenters at the Wellington Workshop were two of Estate's visitors, Goran Hognas (Abo Akademi University, Finland) and S. Jammalamadaka Rao (UC Santa Barbara). Just before that workshop, Ray Brownrigg went to Limassol (Cyprus), to present a paper that he and Estate had prepared at the 3rd International Conference on Computational and Financial Econometrics (29-31 October 2009). Estate has recently been appointed consultant to a 2 year United States NSF-funded project, "Recovery of Functions via Moments: Hausdorff case" awarded to researchers at West Virginia University. Also, Estate



Ivy Liu, Richard Arnold and Nokuthaba Sibanda at Biometrics on the Lake

is about to have a two-month visit (ending mid June 2010) from Alok Goswami (ISI, Kolkatta and Series A editor of Sankhya).

Several MSOR statisticians attended the International Biometric Society Australasian Region Conference (Biometrics on the Lake), held in Taupo from 29 Nov to 3 Dec 2009: Richard Arnold, Ivy Liu, Shirley Pledger and Nokuthaba Sibanda. Apparently a great time was had by all, including by Richard who took part in the Lake Taupo Cycle Challenge the day before the conference started - well done! Other organised sporting activities included catching prawns in the rain, as seen in the attached photo of Ivy, Richard and Nokuthaba. The conference programme covered a wide range of subjects in biostatistics, with Victoria researchers presenting work on Capture-Recapture methods, Bayesian inference in genetics and analysis of multiple response data in contingency tables.

Stefanka Chukova is the key figure (General Co-

Chair) in the organisation of the 4th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling (APARM 2010) to be held at Victoria University, 2-4 December 2010. The theme of the symposium is 'Beyond the Traditional Reliability and Maintainability Approaches' and all the key topics in reliability, maintainability, and safety engineering will be covered. The aim is to bring together researchers, scientists and practitioners from the Asia-Pacific region to identify important and challenging problems in these areas. Several members of the School will be helping with the conference organisation, including John Haywood as Program Co-Chair. Further details, including a Call for Papers, are available at the Symposium web site: <http://msor.victoria.ac.nz/Events/APARM2010/APARM2010>.

John Haywood also chaired and presented at the Econometrics Session of AMW 2010, the 15th Australasian Macroeconomics Workshop hosted by the Reserve Bank of New Zealand and the School of Economics and Finance, Victoria University of Wellington, 8-9 April 2010.

Shirley Pledger started off the MSOR Colloquium series for 2010 in mid-March, speaking to an absolutely packed lecture theatre about Fuzzy Ecological Communities. Shirley explained how to use mixtures for clustering and provided analogues of multidimensional scaling, ordination and correspondence analysis. More information about past and future MSOR Colloquia is available from: <http://msor.victoria.ac.nz/Main/MSORColloquia>. Several staff supervised students on short-term research projects over the summer. Details of all the topics covered were elusive, but Franziska Broell and Ernestynne Walsh worked with Nokuthaba Sibanda and Shirley Pledger, respectively. Franziska and Nokuthaba used hierarchical Bayesian models to compare rates of Caesarean section deliveries across all District Health Boards in New Zealand, with data extracted from the Ministry of Health National Minimum Dataset. Ernestynne and Shirley worked on writing an R package for open-population capture-recapture models, incorporating age structure and heterogeneity of capture and survival probabilities. The package will be launched at a workshop at the University of Kent on 5 July 2010, immediately before the International Conference on Statistical Ecology, where Shirley is involved in two presentations, as is Richard Arnold - not the same two talks, but there is an overlap, presenting some joint work.

In other student news, Lisa Woods was awarded a Victoria Doctoral Assistantship. Lisa started her PhD on the 1 March 2010, researching Bayesian QTL mapping with Nokuthaba Sibanda and Richard

Arnold as supervisors.

Robin Averill completed her PhD “Teacher-student relationships in diverse New Zealand Year 10 mathematics classrooms: Teacher care”, supervised by Megan Clark. Congratulations to Robin! Congratulations as well to Kylie Reiri, an applied statistics Masters student, who has been awarded a Te Tipu Putaiao (Maori Knowledge) Fellowship from ForST. Kylie is one of four Victoria students, and one of only nine nationally, to win this award. Under the supervision of Richard Arnold and Adele Whyte (Biological Sciences), Kylie will conduct a statistical analysis of temporal and spatial variation in the Ngati Kahungunu fisheries catch. Her aim is to provide an improved view of the fisheries data currently collected in the Ngati Kahungunu rohe (boundaries), including reporting results at a finer geographical scale. Kylie will report back to Ngati Kahungunu stakeholders, iwi, scientific and industry groups, and to government.

There have been a couple of staff changes within the School to report. Rowan McCaffery has helped all of us for several years with his excellent work in the MSOR School Office. At the start of 2010 Rowan shifted to half-time with us and he now spends his other seven-fourteenths as the manager of a new Numberworks centre (after-school tutoring) in Johnsonville. Good luck Rowan! Some excellent news is that we have appointed a new Statistical Consultant: Dalice Sim started work on 1 March 2010, Dalice did her PhD with Norman Breslow, and recently spent several years in Canada. We, and all Dalice’s new clients, are very pleased that she chose to come to Wellington now that she is back in NZ!

John Haywood

Plant & Food Research

The Plant and Food Research biometricians from the Mt Albert site attended the talk at the Albany campus of Massey University on 18th January given by James Reinders, a long time employee of Intel.

Entitled “Parallel computing for the multicore: the challenge of having every developer be a parallel programmer”, James’s talk provided useful background information for a brave new world of parallel computing.

High Performance Computing is essential for the ever-increasingly computer intensive statistical methods required for at least some of the newer techniques we find useful. No doubt we’ll be finding many more before long.

In February the Governor General of New Zealand, His Excellency The Honourable Sir Anand Satyanand, visited the Lincoln site to talk to various groups about their research. Esther Meenken was



His Excellency The Honourable Sir Anand Satyanand with (left-right) Esther Meenken, Erin Lawrence-Smith and Andrew Fletcher

one of the group chosen to represent the Sustainable Production Portfolio, and she enjoyed the opportunity to talk about similarities and differences in biometrics approaches in New Zealand and overseas.

Patrick Connolly and Esther Meenken

Wellington Statistics Group

Finally, a wrap up of the news from the Wellington Statistics Group, WSG. The WSG Convenor (David Harte) has been out of NZ quite a bit recently, so talks have been relatively rare. However, we were fortunate to have a well-known visitor (and frequent Anzstat plus ‘Fishing in the Bay’ contributor) in Wellington in February: John Maindonald. John was actually the very first Statistical Consultant at VUW, so it is nice to include news about John in the same entry as news about Dalice and Nokuthaba, who are the two most recent holders of that position. While he was here John gave, on 9 February 2010, the following talk to WSG: : John Maindonald, Australian National University. “Mining a Cricketer Data Archive”. Further details (abstracts, etc) of this and all previous talks can be found on the NZSA Local Groups web page: http://nzsa.rsnz.org/local_groups.shtml. That web page also contains contact details for WSG, names of sponsors (to whom we are very grateful!), and details of forthcoming talks.

We’d very much like to hear from anyone in the Wellington region who would be keen to take over the WSG Convenor’s role from David Harte. Don’t be shy!

John Haywood

University of Auckland

Huge congratulations to Ross Ihaka, for being awarded the American Statistical Association’s inaugural biannual Statistical Computing and Graphics Award, jointly with Robert Gentleman, for their work in initiating the R Project for Statistical Computing. R, which was born in a corridor in Auckland, is now used by millions of people

worldwide and has changed the way that scientists and business professionals interact with data. Ross will receive his award at the 2010 Joint Statistical Meetings in Vancouver in August, before an audience of thousands. Congratulations, Ross!

The department is in the midst of some significant comings and goings. We are delighted that Thomas Lumley of the University of Washington in Seattle has accepted our offer of Chair in Biostatistics, and will arrive later this year.

Thomas will be an enormous asset for our department. At about the same time, the University of Washington will gain not one but two of our staff, as Sharon Browning and Brian Browning have accepted prestigious appointments there. Sharon will be a Research Associate Professor in the Department of Biostatistics, and Brian will be an Associate Professor in the Department of Medical Genetics. Sharon and Brian have been in Auckland since 2005, and have gained international recognition for their work in statistical genetics, including jointly holding a Best Paper Award from the International Genetic Epidemiology Society for the best paper published in Genetic Epidemiology in 2007. We wish them every success in their new positions and hope we will be able to entice them back to New Zealand soon!

We also said a reluctant farewell to senior tutor Rachel Cunliffe in November. Rachel joined our department in 2000 after a stellar student career, and has made a huge contribution to our Stage 1 team and outreach activities, including Census At School. She is currently focusing on motherhood, and the family are planning to travel overseas.

In November the department held a dinner jointly to say goodbye to Rachel Cunliffe, to mark Alastair Scott's 70th birthday, and to celebrate our 15th birthday as a separate department. Or was it mainly to guzzle enough chocolate cake to bring fortitude for the upcoming week? The following week we hosted four major outreach activities. Ross Parsonage and his team organised the annual Statistics Teachers Day, titled 'Laying foundations for inference'. This was the most successful ever, and with enrolments capped at 150 the day was well-oversubscribed by secondary school teachers from around the country. Yannan Jiang and Stephen Vander Hoorn organised the Biostatistics Workshop on Cluster Randomised Trials, with keynote speaker Martin Bland from the University of York, who presented two entertaining talks at Taupo the following week. Thomas Lumley, our professor-to-be, also presented a full-day R workshop. As if the walls of our building weren't pulsating with enough creative energy after all that, there was Girls into Science to cap it off. Making everything run smoothly throughout were our

awesome team of Alexandra Miliotis and Nancy Wong from the Stats Office. Thanks to Alex and Nancy for all their hard work: they must have breathed a sigh of relief when everyone disappeared to Taupo at the end of the week.

Congratulations to Chris Wild, Alastair Scott, and Alan Lee for their success in the most recent Marsden round: a well-deserved \$600K will go towards their investigations on 'Efficient analysis with biased samples' over the next three years. PhD student Gustavo Amorim is about to arrive from Brazil to begin his PhD work on the project.

Our PhD students have had some notable successes. Katrina Poppe won the prize for Best Student Talk at the Australasian Biometric Conference in Taupo, and Jonathan Briggs was runner-up. Lyndon Walker won the statistics prize at the NZ Maths and Statistics Postgraduate Conference in Foxton Beach in November. Drs Debbie Leader and Derek Law successfully defended their theses: Debbie has started a Senior Tutorship at Massey, and Derek is working for Harmonic research company in Auckland. Two of our recent PhD graduates have gained lectureships in New Zealand:

James Russell has just been appointed as a lecturer in Biology at the University of Auckland, and Steven Miller was appointed as a lecturer in Statistics at the University of Waikato last year.

And finally, Stephane Guindon and Ivan Kojadinovic have both celebrated the arrival of baby sons in the last couple of months. Welcome to Elliott Guindon and Damien Kojadinovic. This brings our departmental offspring to a total of 22 children since the year 2000 - of which 19 have been boys and only 3 girls! This latest highly significant news brings our departmental p-value to less than 0.001 against a hypothesis of equal sex ratio. Can anyone suggest a mechanism that might cause statisticians and statistical administrators, both male and female, to produce more boys than girls? Or is there just something in the departmental water cooler...?

Rachel Fewster

Massey University, Palmerston North (Manawatu)

We have a new staff member! Debbie Leader, who has just completed her PhD from Auckland University, has joined us with a half-time appointment as a Senior Tutor, replacing Tony Holleman who has left to teach in Prague. Debbie is helping to deliver our large first-year courses. She is also working part-time for Nigel French, a professor and co-director of the Epicentre, researching into the spatial epidemiology of E. coli.

Having changed institutes last year, we have now cemented our relationship with the mathematicians,

physicists and chemists in the Institute of Fundamental Sciences by moving in with them. Our new location is Level 2 of Science Tower B. Contrary to the expectations of many, it hasn't been too bad, except for the occasional presence of white-coated individuals in our computer lab, making it look a bit like a Gary Larson cartoon.

In a shift of career emphasis, Mark Bebbington will be a 1/2 time volcanologist for the next three years. This apparently agrees with him, as evidenced by a March visit to the Istituto Nazionale di Geofisica e Vulcanologia in Rome, where he was collaborating on models to investigate the triggering of volcanic eruptions by large earthquakes. However, in a case of rank insubordination, Mark's suitcase visited London on the way home, and once located, even managed to miss the flight from Auckland to Palmerston North.

Doug Stirling has now returned from his sabbatical at the University of Reading in the UK. He is putting the finishing touches to a CAST e-book about the design and analysis of agricultural experiments, partially funded from a Reading University contract to improve the statistical training of agriculture students in East Africa.

Jonathan Godfrey went to Japan in December to convince blind people that R is the most accessible statistical software for blind people. With the help of external financial support, he also visited a school for the blind and managed to get some judo practice at a dojo run by one of Japan's leading blind judo players. As an aside, Jonathan and his wife Olivia are awaiting the imminent arrival of their first baby.

The "Three G's" (Ganes, Ganesh and Geoff) and two of their spouses (spice?) attended the Regional Biometrics Conference in Taupo in late November. Ganes, Ganesh and their spice stayed in the Swiss Chalets where they were able to practise their yodelling every morning. Geoff stayed in the Lakeview Motel from which he was able to enjoy a view of the Liquorland carpark. The conference proved a great opportunity to strengthen existing contacts and make new ones. Ganes was invited to visit ANU Statistical Consulting Unit in January where he gave a seminar on Ranked Set Sampling.

Martin Hazelton was in Salerno, Italy in early December to attend DADDY, an international workshop on day-to-day dynamics for transportation network analysis: assignment, control, and design. Martin gave an invited talk, and his PhD student Katharina Parry gave a contributed paper. The conference was reportedly very enjoyable with some excellent talks, characterful accommodation in a converted convent, and a waistband-challenging eight course Italian banquet on the penultimate night.

Steve Haslett has again been overseas on many

trips to many different countries. Having just arrived back from one such, he seemed unable to remember quite where he'd been. This supports the long-suspected Haslett Uncertainty Principle: you may know where he is, you may know what he's doing, but you never know where he is and what he's doing simultaneously.

Finally, Massey's Palmerston North campus has been re-branded the "Manawatu Campus". We are all really excited about this new development.

*Geoff Jones,
Massey University (Manawatu)*

AgResearch

AgResearch statisticians were out in force at the Australasian Region Conference of the IBS at Taupo in December. Neil Cox and Harold Henderson were part of the local organising committee of a very well-run and enjoyable conference. Most of our team of statisticians attended the conference, and Ken Dodds and Zaneta Park gave talks while Dongwen Luo and John Koolaard presented a poster.

In November 2009 we were all pleased to receive Vanessa Cave back into the AgResearch fold, after she obtained her PhD in the UK. Her research topic was "Statistical Models for the Long-Term Monitoring of Songbird Populations: A Bayesian Analysis of Constant Effort Sites and Ring-Recovery Data", working first with Professor Steve Brooks at Cambridge University and then with Dr Ruth King at the University of Saint Andrews, Kingdom of Fyfe. From 2004 till 2010 Roger Littlejohn has done a wonderful job maintaining the NZSA website, a duty now passed on to Vanessa.



Harold Henderson circa 1995

In December 2009 the Ruakura Statistics group celebrated Harold Henderson's 35th and Barbara Dow's 10th (it's more really – it's a bit complicated) significant service awards. The photo shows Harold in approximately mid-career wearing a tasteful batik shirt (you need colour to appreciate it fully) and reminds us of what a cheerful and positive presence he has been. In addition, down here in Palmerston North, I was grateful to receive an award for my first ten years with AgResearch.

Fred Potter

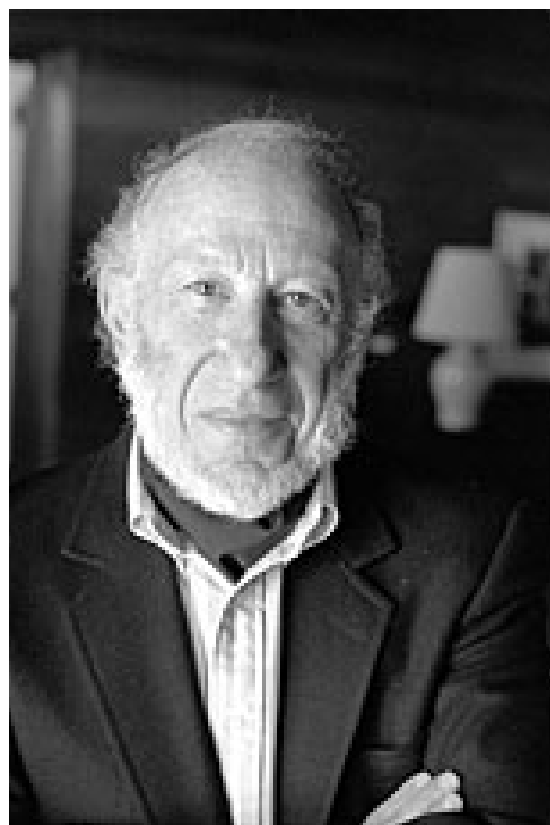
NZSA Visiting Lecturer 2010

We are delighted that Professor Ingram Olkin (Stanford University) will be the NZSA Visiting Lecturer for 2010. His visit will be associated with our next conference and the joint International Conference on Statistical Methodologies and Related Topics celebrating the contribution of Chin-Diew Lai.

Dr Olkin is an icon in the world statistical community, having been active for over 60 years. He is a member of many professional societies, has received many honours and awards, has held and holds many editorial positions, and has delivered numerous invited addresses all over the world. Ingram has coauthored 7 books, edited 10 books, and contributed 220 journal papers. His joint paper with Albert Marshall "A multivariate exponential distribution" was cited in 610 articles – a testament to high calibre research.

Dr Olkin's work is aimed at ensuring that educators select the proper statistical tools for measuring the outcomes of their programs and methods, and that their interpretation of the results is similarly rigorous. His research includes the development of powerful new statistical methods for combining results from independent studies that have analysed the same topic. Meta-analysis is assisting researchers to reconsider long-standing educational problems with a fresh critical eye.

Dr Olkin is a Guggenheim, Fulbright, and Lady Davis Fellow, with an honorary Doctorate from De Montfort University. He received his BS in mathematics at the City College of New York, his MA from Columbia University, and his PhD from the University of North Carolina. Dr Olkin's research interests include analysis of social and behavioural models; multivariate statistical analysis; correlational and regression models in educational processes and meta-analysis.



Dr Olkin will be visiting NZ universities and giving seminars. An approximate schedule is given below. For up-to-date information check the NZSA website or email g.jones@massey.ac.nz.

Auckland U	22-23 Jun
Waikato U	24-25 Jun
NZSA Conf.	29 Jun-1 July
Victoria U	5-6 July
Canterbury U	7-8 July

The Reasoner

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Jon Williamson, Editor

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- > Head of Foreign Trade Section (Job Ref #: 38118)
- > Head of Price Indices (Job Ref #: 38119)
- > Head of Social Statistics (Job Ref #: 38125)
- > Senior Statistical Researcher x 6 (Job Ref #: 38117)
- > Econometrician (Job Ref #: 38128)
- > Data Dissemination Specialist (Job Ref #: 38130)
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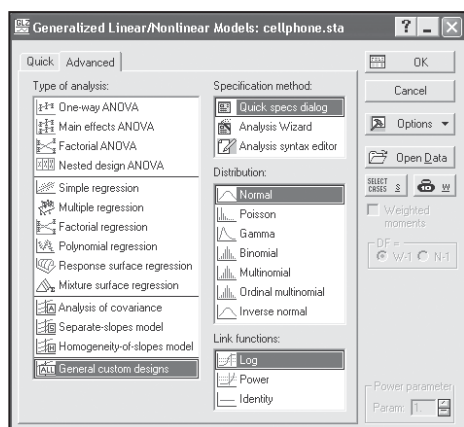
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Hypothesise, test and find relationships in your data with generalised linear and non-linear modelling. Perform quick or advanced tests using ANOVA, and plot your distributions. Perform single, multiple or factorial regression analysis. Whatever your general statistics needs, **STATISTICA** has the tools for you.

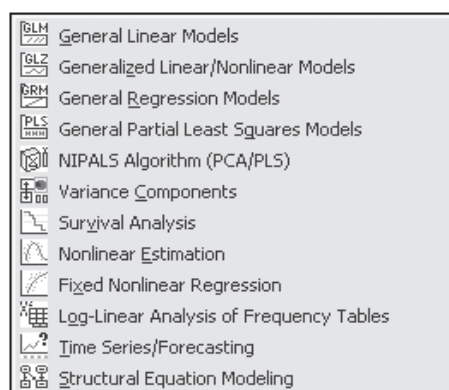


R Integration

R output can be retrieved as native **STATISTICA** spreadsheets and graphs, and managed via highly flexible **STATISTICA** Workbook containers.

Advanced Linear & Nonlinear Models

STATISTICA provides a wide array of the most advanced modelling and forecasting tools on the market, including automatic model selection facilities.

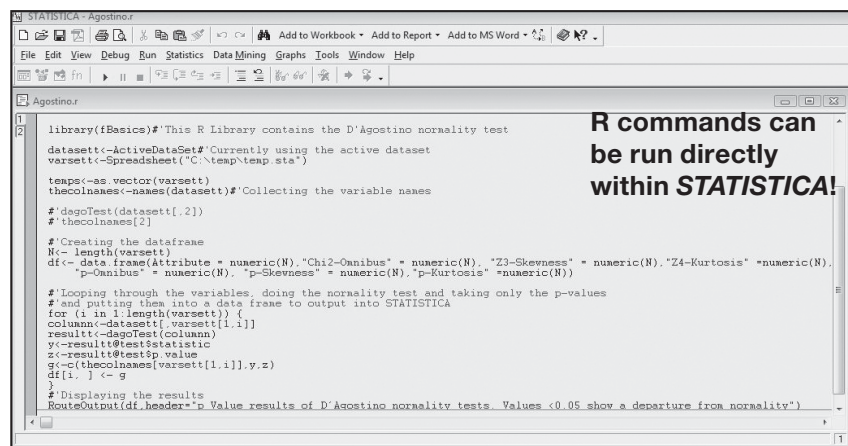
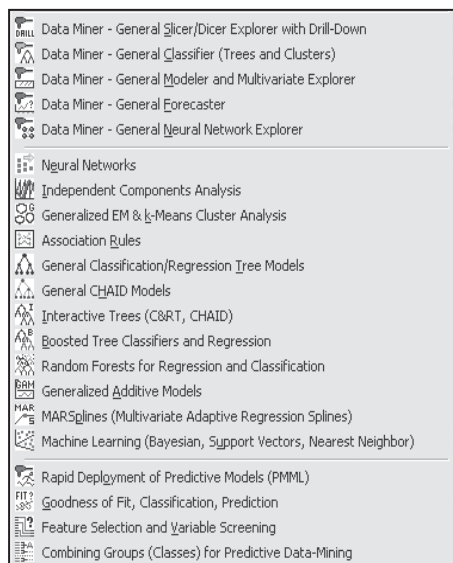
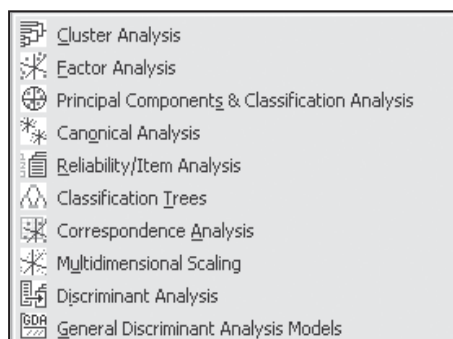


Data Mining

Uncover hidden trends, explain known patterns and predict the future using a comprehensive selection of data mining solutions with **STATISTICA**'s icon-based, easy-to-use user interface. It features a selection of completely integrated, and automated, ready to deploy systems of specific data mining solutions for a wide variety of business applications. You can customise these systems at will.

Multivariate Exploratory Techniques

STATISTICA provides a broad selection of exploratory techniques for various types of data, with extensive, interactive visualisation tools.



R commands can be run directly within STATISTICA!

Request your Free **STATISTICA** Evaluation Now!

1. Call 0800 477 776 & quote # 2527
2. E-mail 2527@hrs.co.nz

