



NZSA 50th Anniversary Conference

The 50th anniversary annual meeting of the New Zealand Statistical Association was held in a cool and wet Wellington in early July – well for most people it was probably a COLD and damp Wellington, but I live in Canberra – these terms are relative.

A number of Australians had ventured across the Tasman to see how Kiwi statisticians hold a meeting. They were rewarded with a conference with a variety of themes, including risk and data mining, together with some old favourites such as surveys, statistical education and appropriately for a 50th anniversary conference, history.

The major themes for the first day (Monday) were history and education. The highlights of the morning included a welcome in Maori by the NZSA President, Sharleen Forbes. There was also a launch of Stan Robert's new book (which may still be delayed at the publishers) on the History of Statistics in New Zealand, which came complete with a birthday cake for the NZSA and some enthusiastic singing.

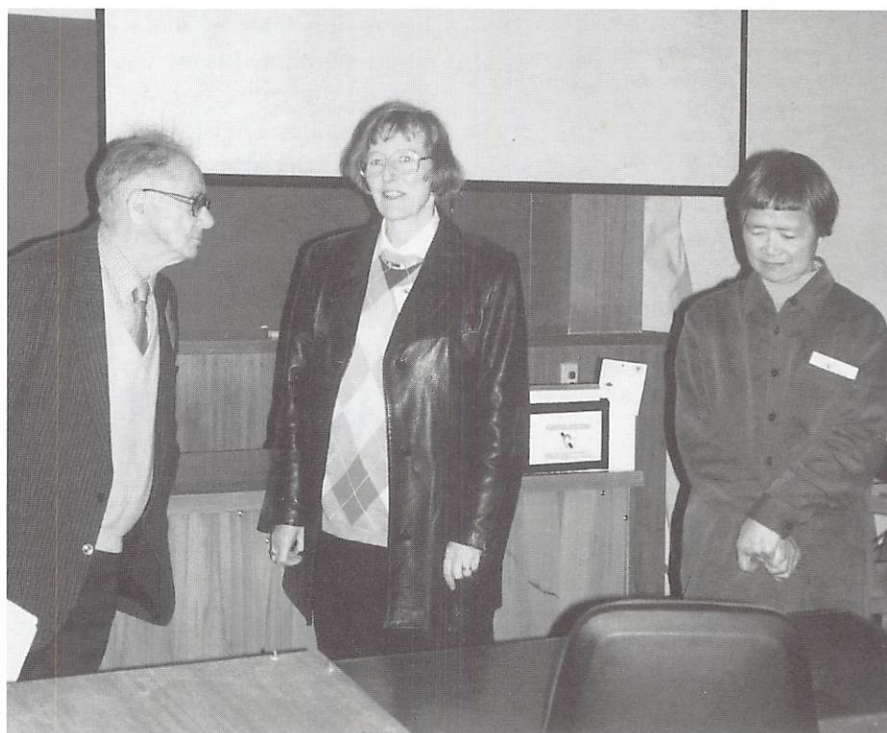
There were a variety of parallel sessions to choose from over the three days. On Monday, deciding not to stray too far from my "comfort zone", I chose the one on education in the morning and the one on surveys in the afternoon. The education session included an entertaining "trial" of the NZSA Education Subcommittee for "aiding and abetting the cause of statistical education" in New

Zealand. The defendants appeared to be pleading guilty in an attempt to be sentenced to do more of the same in the future.

The survey sessions were notable for a large contingent from Statistics New Zealand (one of the sponsors of the conference). The problems facing Statistics New Zealand are

very reminiscent of the ones facing the Australian Bureau of Statistics.

A highlight of Monday afternoon was an entertaining history of categorical data analysis in the 20th Century from Alan Agresti (visiting from the University of Florida) with some gossip on the Pearson/Fisher dispute I hadn't heard before.



Steve Roberts, Jean Thompson (former President NZSA) and Mary Vere-Jones.

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Alan's talk was followed by a more serious note, with Paul Gandar from the New Zealand Ministry of Research, Science and Technology describing some impending changes in "Public Good" funding for New Zealand science and discussing the implications for statisticians.

Monday evening included an employment workshop for graduate students given by Jon Briggs from Statistics NZ and a panel discussion on the future of statistics in New Zealand, both of which were reputedly well attended. I unfortunately had been waylaid elsewhere, enjoying some NZ hospitality and some of their marvellous wine – a good thing the paper I hadn't finished preparing was scheduled for the Wednesday.

I did have the opportunity to talk to some of the participants in the panel discussion later in the week. One often mentioned issue was the gap left by the now defunct Applied Mathematics Division of the New Zealand Department of Scientific and Industrial Research (roughly equivalent to the current DMIS in CSIRO). The New Zealand DSIR was disbanded and split into various research institutes a few

years ago. I was left with the impression that former members of the Applied Mathematics Division felt that a valuable synergy between research disciplines had been lost when the division was disbanded.

Another major concern was the funding for New Zealand science in general, with some people suggesting that recent and proposed financial "reforms" had created a climate of uncertainty in New Zealand research funding, which could be linked to an exodus of New Zealand scientists across the Tasman. John Maindonald later told me that this exodus was the topic of an interesting program on New Zealand television on the Thursday night following the conference.

Tuesday was the turn of some of the Australian visitors with John Maindonald (ANU now, but a former Kiwi) and Glenn Stone (CSIRO) introducing the data mining theme in the morning and Joe Gani (ANU) very capably introducing the medical and social risks theme in the afternoon.

For the Tuesday afternoon parallel sessions, I decided to stray a little away from "home" and attend the medical and social risks session, instead of yet another session on



John Maindonald (ANU) and Tony Vignaux (Victoria University, Wellington)



Brian Easton, Len Cook, Ray Hoare and Steve Kuzmicich

surveys. All three speakers in this parallel session were discussing risk in a medical context and all three were currently resident in Australia, though one, Mark Clements, a PhD student at the University of Sydney, is a Kiwi expatriate modelling cigarette smoking in the New Zealand population.

Tuesday afternoon ended with a talk that was definitely not Australian in flavour, with Papaarangi Reid from the Wellington School of Medicine providing some insights into health risks amongst the Maori population.

Tuesday night was the conference dinner with lots of good food, good company and far too much of that marvellous New Zealand wine.

Wednesday started slowly with a polished performance from Len Cook, the New Zealand Statistician. Len was followed by some "blow-in" from Canberra with a talk that sounded like it had been prepared late on Monday and Tuesday nights under the influence of a lot of good New Zealand wine.

The major themes for Wednesday were economic and financial risks. The day was run in conjunction

with the New Zealand Society of Actuaries (acronyms are carefully rationed in New Zealand, forcing various professional societies to use the same one) and provided an opportunity to examine risk from a wide range of perspectives.

The highlight of Wednesday for me was the idiosyncratic presentation of the prizes for the best student talks to Darren Upton (1st), Jonathan Godfrey (2nd) and Jenni Holden (3rd) by the prize sponsor, Ray Hoare of Hoare Research Software Ltd. These student talks were all in parallel sessions that I didn't attend and by all reports I missed some very good talks - I definitely need to widen my horizons a little at future statistics conferences.

All in all it was a great conference with an applied focus that made it accessible to an audience from a wide variety of backgrounds. My thanks (and those of many others) go to the conference organisers, in particular, the two Davids (Harte and Vere-Jones) from the Victoria University of Wellington. My thanks also go to the other New Zealanders whose hospitality made my trip thoroughly enjoyable.

Ian McDermid



STATISTICIANS

Polartech Ltd is a high-technology biomedical company developing instrumentation for the detection of cancer. We have embarked on a major clinical trials program and require the services of bright, enthusiastic, honours-qualified statisticians. Experience in the development of linear and non-linear statistical classifiers, preferably using SAS, is required. Familiarity with CART, MARS and neural net techniques is also necessary. Salary will be negotiated on the basis of experience and qualifications.

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MINUTES of the ANNUAL GENERAL MEETING of the STATISTICAL SOCIETY of AUSTRALIA Inc. (SSAI)

Held at 6.15 p.m. on Wednesday, 14 July, 1999 in Carslaw Room 173, University of Sydney.

The meeting was chaired by the President, Professor Ian James.

1. Attendance, Apologies and Proxies

As per attendance book.

2. Confirmation of the Minutes

The minutes of the 1998 Annual General Meeting, held on 7 July, 1998 were confirmed (D. Shaw / R. Robertson).

3. Presentation of the Annual Report

The Annual Report was presented by I. James. He noted the small increase in membership over the past year and encouraged all Branches to recruit more members. He thanked Dennis Trewin, who is retiring as Chair of the Accreditation Committee, for the outstanding job he and the committee have done in implementing the accreditation process. He also made special mention of Daryl Daley who retired as Technical Editor of the journal after many years of service.

4. Presentation of the Treasurer's Report

The audited report was circulated. The President noted that the introduction of centralised subscription collection made comparison of this year with the previous one difficult. The President noted that the Society was facing increasing costs. Conference profits had enabled the Society to absorb some of these cost increases in 1998.

The report was accepted (D. Shaw / I. Saunders).

5. Appointment of signatories to operate accounts

The following were appointed as signatories to the Society's

accounts: E. Brinkley, J. Wood, G. van Halderen and A. Welsh. (Moved D. Shaw / N. Weber.)

6. Election of Section Chairs

The Chairs for the following Sections were elected unopposed:

Industrial Statistics	G. Robinson
Statistical Computing	G. Stone
Statistical Education	B. Dansie
Statistics in the Biological Sciences	S. Barry
Statistics in the Medical Sciences	L. Lim
Survey and Management	D. Steel
Young Statisticians	V. Wheway

7. Any Other Business

A. Eyland suggested including a complete list of Honorary Life Members and the names of those awarded AStat status each year in future Annual Reports.

8. Date and place of the next meeting

The next meeting will be held in Adelaide in July, 2000 in conjunction with the Australian Statistical Conference. The precise date and place will be advertised in the Newsletter and Branch Secretaries will be notified.

The meeting closed at 6.25 pm

Neville Weber
Hon. Secretary

ANNUAL REPORT

April 1998 to March 1999

The Society was founded in 1962 as a national "umbrella" organisation to support and further the work of the state statistical societies. The overall objective of the Society is to further the study and application and good practice of statistical theory and methods in all branches of learning and enterprise. The Society is incorporated in the Australian Capital Territory (ACT). The constitution was revised in accordance with the Associations Incorporation Act 1991 (ACT) on 7 May 1993.

In order to hold Annual General Meetings of both the Society and the Central Council in association with Australian Statistical Conferences or other mid-year conferences, the financial year for the Society is from 1 April until 31 March. Branches may choose, through their own constitutions, to retain a different financial year.

Membership of the Society

Based on the capitation fees in 1998 the Society had 795 ordinary members, 129 student/retired members, and 14 honorary life members, making a total of 938. Equivalent figures since 1992 are 897, 910, 954, 952, 958 and 887. These figures do not take into account those capitation fees in arrears.

Central Council

The Annual General Meeting of the Society was held at Conrad Jupiters, Gold Coast on 7 July 1998 and a Special General Meeting was held in Canberra on 24 November 1998 to change the title "Chartered Statistician" to "Accredited Statistician". The Annual General Meeting of the Central Council was held on 5 July 1998 at Conrad Jupiters and a general meeting of the Council was held on 18 February 1999 at the University of Sydney.

The Central Council for 1998-9 comprised:

President	Professor Des Nicholls
Vice President	Professor Ian James (from July, 1998)
Editor	Professor Simon Sheather
Secretary	Associate Professor Neville Weber
Treasurer	Mr Eden Brinkley
Accreditation Committee Chair	Mr Dennis Trewin

Branch Delegates:

Canberra	Dr Michael Adena, Dr Terry O'Neill
New South Wales	Professor David Griffiths, Dr Ann Eyland, Dr Alun Pope, Ms Susan Hoffmann
Victorian	Dr Geoff Laslett, Mr Geoff Bruton, Mr Antony Ugoni
Queensland	Dr Gordon Smyth, Dr Rodney Wolff
South Australian	Ms Sandra Pattison, Dr Gary Glonek
West Australian	Dr R. Milne, Dr Lyle Gurrin

Scholarships for the Honours Year in Statistics were awarded to

NSW	Stella Karuri
QLD	Michael Lazzarini
SA	Susannah Lock
VIC	Kevin Abeyewardene and Natasha French
WA	Andrew van Burgel

Association with other bodies

The Society is an affiliated organisation of the International

Statistical Institute, with the President as the Society's ex-officio member.

The Society is a constituent member of the Australian Mathematical Sciences Council, and through this Council a member of the Federation of Australian Scientific and Technological Societies (FASTS). Mr Nick Garnham and Dr Neil Diamond represented the Society on the Council.

The Society was represented on the National Committee for Mathematics of the Australian Academy of Science by Professor Des Nicholls.

The Society is a corporate member of the New Zealand Statistical Association.

The Society is represented on the Australian Statistical Advisory Council by Dr Ron Sandland, and on Committee QR/4 - Statistical Quality Procedures of the Standards Association of Australia by Dr Geoff Robinson.

The Society is an Associate Member of the Australian Geoscience Council, and its representative is Dr Nick Fisher.

The Society is a member of the Australian Foundation of Science. Professor Chris Heyde is a member of the Board of Directors and Professor Sue Wilson was the Society's representative this year.

Finances

The Society's financial affairs for the year are detailed in the Financial Statement.

The capitation fee for 1999 was set at \$50, comprising an ASPAI (Australian Statistical Publishing Association Inc) component of \$25 and a general component of \$25. The financial state of the Society is generally healthy. The profits from the conferences have enabled the Society to absorb many of the costs incurred in 1998 associated with the introduction of accreditation and the changes to journal.

Central Council warmly thanks Mr David W. Sistrom for his time and effort in auditing the accounts.

The Australian and New Zealand Journal of Statistics

The first four issues of the merged journal appeared in 1998. In 1998, 44 papers were published and each issue contained papers in both the Applications and Theory and Methods sections. The Society would like to thank the Editors, Simon Sheather and Murray Jorgensen, and the Editorial Board for their contributions to the smooth production of the journal.

Special mention should be made of the exceptional service of Daryl Daley who retired as Technical Editor at the end of 1998 after 11 years service to the Society in that role. A tribute to Daryl appears in the first issue of Volume 41 of the journal. Ray Watson is the new Technical Editor for the journal.

Accreditation

The accreditation process is now in place and running smoothly thanks to the outstanding job done by the initial Accreditation Committee. The Committee has had to process a significant number of applications and make many difficult decisions. It meets once a month, generally via telephone conference, and spends a considerable time examining each of the applications and referees'



Ian James talking with Des Nicholls after 'taking over the reins' as President.

Central Council

reports to ensure that a high standard for accreditation is established. Those members granted GStat and AStat status are listed in the Newsletter once the recommendations have been approved by the Executive.

The Society adopted a Code of Conduct which is mandatory for accredited members at the Annual General Meeting in July. A detailed report on accreditation can be found in the November Newsletter.

We would like to take this opportunity to thank all members of the committee for their efforts, especially Dennis Trewin who has been Chair of the committee for the past two years.

Conferences, Workshops and Symposia

The 14th Australian Statistical Conference (ASC 14) was held on the Gold Coast 6-10 July 1998. The conference was an outstanding success with 400 registered delegates. Our thanks go to Walter Robb, Margaret Mackisack (Chairs of the Organising Committee), Kaye Basford (Chair of the Program Committee) and their teams for providing the Society with a superb conference. Several Sections organised workshops and sessions that were held in conjunction with ASC 14.

The Young Statisticians Section was very active during the year in

several Branches with the annual Workshop being held in Canberra on 12-14 August.

Reports on both of these meetings appear in the Newsletter.

Awards

The 1998 Pitman Medal was awarded to Professor Eugene Seneta from the University of Sydney at ASC 14 in July. The citation appears in the Australian and New Zealand Journal of Statistics, 40, 385-387.

The 1998 E.J.G. Pitman Prize for the most outstanding talk presented by a 'young statistician' at an Australian Statistical Conference was awarded to Petra Kuhnert.

At the February meeting of Central Council Dennis Trewin and Richard Jarrett were awarded Honorary Life Membership of the Society.

This year the Society introduced special Service Awards to recognise sustained and significant service to the Society over many years. The recipients of the initial awards were

Eden Brinkley	Canberra
Robert Forrester	Canberra
E. Ann Eyland	NSW
Helen MacGillivray	Queensland
John Field	SA
Malcolm Clark	Victoria
Nick Garnham	Victoria

Named Lectures

The Belz Lecture was given by Dr Jane Matthews at a meeting of the Victorian Branch on 27 October 1998. Her lecture was entitled 'Breakthrough or bunkum? Sources of bias in the design, conduct, analysis and interpretation of clinical trials'.

The Knibbs Lecture for 1998 was given by Professor Geoff Eagleson at a meeting of the Canberra Branch on 24 November. Professor Eagleson's lecture was on 'Selling Statistics: Is it time to segment the market?'.

The H.O. Lancaster Lecture was given at the Annual General Meeting of the New South Wales Branch on 17 March 1998 by Jennifer Kelly. The title of her lecture was 'Marketing Statisticians'.

The E.K. Foreman Lecture was given at ASC 14 by David Morganstein from Westat. The title of his lecture was 'Continuous quality improvement in statistical survey work'.

Sections

Current Sections and their 1998-9 chairs are:

Survey and Management Statistics	Associate Professor David Steel
Statistical Computing	Dr Glenn Stone
Statistics in the Medical Sciences	Dr Lynette Lim
Statistics in the Biological Sciences	Dr Simon Barry
Statistical Education	Dr Brenton Dansie
Industrial Statistics	Dr Geoff Robinson
Young Statisticians	Ms Virginia Wheway

Other Sectional and Branch activities have been detailed in the Society's Newsletter.

For the Society,

Professor Des Nicholls, President

Dr Neville Weber, Secretary

April 1999



Lynne Giles, Ian Saunders and Abi Ekangaki attending for the first time.

NEW SOUTH WALES

Statistical literacy and Simpson's paradox

Milo Schield. Sounds a bit like the Colgate ring of confidence, but worse. You can just see kids running around the school grounds now, head-butting each other into submission because they have the power of the Milo shield. Makes you wonder what Quik or Ovaltine will do in response. Oh dear.

Milo Schield gave the inaugural 1999 NSW branch meeting talk in March, just after the AGM. Milo, appearing without his life-long friend Otis, who, strange as it may seem, had recently departed to achieve a life's ambition of hiking across the USA, gave a fascinating talk on statistical literacy and Simpson's paradox. Holding a chair (but only until his arms get tired – boom, boom) in the Department of Business Administration and Management Information Systems at Augsburg College in Minneapolis (phew!), Milo seemed ideally qualified to discuss this topic.

Now, before we cue the Simpson's theme song we need to get something straight. Simpson's Paradox does not, in any way, shape or form, refer to the puzzling ability of the TV show of similar name to retain high ratings despite having been in obvious decline since the start of the fifth series. I mean, consider the classic shows of the early series' – Marge vs the Monorail, Bart the Genius and Dancin' Homer. And who can forget the all time classic piece of the Simpson's television when the Germans buy the nuclear power plant from Mr Burns and Homer has his daydream in the Land of Chocolate? Or when Timmy O'Toole gets stuck down the well? Not me. But sure, the first series wasn't very good from the animation point of view, but I ask you, can you fault them for their storylines? Thought not. But compare that to the drivel they are

putting out now. I ask you, how do they continue?

Anyway, Simpson's paradox refers to the reversal of association that occurs between two variables when two non-homogeneous sub-populations are pooled or when a population is separated into two non-homogeneous populations. Milo gave a good example of Simpson's paradox by considering the race of prisoners given the death sentence for murder. It was found that the death sentence was more likely to be handed down to white prisoners than to black prisoners. However, if the groups were separated by the race of their victim then the death penalty was more likely among black prisoners than white. Result: paradox (and in light of recent events perhaps this should be renamed the OJ Simpson Paradox. Any takers?).

Milo then proceeded to discuss an example of Simpson's Paradox that arose in the literature in the late 1950's. A relationship between smoking and lung cancer had been observed and the question of whether smoking caused lung cancer had been raised. This caused the great R.A. Fisher to stir and raise an objection. Fisher introduced data showing distinct differences in smoking choice amongst twins: 51% of fraternal twins as opposed to 24% of identical twins. To Fisher this suggested a genetic cause, not smoking, as the cause of lung cancer.

However in 1959, a group of epidemiologists, led by Cornfield, had a breakthrough. By supposing that the prevalence of lung cancer is N times as great amongst smokers than non-smokers then the prevalence of the "genetic" cause supposed by Fisher must as well be at least N times as great amongst smokers than non-smokers. The failure then of Fisher's data to Cornfield's necessary condition was then seen to give policy makers "strong evidence" to treat the observed relationship as being immune to Simpson's Paradox and

immune to being caused by some other factor. As a result smokers have been maliciously and wilfully persecuted ever since. Poor dears.

Milo considered this contribution to the field to have the same status as the contribution of randomisation had to experimental statistics. Unfortunately for Milo I think he undersold the idea and left most of us not so sure.

It was at this stage that Milo's talk branched off into the arcane (i.e. notation and mathematics). Nary a slide went by that didn't contain a conditional probability statement of some sort and the odd splattering of Greek notation (note to my old lecturers – yes I do know what a conditional probability statement looks like but I could just never be bothered. I really think your ability to teach was outdone by my ability to not want to learn – sorry!). Needless to say some of us tuned out, thereby missing the rest of a wonderful talk.

This doesn't mean that the time was spent in an unconstructive manner. No sirree! We managed to play the old "Guess who's fallen asleep?" game, and what a wonderful time we had. Leading the charge into the land of Nod was a little someone

ACCREDITED MEMBERS

The following applications have been approved by the Central Council.

GStat

Peter Dunn

Accredited Statisticians

Robyn Attewell

Caroline Finch

Terry Koen

Bob Murison

Neville Weber
Secretary, SSAI

Branch Reports

who should have known better, given that her part in the evening was fairly important, followed closely by the Goliath of the society, himself well known for having a nap. But are we criticising? The answer is no, we're just saying don't get caught. See ya next time.

VaR and all that jazz

Anyone expecting a five piece combo, singing, dancing and just good ol' fashioned getting down was to be sorely disappointed at the May meeting of the NSW branch. We were not to be treated to the dulcet tones and tuneful renditions of the hit songs of Ed and the Bosworths, the world famous in Erskineville jazz quintet. Instead we were to be entertained by the man himself, the ubiquitous Bosworths choosing this night, of all nights, to decline their invitation to play.

Super trouper that he was, Edmund soldiered on, and, like all good performers, he knew his crowd well. Packing them in to a small room at the ABS he kept them waiting, waaaaaiting, letting the tension build before presenting himself to raucous applause and much voiced appreciation. Many hurrahs were given on his appearance, men shouted, women swooned, and some underwear found its way onto the stage, promising love and something more (although I do believe these belonged to David Griffiths).

A bumper crowd, including some blow-ins from the banking industry, heard Ed apologise for not including enough statistics in his talk. He stated that he had a political barrow to push – too many statistics problems in the banking industry were being handed to people less than ideally qualified to handle them – and this was the forum in which to don the wellies and overalls, pop the straw in the mouth and start pushing. Ed also stated that there were lots of opportunities in the industry but that the banks would need to be convinced of this fact.

The 1980's were the banking nirvana. With the aid of an X-wing fighter cursor and a little bit of yours-truly-assisted screen movement Ed gave his delighted audience a brief rundown of the decade as seen by the banks and explained how, as a result of the fun times in the previous decade, the 1990's saw risk management take off.

Ed then described the four major aspects of banking: credit scoring, provisioning, options and capital management and highlighted the types of analyses commonly used in these areas. The latter area, in which extreme value theory is commonly used, was to be the focus of Ed's talk. Starting with a balance sheet for beginners (assets equals liabilities plus capital), Ed moved onto a basic interest rate discussion (borrow low, lend high), touched on the vagaries of corporate lending (much to the chagrin of the Ray Martin's of this world, who like to bash the banks on the pensioners' behalf, there is no money in it) and finished up discussing the use of VaR estimates as forecast confidence intervals of future market value.

Now I must admit that there is a lot of Ed's talk I didn't understand or follow and hence I find myself unable to contribute much more in the way of sensible review. Greed may be good for Gordon Gecko, but it just leaves me all confused and needing to find somewhere quiet to rest. My sincere apologies Ed.

At the end of the talk a rather long and lively discussion got under way, mainly because everybody was interested in what Ed had to say but also because Roger wouldn't close the meeting. Eric Soweley got metaphysical (not to be confused with the Olivia Newton-John song, although these days it's a tough contest to say who'd look better in pink tights and orange leg warmers), someone brought up the old chestnut about the corporate and academic worlds not listening to each other and much talk was

made of different models. The lively talk was followed by a not-so-lively dinner but fun was had by all.

Jason Boland

VICTORIA

Bible Codes – Puzzles and Solutions

At the March meeting Professor Michael Hasofer gave a very interesting talk entitled "Bible Codes – Puzzles and Solutions". In his talk he outlined the controversy relating to a paper "Equidistant Letter Sequences in the Book of Genesis" published in *Statistical Science* in 1994. In that paper quantitative methods were used to "test" claims that when the Book of Genesis is written as a two-dimensional array, equidistant letter sequences spelling words with related meanings appear in close proximity and that this is evidence that the Book of Genesis is of Divine Origin. The data that is the focus of the article consists of two lists of famous rabbis who all lived long after the Torah was given, together with their birth dates and dates of death. The paper sets up a distance measure between the names and dates and claims that these are surprisingly close, with a randomisation p-value of 0.00002. In his talk Professor Hasofer argued that the methodology for separating the "codes" from "meaningless coincidences" is not valid according to accepted scientific standards; the same pattern can be found in other literary texts such as a Hebrew translation of *War and Peace*; and that the credibility of the paper depends on the honesty of the authors since small changes to the way the famous rabbis experiment was carried out would give results that were "not significant".

Let The Inference Fit The Design

The April meeting was addressed by Cliff Lunneborg of the University of Washington at Seattle.

His talk was entitled "Let The Inference Fit The Design" and described settings in which standard ANOVA techniques are overused. Cliff observed that in most medical research, trials used the available cases and did not select truly random samples upon which to apply the treatments. As part of this discussion, he explained how ANOVA techniques had become the panacea, then outlined the history of randomisation tests and how the PC age had changed the ways that analyses can be handled. The availability of randomisation tests and the PC has created a situation where methods of analysis can be re-thought. After discussing randomisation and study design, Cliff presented several examples and ways that they could be analysed, and emphasised that the null hypothesis needs to be considered in a different way when tackling many situations. Anyone wishing to find out more about the talk can access it at http://weber.u.washington.edu/~lunn_eborg/Australia.

SOUTH AUSTRALIA

Modelling the perception of the current and prospective economic situation

Professor Bernd Roenz, of the Humboldt-University of Berlin, presented a talk entitled "Modelling the perception of the current and prospective economic situation" to the May Branch meeting.

A general population survey called ALLBUS is carried out regularly in Germany, with the one of the aims of the survey to discover respondents' perceptions of various topical issues. One issue of interest to econometricians is the perception of the economic situation in Germany, from both an individual and country viewpoint. ALLBUS data from the years 1991, 1992, 1994 and 1996 were used to investigate the extent to which the perception of the current and future economic

situation, for Germany and for individuals, depends on some characteristics of the respondents. Characteristics investigated in the work by Prof Roenz included the region in which the respondents lived, gender, size of household, family status, age and net income. A multinomial logit model was used estimate the effects of the aforementioned explanatory variables on the assessment of the economic situation. The results of bivariate and multivariate estimations were contrasted in the presentation.

After the talk, a small group of statisticians assisted the speaker in sampling some more Australian seafood, of which he has grown particularly fond.

Modelling Misreporting in a Prenatal Down's Syndrome Screen

Before leaving Adelaide to take up a position with CSIRO in Canberra, Dr Brent Henderson presented a talk based on some work carried out as part of his PhD.

The gestational age at which mothers present for screening in a Prenatal Down's syndrome screen is subject to error in that the continuous gestational age of presentation is quoted in discrete weeks. This may be simply thought of as rounding. More generally, it can be considered 'misreporting'. This misreporting plays an important role in the screen because the biochemical markers on which the screen is based are traditionally adjusted for gestational age prior to the formation of the classification rule.

Brent's talk extended data rounding or grouping to misreporting, drew links with measurement error and misclassification models, and considered the impact the misreporting of gestational age has on the performance of the prenatal Down's syndrome screen.

Discussion of Brent's talk continued at dinner, held at a nearby Thai restaurant.

Kruskal-Wallis and Efron dice

Associate Professor Bruce Brown of the University of South Australia spoke to the July meeting of the SA Branch, presenting a talk entitled "Kruskal-Wallis and Efron dice".

The Kruskal-Wallis test is a rank-based one way ANOVA. Its test statistic is a quadratic form among ranks, or alternatively among all the Kendall tau concordance measures between pairs of treatments. But the full set of such concordance measures has more degrees of freedom than the Kruskal-Wallis test uses, so what can the independent surplus be attributed to? The somewhat surprising answer is: circularity, or non-transitive effects. The meaning of circularity is well illustrated by Efron dice. The full sum of squares among all concordance measures may be decomposed into uncorrelated transitive and non-transitive circularity effects, and a multiple comparisons procedure making inferences about patterns of orderings among treatments, including circularities, can be implemented.

Lynne Giles

CANBERRA

Rasch Modelling of Educational Measurement

In May, Dr Inna Kolyshkina of the Schools Assessment and Reporting Unit of NSW Department of Education and Training gave an historical account of Rasch modelling and discussed how and why it has been used for educational measurement in the NSW Department of Education and Training over the past three years.

In education, an aim is to measure a person's ability using "calibrated" educational measurement instruments, and not by comparison to the ability of other students. A good measurement model for assessing a person's ability should

require that: (a) a more able person always has a better chance of success on a question in a test than does a less able person; (b) any person has a better chance of success on an easy question than on a difficult one; and (c) the chance of answering correctly depends only on that person's ability and the question's difficulty, and must hold regardless of the race, sex, age, etc of the person. The Rasch model fulfils the requirements of a good measurement model.

The main advantage of the Rasch model is that it enables the ability of a person and difficulty of a question to be ordered on the same scale and measured in the same units. Consequently, results from several tests can be meaningfully compared, both for the same student and for different students. Other advantages include local independence (a person's response to one question is independent of their response to other questions), equal question discrimination (all questions discriminate student performance equally well), and guessing is minimised through clever construction of the test. Inna presented examples of a Rasch scale from the Basic Skills Test and several questions from the Numeracy test.

120 Years of Statistics

In honour and celebration of their 60th birthdays during 1999, three eminent Canberra statisticians, Dr Daryl Daley, Professor Chris Heyde and Mr Richard Morton, were each asked to present a brief talk on a topic of their choice at the June meeting. A larger-than-normal crowd attended the talks (almost 50) indicating the popularity of historical talks (or even of the speakers!).

First speaker for the evening was Dr Daryl Daley. Daryl is a Reader in the Stochastic Analysis Program of the Centre for Mathematics and its Applications at the Australian National University. In reflecting on

his career over the past forty years, Daryl focussed on four specific events.

The first event concerned the supposition by David Kendall that pegs in a map of London on Pat Moran's office wall were sites of hits by World War 2 bombs, a conclusion he reached after dividing the map into a grid and observing that the pegs appeared to be Poisson-distributed. Pat revealed that they were in fact offices he had recently visited! For the second event, Daryl described how David Kendall talked to final year secondary students at a girls school about using the spread of a rumour to mimic the spread of an epidemic. The students tried the idea, and sought more guidance on how the rumour may stop spreading. The answer resulted in a basic paper on stochastic rumours. The third event concerned Daryl's involvement in the early 1980s in assessment of Australian Scholastic Aptitude Test (ASAT) scores from the ACT Year 12 system and whether there was indeed a bias against girls. His analysis of a variety of data showed that according to the principles of the ACT system there was (and is) a small bias against girls in single-sex schools (and a bias that favours boys in single-sex schools), while there is effectively no bias in the mixed-sex schools. For the fourth event, Daryl presented a "concrete" problem in probability, the

application actually concerning the volume of aggregate in concrete. A solution to this problem lies in establishing a model for the volume of little spheres in a large sphere.

"Change and Challenge for Statistics: A Personal View Spanning 40 Years". This was the topic of Australian National University Professor Chris Heyde's talk. To set the scene, Chris described how forty years ago, statistics departments were being established all over Australia along with an expansion of the tertiary education sector. Statistics was seen as an important discipline and a necessary component of a well-rounded education in any discipline with a quantitative basis. In those expansionary days, after completing a Ph.D., one could step straight into a senior position in a statistics department. Service courses were taught by statisticians and this fueled the growth of the new departments. But in the intervening years many of these service courses have been lost, and statistics departments have contracted as a consequence.

After he completed his Ph.D. under the supervision of Pat Moran, Chris became interested in a broad range of applications. He thinks statistics has suffered because many supervisors have cloned themselves through their students and led them down a very narrow research path.



The speakers, Daryl Daley, Richard Morton and Chris Heyde with the President of the Canberra Branch, Alice Richardson

Unfortunately, statistics has fragmented into too many specialisations (ASA has 18 sections!) and is not as well-defined as it used to be. Further, the segregation of probability and statistics common in the USA is divisive. He questioned how should we maintain unification with such diversity?

Chris mentioned that some of his closest colleagues are in disciplines outside of mathematics and statistics, such as in engineering and business, and that they do statistics under different auspices. However, they have no real identification with the statistical profession. These people can provide a vital link between statisticians and researchers from other disciplines and this needs to be fostered. He concluded by mentioning a conference on Unsolved Problems of Noise (July, 1999, Adelaide) which was right up the statistician's alley, the aim being to bring together those who investigate a signal estimation against a noisy background – the very essence of statistics, but that no statisticians seemed to be involved!. He remarked that it was all too easy for a relevant conference, outside professional statistics circles, to pass unnoticed. Statisticians potentially have a big role to play in conferences such as this and we should not miss the bus!

In his talk, Mr Richard Morton of CSIRO Mathematical and Information Sciences considered "How Statistics came of age". Richard began by describing the statistics scene in the UK in the 1960s. There were desperate staff shortages in statistics lecturing positions (30%) resulting in rapid staff movement and promotion. Statistics courses gained status as part of an Honours Mathematics course and there was an emphasis on mathematical respectability; "Let (W, E, P) be a probability space ..." became a familiar opening to many theoretical papers. Because of the rapid expansion of statistics, an instructional conference was held in Durham in 1963 which aimed at

bringing participants (including statistics lecturers) up to date on statistical topics such as measure theory, ergodic theory and information theory.

Richard remarked that computing was very primitive in the 1960s. Calculations were manually cranked out by turning a handle. Graphs were drawn freehand and then by a draughtsman when a paper was to be published. Because this was so cumbersome, graphical methods were used sparingly. Eventually, rotary machines became electro-mechanical enabling only simple arithmetic operations to be performed more quickly. Data were transformed and treated as Normal and "data snooping" was abhorred because of the bias due to choosing a model after seeing the data. Thus, statisticians were forced to think about the data first because they only wanted to do a calculation once, given how long it took! Computers were rare and there was no software (unless you had written your own in Fortran, etc).

As a comparison, Richard then focussed on statistics in the 1990s and how the advent of powerful computers changed not only what we could do, but also what we consider is important and our philosophy of the approach to statistical analysis. He remarked that statistics is now not judged solely by its mathematical content. Packages proliferate but are easily abused by inexperienced users who have not thought about what they are doing. There is a huge choice of methodology now, and Bayesian methods, once unfashionable, are now feasible via MCMC (but what about the philosophy?). Simulations abound both in evaluating methodology and in inference, and diagnostics and model selection are common tools in a statistician's toolbox. He concluded with the warning that that the ease and power of computing must not be allowed to discourage us from thinking!

Improving Quality of Household Surveys by Pretesting Techniques

At the July meeting of the branch, Ms Sandra Smith of the Australian Bureau of Statistics discussed pretesting techniques for household surveys as a means for improving survey quality.

Pretesting is a broad term that incorporates many different methods or combinations of methods to identify problems in questionnaires for both respondents and interviewers. It is now typically divided into two major categories: pre-field techniques and field techniques, with Sandra concentrating her talk on the former. Pre-field techniques are those generally used during the preliminary stages of questionnaire development and include respondent focus groups and cognitive laboratory interviews.

Questionnaire developers decided that it was important to make sure that the questions "worked" as intended, before conducting a field test, in order to minimise respondent burden during a field test. Sandra discussed various methodological approaches used to understand question characteristics, the cognitive processes, and respondent difficulty in answering questions. These included protocol analysis or cognitive interviews in which respondents "think aloud" as they answer survey questions. To illustrate, a volunteer from the audience was chosen to participate in a pseudo-cognitive interview. The question they were asked was "How much did your household spend for food at a supermarket last week, NOT counting money spent on non-food items, such as cleaning or paper products, pet food or cigarettes?". The respondent was then prompted by the interviewer to think aloud and reveal how they were deriving their answer to the question. In particular, the respondent was prompted to reveal what they considered "last week", whether they only excluded the

non-food items listed in the question, what was their definition of supermarket, whether they were considering trips made to the supermarket or the amount on the docket(s) as a means to remembering how much they spent, etc.

In summary, cognitive interviews provide insight into the ways in which respondents understand questions, search their memories for relevant information, form judgments, and edit their answers. There are some limitations to these methodologies, such as that they uncover problems with the respondent's task, rather than the entire data collection process.

At the conclusion of the talk, several branch members joined the speaker for dinner at one of the branch's favourite eating places, Delicateating.

Melissa Dobbie

YOUNG STATISTICIANS WAYS99

WAYS99 is on again! This year it's scheduled for 6-8 October in wonderful Wollongong. In a break with tradition, WAYS99 will be held in conjunction with the Industrial Statistics Conference. There will be a focus on group work to solve real-life problems supplied to the Young Stats section. Geoff Robinson of the CSIRO will lead a session on DOE while David Steel of the University of Wollongong will conduct a Survey Design session. It is hoped that these activities will encourage future networking as well as provide an example of the process used by experienced statisticians in their consultation. There will also be allotted time for honours and PhD students to make a small presentation of their work. Naturally there will be ample time for informal discussion during the workshop so come one, come all!

Andrew Collins

Collins.Andrew.AA@bhp.com.au

INDUSTRIAL STATISTICS SECTION

Planning is now well-developed for a "Statisticians Networking Forum" to be held at the Novotel Northbeach in Wollongong from the evening of Wednesday October 6th to Friday the 8th. The Young Statisticians conference, WAYS'99, will be held at the same time and place.

Queensland Rail has provided substantial funding and organising effort.

We plan to have about 40 people at the Forum, largely by invitation, with a balance between several classes of interested parties.

There will be about 12 talks of 10 to 15 minutes duration and a lot of opportunity for discussion.

The precise objectives of this Forum are still being formulated. We would like to make progress on a number of issues for which the present situation is not satisfactory. Some of them are as follows:

- How do we define our subject? ... Is "statistics" primarily about uncertainty and variation or is it primarily about data?
- What classes of problems does the statistical profession wish to own?... Who do we serve?
- Why have few statisticians applied to become accredited?
- Why do many people who work as statisticians not consider the Statistical Society relevant or useful?
- What can we do to change the image of statisticians? ... Is "Statistician" a good enough brand name?
- What do we need to do to compete with the purveyors of neural networks, chaos theory, data mining, factor analysis and other techniques? These methods seem to be attractive to potential students and potential clients, but many conventional statisticians have doubts about the validity of their internal assessments of reliability.

- What are the barriers to Statistics having more impact on industry?
- Is the future of Statistics made bleaker or brighter by universal access to statistical computing? ... Combining a little knowledge with a lot of statistical computing power may be a recipe for disaster.
- Has our "free ride" on the Quality Movement done anything to enhance the image of statisticians?
- What must we do to sell the perception that statistics and statisticians can be of great value to businesses?

We expect that this Forum will be of substantial interest to many statisticians, not just those in the Industrial Statistics section.

We hope to get some agreement about priorities and some actionable outcomes from this Forum. However, statisticians in other countries are facing similar difficulties, so we must expect that progress will require continuing, well-focussed efforts.

Some information about the Forum will be put onto the anzstat email list, probably some time during August.

I intend to submit a written paper to the Forum, including other people's arguments of relevance to these topics as well as my own opinions.

I would be interested to discuss these questions with members of the Statistical Society.

My telephone number is (03) 9545 8014, fax: (03) 9545 8080, email: Geoff.Robinson@cmis.CSIRO.au

*Geoff Robinson, Chair
Industrial Statistics Section*

ISI COMMITTEE ON WOMEN IN STATISTICS

The following, a brief update from the ISI Committee on Women in Statistics, is being sent to you as part of our effort to acquaint members of the Statistics

profession, both men and women, with our latest activities. I would appreciate it if you could relay our news to your members and inform them of the various means by which they could contact us. As we operate without a budget, we rely very heavily on communication by e-mail, but we would be happy to communicate by regular mail with those who do not have access to that medium.

As you probably know, the ISI Committee on Women in Statistics was set up in 1995 upon the realization that women were poorly represented in the ranks of the ISI family. As this low representation tends to reflect women's overall role in the profession, the committee has been concerned with the wider picture as well. Among the recent activities:-

- Our survey-type "characterizations" project has been running for well over a year. In this project, volunteer teams were set up locally in about 50 countries in order to arrive at relative characterizations of men and women statisticians, using a set of well-defined variables. A general report on the project, entitled "A Characterization of Statisticians by Gender in Several Countries", is currently in preparation and will be presented and discussed at an open meeting of the committee during the 52nd Session of the ISI in Helsinki in August. Copies of the report will be available at the meeting and by mail. Interested individuals can address their inquiries to the head of the coordinating team, committee member Ms Lelia Boeri de Cervetto, by email: notas@indec.mecon.ar. The project has been running under the sponsorship of Argentina's Instituto Nacional de Estadística y Censos (INDEC).
- Four prominent statisticians were panelists at a meeting on The Role of Women in Statistics organized by the committee at

an international conference in Mexico in September 1998. Summaries of the four presentations are posted on the committee's web site, whose URL is given below, and the full texts are included in a monograph prepared by committee member Beverley Carlson and entitled "Women in Statistics: the Profession Speaks". The monograph, which also contains related material, is being published by the UN Economic Commission for Latin America and the Caribbean (ECLAC). Copies are available upon request. Please address your request to Ms Beverley Carlson, either by email at: bcarlson@eclac.cl, or by regular mail at: Division of Production, Productivity and Management, ECLAC, Box 179D, Santiago, Chile.

- The Role of Women in Statistics in the New Millennium will be the topic of an Invited Paper meeting at the 52nd Session of the ISI in Helsinki in August. One of the papers, which gives a historical perspective, is jointly authored by Susan Wilson of the Australian National University and Lynne Billard of the University of Georgia. In the other paper, Dennis Trewin of the Australian Bureau of Statistics will address the question of increasing women's participation in Statistics, the barriers that exist and how to overcome them. The discussants will be: Barbara Bailer of the University of Chicago, Ivan Fellegi of Statistics Canada, and Pilar Martin-Guzman of the Statistical Office of Spain.
- The committee has assisted in facilitating the attendance of some women statisticians from developing countries at short courses offered in conjunction with the ISI 52nd Session in Helsinki. Efforts to seek funding for similar opportunities in the future will continue.

- Within the ISI, the committee has nominated women to membership in several committees and supported the election of several qualified women to ISI membership. Women are also encouraged to join one of the five Sections of the ISI: Bernoulli Society, the International Associations of Survey Sampling, of Official Statistics, Statistical Computing, and Statistical Education.
- The committee maintains a website <http://sun.cwru.edu/isi> which is updated periodically and which carries details of its activities as well as reports about the activities of other groups or individuals that come to our notice. We welcome both letters and email messages.

Please contact: Mary H. Regier,
Chair, ISI Committee on Women in Statistics
Statistics Department, Case Western Reserve University, Cleveland, Ohio, 44106, USA.
Email: mhr@po.cwru.edu;
Fax: 216-368-0252.
<http://sun.cwru.edu/isi>

HANNAN MEDAL

Professor Tony Guttman

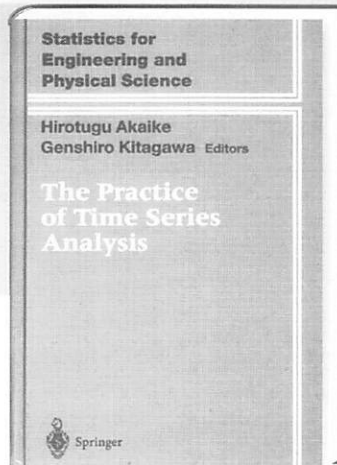
Professor Guttman, Professor of Mathematics at the University of Melbourne, has developed analytical and computational techniques to analyse power series expansions in statistical mechanics and fluid dynamics.

Recently, his work on the question of solvability in a computational setting has attracted significant attention.

The Hannan Medal is awarded for distinguished research in statistics or pure, applied or computational mathematics.

(Reproduced from the Australian Academy of Science Newsletter Number 44.)

Springer for Statistics



H. Akaike, G. Kitagawa (Eds.)

The Practice of Time Series Analysis

This book addresses successful applications of time series analysis and control methods in control engineering, earth science, medical science, biology, economics, and finance. The examples included in this book are related to various stages of the development of time series analysis methods such as the analysis and control of feedback systems based on multivariate time series models, and Bayesian or state space modeling for nonstationary or nonlinear time series.

1999. XVIII, 386 pp. (Statistics for Engineering and Information Science)
Hardcover DM 99,-*
ISBN 0-387-98658-8

A.M. Dean, D. Voss

Design and Analysis of Experiments

This book offers a step-by-step guide to the experimental planning process and the ensuing analysis of normally distributed data, emphasizing the practical considerations governing the design of an experiment. Data sets are taken from real experiments and sample SAS programs are included with each chapter. Experimental design is an essential part of investigation and discovery in science; this book will serve as a modern and comprehensive reference to the subject.

1999. XIX, 740 pp. 83 figs.
(Springer Texts in Statistics)
Hardcover DM 159,-*
ISBN 0-387-98561-1

V.G. Kulkarni

Modeling, Analysis, Design, and Control of Stochastic Systems

This is an introductory level text on stochastic modeling, employing a large number of examples to teach how to build stochastic models of physical systems, analyze these models to predict their performance, and use the analysis to design and control them. The book provides a self-contained review of the relevant topics in probability theory, emphasizing numerical answers to problems. A software package called MAXIM, which runs on MATLAB, is made available for downloading.

1999. Approx. 400 pp.
(Springer Texts in Statistics)
Hardcover DM 129,-*
ISBN 0-387-98725-8

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Overseas Conferences

School on Modern Statistical Methods in Medical Research, 6–24 September 1999, International Centre for Theoretical Physics, Trieste, Italy.

Directors: J.L. Hutton, E.J.T. Goetghebeur and P.J. Solomon;
Sponsors: UNESCO and IAEA

Information: email smr1122@ictp.trieste.it or sci_info@ictp.trieste.it;
website <http://www.ictp.trieste.it>;
International Centre for Theoretical Physics, PO Box 586, I-341000, Trieste, Italy.

International Conference on Survey Nonresponse Error, 28–30 October 1999, Portland, Oregon, USA.

Information: Email: icsn@survey.umd.edu; www.jpsm.umd.edu/icsn99.

International Conference on Statistics, Combinatorics and Related Areas (Sixth International Conference of the Forum for Interdisciplinary Mathematics),

18–20 December 1999, University of South Alabama, Mobile, Alabama 36688, USA

Following symposia will be held during the Conference: Ranked Set Sampling, Graph Theory, Resampling, Linear

Models, Statistical Applications, Smooth Estimation of Distributions and Related Functionals, Simultaneous Inference, Multiple Comparisons and Selection Theory, Combinatorics, Multivariate Model Selection and Asymptotic Approximations, Statistical Consulting, Sequential Analysis, Multivariate Analysis, Survival Analysis, Biostatistics

Information: Satya Mishra, Dept Mathematics and Statistics, ILB 325, University of South Alabama, Mobile, Alabama 36688 USA; email: mishra@mathstat.usouthal.edu; http://www.mathstat.usouthal.edu/statistics/usa_conf.html

Workshop on Hierarchical Modeling in Environmental Statistics, 14–16 May 2000, Ohio State University, Columbus, Ohio, USA

Co-sponsored by Ohio State University and American Statistical Association's Section on Statistics and the Environment.

A tutorial on Bayesian hierarchical modeling will precede the conference on Sunday morning May 14, 2000.

For more information, contact Noel Cressie (ncressie@stat.ohio-state.edu)

XXth International Biometric Conference, 2–7 July 2000, University of California at Berkeley.

Information: website:
<http://www.biostat.ucsf.edu/IBC2000>
/ Kevin L. Delucchi, PhD, Dept. of Psychiatry, Box 0984-TRC, University of California, San Francisco, 401 Parnassus Ave, San Francisco, CA 94143-0984; USA; e-mail: kdelucc@itsa.ucsf.edu; tel +1 (415) 476-4180; fax: +1 (415) 476-7677.

MAM3: The Third International conference on Matrix-Analytic Methods in Stochastic Models, 12–14 July 2000, Leuven, Belgium.

Information: email:
MAM3@econ.kuleuven.ac.be;
<http://www.econ.kuleuven.ac.be/man3>

IASE Round Table Conference on Training Researchers in the Use of Statistics, Meiji University, Tokyo, Japan, August 2000.

Information: Carmen Batanero, Dept. Didactics of Mathematics, University of Granada, 18071 Granada, Spain; email: batanero@goliat.ugr.es; URL <http://www.ugr.es/~batanero/iasert.htm>



Statistics from a distance...

From 2000, Macquarie University's Master of Applied Statistics program is to be offered in distance mode, in addition to the traditional face-to-face mode. Students will receive tuition through the medium of course notes and the Web, and communication with lecturers will be enhanced through the use of electronic discussion groups, bulletin boards and e-mail.

The course duration is one year full-time, or two to four years part-time. Students undertake seven courses plus a project; topics covered in the coursework are Statistical Theory, Generalized linear models, Stochastic Finance, Information management, Statistical design, Epidemiological methods, Multivariate Analysis, Time series, Statistical graphics, Nonparametric regression and density estimation, and Survey of contemporary statistical methodology. Graduates have been employed in areas such as biomedical research, financial markets, insurance and environmental statistics.

more information about the Master of Applied Statistics is available at:

<http://hannan.stat.mq.edu.au/Postgrad/pgradset.htm>

for enquiries, please contact Dr Gillian Heller on (02) 9850 8541,
e-mail gillian.heller@mq.edu.au

Australasian Conferences

CONFERENCE SUMMARY

First Western Pacific/Third Australia-Japan Workshop on Stochastic Models, 23-25 September 1999, Christchurch, New Zealand.

Information: Professor Malcolm Faddy, Department of Mathematics, The University of Canterbury, Christchurch, New Zealand; email M.Faddy@math.canterbury.ac.nz

WAYS99, 5-7 October 1999, Wollongong.

Information: Virginia Wheway, AI Department UNSW, (02) 9385 3988; and Andrew Collins, Collins.Andrew.AA@bhp.com.au

SEEM3 - Third Conference on Statistics in Ecology and Environmental Monitoring, 6-10 December 1999, University of Otago, Dunedin, New Zealand

Information: Email enquiries to: igoodwin@maths.otago.ac.nz; <http://www.casm.otago.ac.nz/courses/SEEM3/>

International Biometric Society Australasian Region Biennial Conference, 12-16 December 1999, University of Tasmania, Hobart.

Information: Helen Stewart, Convention & Venue Services, University of Tasmania; tel (03) 6226 2799; fax (03) 6226 1777; email Uni.Centre@utas.edu.au; <http://www.cmis.csiro.au/biometric>

15th Australian Statistical Conference, 3-7 July 2000, Adelaide.

Information:<http://www.sapmea.asn.au/15ASC.htm>

There is a list of Australasian statistics conferences for 1999 and 2000 at:

<http://www.maths.uq.oz.au/~gks/webguide/conf.html>

International Clinical Trials Symposium

Sydney Hilton Hotel
15 - 17 September 1999

This conference will be of interest to biostatisticians and others involved in clinical trials research. The conference will focus on recent methodological developments in the design, conduct and analysis of clinical trials, as well as practical information concerning the conduct of clinical trials. International key-note speakers include Stuart Pocock (London School of Hygiene and Tropical Medicine) and Marvin Zelen (Harvard School of Public Health).

All those interested are encouraged to contact the conference secretariat for further information:

ICMS Pty Ltd
Locked Bag Q4002
VB PO NSW 1230
Sydney
phone (02) 9290 3366
fax (02) 9290 2444
email trials@icms.com.au

Simone Becker, Biostatistician
NHMRC Clinical Trials Centre
The University of Sydney

Women Achieving in Science National Conference on Women in Science, Technology and Engineering

Storey Hall RMIT, Melbourne
12 November 1999

The conference is organised jointly by the CSIRO Section of the Community and Public Sector Union (CPSU), the National Tertiary Education Industry Union (NTEU), the Women in Science and Engineering Network (WISNET) and FASTS.

It aims to bring women together from all areas of science in Australia to share experiences, explore issues related to their working lives and define a better balance for women with careers in Science Technology and Engineering. They will join prominent female scientists including Prof. Sue Serjeantson, former Director of the IAS and Deputy Vice Chancellor at ANU, Drs Nan Bray and Annabelle Duncan, both Chiefs of Divisions in CSIRO.

Topics for the workshops include scientific leadership, public image of women in science, handling the male culture, non-traditional roles, mentoring, networking, pay and performance systems, career development, balancing work and family.

For further information and registration check out

<http://www.vicnet.net.au/~csiro-union/>
<http://www.nteu.org.au>
or call Pauline Gallagher on tel. 03 9206 2288
email pjodsec@iaa.com.au

Biometrics99

Hobart, Tasmania
12 -16 December 1999

The Australasian Region of the International Biometric Society is holding a conference in Hobart, Australia from 12 to 16 December 1999. This year is the 50th anniversary of the formation of the Australasian Region of the Society.

The major themes of the conference are genetics, biomedical studies, longitudinal studies with spatial correlation, and planning experiments. The invited speakers are Gary Churchill, Scott Emerson, Patrick Heagarty, Peter Johnstone, John Neuhaus and Sue Wilson. There will be three workshops associated with the conference: REML, Non-standard Mixtures, and Design and Analysis of Group Sequential Trials.

Sponsors are Roche, CSIRO Mathematical and Information Sciences and University of Newcastle Department of Statistics.

Registration forms are available from Sue Robinson and the website. The last day for Early Bird Registrations is Friday, 3 September.

The Program Committee is calling for papers (presentations no longer than 20 minutes) which address the conference themes or other topics related to Biometrics. Abstracts should be submitted by Friday 1 October.

For more information about Biometrics99, please contact Sue Robinson on email sue.robinson@utas.edu.au; tel. (03) 6324 3044; fax (03) 6324 3459; mail Convention & Venue Services, University of Tasmania, Hobart 7000; website: www.cmis.csiro.au/biometrics99

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