statistical society of
australia incorporated

SSAI newsletter

February 2005 Number 110

Registered by Australia Post Publication No. NBH3503 issn 0314-6820

Symposium and dinner in honour of Joe Gani's 80th birthday

On Tuesday and Wednesday 14-15 December 2004 the Centre for Mathematics and its Applications (CMA) of the Australian National University (ANU) held a National Research Symposium entitled "A Celebration of Modelling and Applied Probability". The venue was the Shine Dome of the Australian Academy of Science (AAS) in Gordon Street, Acton, Canberra. The Symposium honoured Professor Joe Gani, currently a member of the CMA, who turned 80 on Wednesday 15 December. The event was sponsored by the CMA, SSAI and ANZIAM (Australian and New Zealand Industrial and Applied Mathematics), a Division of the Australian Mathematical Society (AMS).

Professor Chris Heyde (CMA) opened the symposium with a brief biography of Joe, who has been a close colleague of his for over 40 years. During that time Joe had contributed immensely to many organisations – such as ANU, SSAI (of which he has been an Honorary Life Member since 1983), CSIRO, AAS (of which he has been a Fellow since 1976) and AMS (of which he had been President during 1978-80).

Joe was born in Cairo, Egypt, in 1924. After completing a degree in Mathematics at Imperial College, London, he emigrated to Australia in 1948. After two and a half years as a lecturer at the University of Melbourne, and a variety of labouring and clerical jobs, he was awarded a Commonwealth Postgraduate Scholarship at ANU in November 1953. There he began to study for a PhD under Professor Pat Moran. Having completed his doctorate at the end of 1955, Joe spent a year as Nuffield Fellow at the University of Manchester in 1956-7 with Professor Maurice Bartlett, and several years at the University of Western Australia under Professor Larry Blakers, before returning to ANU as a Senior Fellow at the end of 1960. In

Valerie Isham, Joe Gani and Zari Rachev.

1964 he launched the Journal of Applied Probability – the first of four journals currently published by the Applied Probability Trust. Joe found the statistical scene in Australia in the 1960s somewhat restrictive; and moved first to the USA at Michigan State University, and then in 1965 to Britain at Sheffield University, where he founded the Department of Probability and Statistics. In 1967, he organized the joint Manchester-Sheffield School of Probability and Statistics, which continues to exist to this day.

In 1974 Joe returned to Australia, as Chief of the CSIRO Division of Mathematics and Statistics (originally the Division of Mathematical Statistics), with headquarters in Canberra. There he became instrumental in broadening the spectrum of activities of the Division. For example, in collaboration with the Australian Universities, he instituted a regular international program of visiting mathematicians and statisticians from overseas. However, following a Divisional Review which proved to be unfavourable to some of these initiatives, he resigned

ISI 2005 is fast approaching! Have you registered?

Don't miss this great opportunity to attend an ISI Session in Sydney and take advantage of this cost-effective and enjoyable way to stay in touch with the latest statistical developments. Discounted rates are available for SSAI members!

Details on the scientific program, satellite meetings and social program are given on pages 10 and 11 in the Newsletter. Further details can be found at the website www.tourhosts.com.au/isi2005

2005 Session of the International Statistical Institute (ISI)
Sydney, Australia – 5-12 April 2005

from his position and returned to the USA. There he spent four and a half years at the University of Kentucky, followed by a decade at the University of California, Santa Barbara, where he set up and developed the Department of Statistics and Applied Probability. Joe's wife Ruth became seriously ill with breast cancer in 1992 (she died of it in 1997), and he retired in 1994, returning to Canberra where he has continued to publish and remain active at many levels.

Following Chris Heyde's introduction, Professor Svetlozar (Zari) Rachev of the University of Karlsruhe gave the first talk of the Symposium, entitled "A generalized heteroscedastic asset price process: Properties, parameter estimation and pricing". The other talks were by: Dr Mark Westcott of the CSIRO ("How many buses?"); Dr Tony Pettitt of the Queensland University of Technology (QUT) ("Statistical modelling for nosocomial infections: Estimating transmission rates for infection control and developing surveillance schemes"); Yoshi Ito of Aichi-Gakuin University ("Further geometric methods for the distribution of the sample correlation coefficient"); Valerie Isham of University College, London ("Macroparasite population models: Persistence, population scale and cross-species interactions"); Niels Becker of ANU ("Control of transmission with two types of infection"); Kostya Borovkov of Melbourne University ("On the asymptotic behaviour of a simple growing point process model"); Jeff Hunter of Massey University ("Mixing times and their application to perturbed Markov chains"); John Blake of Birmingham University ("Vigorous non-linear, non-spherical bubble dynamics: Applications to biology, medicine, chemistry, physics and engineering"); Linda Stals of ANU ("A plantation-nursery system"); Glenn Fulford of QUT ("Spatial modelling of infectious diseases"); Frank De Hoog of CSIRO ("Predicting winding stresses for wound coils with large deformations"); Belinda Barnes of ANU ("An ecological framework linking scales based on self-thinning"); and Geoff Aldis of the Australian Defence Force Academy ("An integral equation model of the control of a smallpox outbreak"). The Symposium was followed on Wednesday afternoon by the ANZIAM Canberra Branch Annual General Meeting.

The symposium dinner was held on Tuesday evening 14 December in the Great Hall of University House at ANU. Following an introduction by Professor Alan Welsh (CMA), talks in honour of Joe were given by Professor Neil Trudinger (CMA) and Dr Neville Bartlett (President of SSAI). Neil spoke of Joe's great generosity and sense of humour, and Neville noted that Joe had accomplished all three of the things which, according to a Jewish proverb, define a successful life: He had fathered a child, written a book and planted a tree. Finally, Joe responded by saying how absolutely overwhelmed he was by the warmth of the assembly. He also spoke of the writer Isaac Bashevis Singer – one of a rare few who wrote in Yiddish – and related three jokes. One of these was about a young Jewish man who was convinced by his father to see a psychiatrist regarding a possible neurotic condition which might be preventing him from marrying. Later the son told his parents that he had been diagnosed with an Oedipus Complex. To this his mother replied: "Oedipus Shmedipus! What does it matter? Everything is all right so long as you love your mother."

Borek Puza

Report on BioInfoSummer 2004

Following the success of last year's BioInfoSummer event, the Australian National University's Centre for Bioinformation Science hosted yet another extremely successful International Centre of Excellence for Education in Mathematics (ICE-EM) Summer Symposium in Bioinformatics, with the theme "Genome to Phenome Modelling", 6-10 December 2004. Sponsors also included Cray, Ceanet, the Australian Partnership for Advanced Computing and ANU's National Institutes for Bioscience (NIB), Health and Human Science (NIHHS) and Engineering and Information Sciences (NIEIS). There were approximately 150 registrants.

The days were organised into Themes, allowing attendees who were unable to attend the whole week to select those areas of particular interest. The Themes were: Introduction to Molecular Biology; Sequence to Structure; Comparative Genomics; Analysis of Gene Expressions and Regulatory Networks. Each day started with Educational Lectures followed by a mix of Educational, Keynote and Contributed talks. Most days held parallel sessions in the afternoon, allowing those students who had registered for the Graduate Course Award in Bioinformatics to do the Educational Computer Lab session while others attended Contributed talks. The Graduate Course Award was very popular, with nineteen students enrolled and sixteen on the waiting list. There are plans to expand the class size during next year's BioInfoSummer to cope with the demand.

The list of speakers this year expanded to include international as well as local experts. The keynote and invited speakers were Warren Kaplan (Garvan Institute, Sydney), Gavin Huttley (ANU), Matthew Wakefield (ANU), Bill Pearson (University of Virginia, USA), Michael Wise (University of Western Australia, Perth), Ziheng Yang (University College London, UK), Allen Rodrigo (University of Auckland, NZ), Geoff McLachlan (University of Queensland, Brisbane), Conrad Burden (ANU), Hilary Booth (ANU), Ian Dodd and Keith Shearwin (University of Adelaide) and Terry Speed (Walter and Eliza Hall Institute, Melbourne). A poster session was held on Tuesday evening, and student scholarships were awarded to 36 successful applicants. The ceremony was followed by a well-attended public lecture by Rob Saint (ANU) on "Biological Information and How to Read It: A Geneticist's View". NIB prizes were awarded to Ian Wood of QUT (best poster), Brett Easton of ANU (best student talk) and Alicia Oshlack of WEHI (best talk by a researcher within ten years of receipt of PhD).

Next year's BioInfoSummer will focus on the theme of "Open Problems in Bioinformatics". It is proposed that it will be held during the week of 28 November – 2 December 2005. Details will be confirmed by March 2005, and posted on the events page of ANU's Mathematical Sciences Institute: http://wwwmaths.anu.edu.au/events/

Prizewinners: (l to r) Alicia Oshlack, Conrad Burden (CBiS who presented the prizes), Ian Wood and Brett Easton.

Still counting after all this time – but not by hand

By Emma Macdonald

In 100 years, the Australian Bureau of Statistics has come a long way – and for that chief statistician Dennis Trewin is eternally grateful.

Gone are the days when the first census figures of 1911 were tabulated by hand – all four million cards of them – and took up to six years to finalise.

At the 2001 census, it took just 10 months to process 8.6 million forms and return the first results to the community.

This speedy compilation was aided by 920 computers processing 59.3 million sheets of paper, 15 scanners scanning in as much as one million pages a day, and 1.5 km of optic fibre cabling with 52.5 km of communications cable linking the technology together.

While the technology driving the modern ABS had changed immensely, some things remained the same as one century ago when the ABS was founded, according to Mr Trewin.

"Our purpose of providing information to support a democracy remains constant," he said.

"As does the need for integrity and professionalism of the organisation, and the protection of confidentiality.

Don't think statistics are boring, Mr Trewin said. Think of them as a mirror to who and what we are and how Australia is functioning as a society and economy. Not only do the financial markets depend on the ABS, so do governments.

ABS data on the ageing population, falling fertility rates and a potential labour market shortage has infiltrated our collective conscience and made the Howard Government implement various policies in order to counter the trend.

"The debate surrounding those trends has actually resulted in a change of attitude and now we are seeing fertility creep back up again.

One of the ABS productions Mr Trewin is most proud of is the groundbreaking *Measuring Australia's Progress* series, which began in 2002.

He came up with the idea of using a series of social, economic and environmental indicators to measure progress and quality of life, rather than simply using Gross Domestic Product, or, as other suggested, alternative measures such as the Genuine Progress Indicator developed by American academics.

"But one number and a whole lot of value judgements didn't seem to me to be what a national statistical agency should be doing.

NEW,OLD: *Australian statistician Dennis Trewin with a comptometer, used to count statistics up until the 1960s, and a new slimline laptop used by statisticians today. Picture: Vikky Wilkes.*

The subsequent series of measures has been picked up in the United States, and copied by Ireland.

It also won Mr Trewin and his ABS team the "best contribution to society" award by the *Bulletin* magazine.

As the ABS's 3000 staff – 1732 of whom are based in Canberra – celebrate its 100th birthday, Mr Trewin would like to make statistics a greater part of all of our lives.

"I think statistical literacy is a skill all Australians need to have."

The ABS is currently working on school programs, so maths teachers can incorporate more statistics into their curriculum.

Apart from statistical literacy, the aim is that before Australia's next census takes place in 2006, students across the country can conduct their own statistical research as part of the "Census At School" program.

This article is reproduced with permission of *The Canberra Times* following its publication on 22 January 2005.

* An article from the ABS about the Census At School program will appear in the May issue of SSAI Newsletter.

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Advertising will be carried in the Newsletter on any matters which the Editors feel are of interest to the members of the Society. For details of advertising rates, etc. contact the Editors at the above addresses.

Printer

National Capital Printing
22 Pirie Street, Fyshwick ACT 2609

DEADLINE FOR NEXT ISSUE: 10 APRIL 2005

Editorial

The first newsletter of 2005 sees the finish of some segments, the start of a new one and the continuation of many others. The website of the month will not be continuing, neither will the Editors' competition. In place of the latter there will be a series of posers from Canberra Branch member, Borek Puza. There are prizes attached to these, and the Editors encourage you to put pen to paper and tackle the problems.

As always, the Editors are delighted to print reports of Branch activities, whether regular meetings, workshops on special topics or associated with particular individuals. We also accept contributions from people who have attended statistical events outside Australia. Keep those photographs coming too, so that there will be a permanent record of the wide range of activities supported and attended by Society members around the country, and indeed around the world.

Best wishes for the new year!

Member News

At the August 2004 Joint Statistical Meeting of the American Statistical Association, fifty-two new Fellows were announced. They included two members of the Statistical Society of Australia, and their citations are reproduced below. Congratulations to Ray and William!

Raymond L. Chambers, Professor of Social Statistics, Southampton Statistical Sciences Research Institute. For outstanding contributions to the theory and practice of statistical modelling, as applied to the design and analysis of sample surveys; for important contributions to official statistics; and for editorial service.

William T.M. Dunsmuir, Professor of Statistics, University of New South Wales. For outstanding contributions in time series, space-time modelling and methods for count data; for leadership in consulting in climate modelling and quality improvement; and for administration and statistical activities.

APOLOGY

The Newsletter Editors apologise to the Australian Bureau of Statistics for incorrectly associating the ABS with the 'causes of death' data in the November competition. This set of figures is a hoax that regularly does the rounds at Christmas time, and bears no relation to information collected and published by the ABS. The ABS has asked that all figures attributed to their organisation that are published by SSAI be checked with the ABS first, which can be done through their Director of Media and Public Relations. The ABS enjoys a strong and productive working relationship with the SSAI and the Editors are keen to maintain this relationship by exercising due care with any ABS material that appears in the Newsletter in the future.

In this issue

SSAI's Canberra office has moved – The new postal address is: PO Box 5111, Braddon ACT 2612
The telephone remains the same (02) 6249 8266 – Our new Fax (02) 6249 6558

President's Corner

Joe Gani's Eightieth Birthday

Joe Gani celebrated his eightieth birthday on the 15th December 2004 and a two day workshop was held in his honour at the Australian Academy of Science in Canberra. The event was arranged by the Centre for Mathematics and its Applications at ANU and congratulations must go to Chris Wetherell and the team that carried out the organisation. An impressive collection of people gave talks along with comments about the influence that Joe Gani has had on their work. Besides having an impressive academic career and being the driving force behind the establishment of two respected journals, Joe has influenced many statisticians/mathematicians around the world by his vision and ability to provide constructive suggestions. During his time as chief of the CSIRO Division of Mathematics and Statistics in the seventies, Joe implemented programs and changes that brought the best of the profession to Australia either as visitors or to longer-term appointments. This had the effect of making us all much more aware of being part of a global community with high standards and broadened our horizons. Joe is very much a legend in our community.

AusCan Scholar

We are seeking applications from Australian researchers interested in spending some time in Canada during 2005. Details of the programme are available from the SSAI website and if anyone knows of a person who would be interested then please encourage them to apply.

Direct Election of Executive Officers

At the SSAI AGM in July, Ken Russell moved that we consider the direct election of Executive officers by all SSAI members instead of the current approach where a nominating committee, made up of the Executive plus Branch presidents, puts forward nominations to Central Council. Doug Shaw has put together a paper on the subject and this has been circulated to the Executive and then will go to the next Central Council meeting early in February. I expect that this document will soon be published so that all members can consider the issue and express their views. It is interesting to note that we are very much out-of-step with comparable organisations.

SSAI Office and Website

For some years, SSAI has rented some office space at Covance (formerly INSTAT) in Canberra in a rather cramped set of offices at the Ainslie shopping centre. Covance has moved to a more spacious and modern site much closer to the centre of Canberra and SSAI has moved with them. Our telephone number is the same but the postal address has changed.

Coincidentally, SSAI has renovated its website and moved to a commercial server. We have been using university web sites for quite some time and are very grateful for the assistance from ANU. Special thanks go to Michael Martin for all of his assistance over the last few years. It is time for us to stand on our own feet and not rely on the generous hospitality of others. One major advantage of the new configuration is that it provides us with greater flexibility of operation in that branches and sections can now directly maintain their own section of the SSAI site quite independently of everyone else while maintaining overall integration. This will no doubt facilitate last minute changes and announcements that will inevitably arise. Email addresses have changed along with the move so change your address book entries now.

Workshops

It is great to see so many workshops/courses happening around the country and the registrations are running at very encouraging levels. Our Executive Officer is providing assistance by looking after registrations, fee collection and the issuing of receipts. This service is not free of charge but it frees organizers from having to sort out GST matters and so on. Some have complained that we are charging too much for this service but it is substantially less than that charged by some universities who are becoming more commercially oriented when providing such facilities.

ISI 2005

One of the ways that SSAI is assisting the ISI 2005 conference is by providing people to review and classify abstracts. A group of people have agreed to assist with this and their help is greatly appreciated. SSAI members will be able to take advantage of substantial discounts when registering so check out the conference website for details (www.tourhosts.com.au/isi2005/).

ASC/NZSA 2006

Arrangements are well in hand to stage the 2006 conference in conjunction with the NZSA in Auckland. Sky City is an excellent venue in the heart of Auckland within easy walking distance of a wide range of accommodation and shopping. We have been most impressed with the facilities and the surrounding environment. David Scott heads up the organising committee and William Dunsmuir chairs the program committee. Feel free to approach either of these two people if you have any suggestions.

Neville Bartlett
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Post-ISI Workshops

A post-ISI workshop in Canberra organised by the society with the theme of methods in official statistics is planned. The workshop coincides with visits to Canberra of overseas ISI delegates associated with the recently completed DACSEIS project, funded by the European Union. The workshop is free to members or ISI delegates but attendees are asked to register with the society ahead of time to assist organisers. The workshop will be held at ABS House in Belconnen, on Thursday 14th April. Program and registration details will be available on the SSAI website, and announced during ISI. Contacts for the workshop are Paul Sutcliffe [p.sutcliffe@abs.gov.au] and Stephen Horn [stephen.horn@facs.gov.au].

The Department of Family and Community Services is hosting a follow-on seminar with the same speakers on the 15th April at Tuggeranong Office Park, Greenway that will address policy implications of panel survey data quality. This seminar will be open to members and delegates, but they are asked to register interest ahead of time with Helen Boden [helen.boden@facs.gov.au]. Details will be made available on the SSAI website.

Liaison with other organisations – FASTS

The Federation of Australian Scientific and Technological Societies (FASTS) to which the Society is affiliated through its membership of the Australian Mathematics Council held its annual general meeting 24 November in Canberra. FASTS acts as an umbrella group for its member societies, and as such reflects in amplified fashion the same pressures the statistics society has been responding to: declining membership levels in traditional professional associations even as professional activity burgeons; splintering of disciplinary loyalties; remoteness of society activity from membership. FASTS runs an office out of Canberra. Outside of a political lobby its main activity is the annual 'science meets parliament' event. In 2005 it is planning a Governance of Science Conference whose intent is: "to [discuss] global changes in the funding and structure of science and research… and focus of role and prospects of science societies…".

The AGM was a rare opportunity for societies themselves to influence FASTS direction. In reports to Council it is clear that FASTS is facing both a goverance impass and a structural deficit in its funding, as its member base is declining. It has achieved visibility in national politics, and appears to have handled a succession at both executive officer and chair levels well. The incoming chair was a contested position, allowing for some articulation by candidates as to why they were seeking this office. In the event the meeting elected Tom Spurling to succeed Snow Barlow. Council debate centred on essential issues: what is unit of the organisation, how to respond to body of unrepresented scientists, what do societies want from an umbrella body like FASTS. Until now it has influenced the government policy agenda without committing itself to 'public good' lobbying – maybe it should? If it is to be a successful lobby group it will need the power and licence to respond quickly. This might be difficult to reconcile with 'member responsiveness'. An overhaul of its constitution was set in motion in light of inconsistencies in its structure and governance. Those curious as to what this organisation might be doing on our behalf should consult the website: www.FASTS.org.

Stephen Horn

SAS Applications Workshop

Forthcoming Professional Development opportunities brought to you by the NSW Branch of SSAI.

A series of one-day workshops designed to provide members with skills in applying SAS is being planned. These workshops will be presented by SAS, are condensed versions of the corresponding SAS Institute courses and will be offered at very competitive prices.

- Mid to late February 2005
  - SAS Programming Fundamentals
  - Introduction to Statistics using SAS
- March 2005
  - Introduction to Data Mining using SAS

Contact: Caro Badcock – Caro.Badcock@covance.com

Brought to you by the NSW Branch

Meta-analysis Workshop

The NSW Branch is proud to present a course on the use of meta-analysis during the drug development program. Professor Stephen Senn, one of the most well known statisticians world-wide contributing to the drug development industry and author of the popular books Cross-over Trials in Clinical Research, Statistical Issues in Drug Development and Dicing with Death will be visiting Australia in late March, early April as part of the ISI conference. During his visit he has agreed to present a 2-day workshop on meta-analysis on March 30-31.

Meta-analysis has now achieved a century of use and controversy. In this workshop Stephen will cover the practicalities of carrying out meta-analysis concentrating not only on different models for analysis but also on contentious matters such as when and when not to pool. Some parallels to the analysis of multi-centre trials will be made and attention will also be drawn to some differences in practice between 'public' organisations such as the Cochrane Collaboration and commercial organisations such as pharmaceutical sponsors. Common pitfalls will be covered. Case studies will include the controversy over breast cancer screening and that of rofecoxib and heart disease. Rofecoxib was the drug for arthritis and pain management that was recalled by international drug company Merck on September 2004 after a study showed an increased risk of heart attack and stroke.

So, if you are interested in meta-analyses and would like to be entertained with some discussions of the controversial nature of these methods please join us at the workshop. Further details on the speaker, the venue and registration can be found at http://www.maths.unsw.edu.au/~inge/ssai_nsw/

Caro Badcock
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Profile of Adrian Baddeley – 2004 Pitman Medal Winner

At last year's Australian Statistics Conference in Cairns, Professor Adrian Baddeley was presented with the 2004 Pitman Medal in recognition of outstanding achievement in, and contribution to, the discipline of Statistics. Those of you seeking an official citation should look towards future issues of the Australian and New Zealand Journal of Statistics. If, on the other hand, you would like something a little lighter with a human interest slant, then read on.

Adrian Baddeley was born and brought up in Melbourne, where he attended Eltham High School. Adrian became interested in statistics while at school, inspired by a combination of good teachers and M.J. Moroney's book "Facts from Figures" which offers the following advice: "If you are young, then I say: Learn something about statistics as soon as you can." Suitably motivated, Adrian headed off to the Australian National University from which he graduated BA Hons in Statistics and Pure Mathematics in 1976. His lecturers during this degree included Eugene Seneta (for branching processes), Richard Tweedie (for Markov chains) and Chris Heyde (for martingales). Adrian was introduced to geometrical probability by Roger Miles at this time, a topic that has proved dear to his heart.

By the time Adrian left ANU the predictors of a distinguished career in statistics were already firmly in place. He had won various awards as an undergraduate (University Medal, SSA prize, Hannah Neumann medal); he had published three scientific papers; and he had long hair and a preference for hanging around lefties (although these last two factors may not be statistically significant). The next step was a move overseas, so in 1977Adrian set off for Europe via Indonesia. His stay in Paris was eventful – one of the rafters in his hotel room carried the message, "Congratulations! You have found the cheapest room in Paris! Get Out While You Still Can". Nonetheless, he survived to attend a meeting on geometrical probability in Paris before embarking on a cycling tour of France.

Adrian's next move was across the English Channel. He spent 1977-1980 doing a PhD in mathematical statistics at the University of Cambridge, supervised by David Kendall. He won the Adams prize for this work and was elected as a Research Fellow at Trinity College for 1979-1982. At the end of this period Adrian took

up a lectureship at the strong Statistics Department at the University of Bath. He admits to fond memories of the West Country, but whether these involve the fiendishly potent scrumpy cider remains a mystery. Whatever the source of his inspiration, Adrian produced ground breaking work in stereology leading to a paper on the estimation of surface area from vertical sections which has been cited more than 500 times.

Adrian returned to Australia in 1985 as a research scientist, and later senior research scientist, at CSIRO Division of Mathematics and Statistics in Sydney. He worked on statistical image analysis, spatial data analysis and stereology, and learned a huge amount about applied statistics and computing from his colleagues. Adrian developed techniques for measuring the distance between two images (including the "Baddeley metric") with application to image cleaning and optimal image reconstruction. His time at CSIRO came to an abrupt end in 1987 when, following what Adrian politely refers to as a turbulent period of reconstruction at the organization, he resigned in front of 200 people and a video camera.

In 1988 Adrian moved back to Europe as a research group leader at the Centre for Mathematics and Computer Science (CWI) in Amsterdam. He enjoyed Amsterdam hugely, and learned fluent Dutch and coffee appreciation. CWI itself provided a stimulating environment in which Adrian pursued his work in statistical image analysis and spatial statistics. In 1991 he was appointed as adjoint professor of mathematics at the University of Leiden (a common type of arrangement for senior Dutch researchers). He supervised PhD students Marie-Colette van Lieshout and Annoesjka Cabo, and worked in collaboration with Richard Gill. Adrian developed methods for object recognition in images (for instance, recognizing cells in a microscope image) using stochastic models, and worked on summary statistics for spatial point patterns. He also applied survival analysis techniques to spatial data, and did research on stereological estimation theory. However, amidst Adrian's research achievements during this period and his enjoyment of Amsterdam living there was a sad note when he divorced his long term partner Jane in 1991.

Adrian moved to Perth in 1994 to take up his current position as Professor of Statistics at the University of Western Australia. He was head of the Department of Mathematics and Statistics from 1998-2000, allegedly because the Dean informed him that it was, "a job that Baddeley needs doing." While at UWA Adrian has focused his research on practical methods for spatial statistics. In collaboration with Rolf Turner he has written an R software package, 'spatstat', for the analysis of point pattern data, and has developed practical estimation algorithms.

Despite Adrian's ongoing record of academic achievement, he finds time to indulge in his favourite past-times of t'ai chi and scuba diving. He is particularly fanatical about the latter and spends most weekends with his girlfriend Melissa on this or that diving trip. He has clocked up more than 600 dives, and even underwent a voluntary heart operation in order to continue this activity. There are hundreds of underwater photos on Adrian's web pages; see http://www.maths.uwa.edu.au/~adrian/scubaphoto.html. Many are stunning, but beware downloading without a broadband connection!

It is perhaps fitting to finish with a story related by my colleague (and Adrian's sometime dive buddy), Berwin Turlach, which combines Adrian's twin passions for spatial statistics and diving. Once, at the end of a long dive, which left Berwin completely lost and wondering where they were, the dive boat appeared miraculously above them. Back on the boat, Berwin complimented Adrian on his navigation skills, to which Adrian responded, "but don't you know that a random walk is recurrent?". While Adrian's underwater navigation might be somewhat haphazard, his rise to the top of the statistical tree owes nothing to chance.

Martin Hazelton

International Sri Lankan Statistical Conference and Tsunami Came Face to Face

Kandy, Sri Lanka: December 28-30, 2004

http://www.st.rmit.edu.au/~desilva/conference/slstat.htm

The original planning for this conference began when the two Co-Chairs, Professors Basil M. de Silva and Nitis Mukhopadhyay, met in India in December 2002. The conference venue was the Postgraduate Institute of Science (PGIS) in the middle of the beautiful lush green campus of the University of Peradeniya. The facility was wonderful and modern.

The conference was sponsored by a number of international organizations including the Department of Statistics at the University of Connecticut (Storrs, U.S.A.), the School of Mathematical and Geospatial Sciences at RMIT University (Melbourne, Australia), the Department of Statistics and Computer Science at the University of Peradeniya (Sri Lanka), the PGIS (Sri Lanka), the Indian Association for Productivity Quality and Reliability (Calcutta), and the Statistical Society of Canada.

The foreign and Sri Lankan delegates started arriving on location around December 25, 2004. Some arrived earlier for vacationing in the coastal areas and islands. At the time, the members of the international and local organizing committees were steadfast busy finalizing some of the last minute details. No one was going to leave anything to chance!

The air became more festive by the hour. The evening of December 25 was gorgeous and the spirits were high as everyone exchanged greetings and hellos with the arriving colleagues. After all, no international statistical conference of this magnitude ever took place on Sri Lankan soil as far as anyone could remember.

Unfortunately, the unimaginable tsunami hit the Sri Lankan coast and other countries in the region in the wee hours of December 26. It was impossible to fathom the destruction and the toll on human lives at first. All over the world, people felt numbed, and the Sri Lankans were no exception as everyone was quickly engulfed by the horrific sense of disbelief and helplessness.

The conference organizers, however, exhibited unbelievable courage, determination and defiance against nature to go ahead with the international forum as planned. Bravo to all the organizers, especially to Professor Lakshman Dissanayake, Director of the PGIS, and his totally dedicated group of local committees that included a large number of faculty members, students and staff at the PGIS.

The conference began as scheduled in the early morning of December 28 by lighting the traditional oil lamp under Sri Lankan drumbeat and the rendition of her national anthem in the presence of more than 170 delegates during the opening ceremony.

The situation was a little awkward because of the overpowering emotions from freshly inflicted grief, but at the same time, the human spirit inside the auditorium wanted to soar high too. This was supposed to be the moment of glory, the culmination of two years' of extreme hard work on the part of so many colleagues. Everyone realized that there was no turning back. After observing a minute of solemn silence to commemorate the lives lost to the sea, all the delegates quickly moved the program forward.

Sri Lankan traditions evident at the opening ceremony.

The chief guest, Hon. Professor Tissa Vitharana, Minister of Science and Technology of Sri Lanka, kindly declared the conference open. He delivered the keynote address challenging statisticians to help very poor countries like Sri Lanka to advance quickly in science, education, health and information technology. His presence was a miracle of sorts and a morale booster especially in view of his assignment (delegated by the President) to head Sri Lanka's urgent health and human services as well as relief efforts in the face of this world's biggest natural catastrophe. The Chancellor of the University of Peradeniya and other special guests also welcomed the gathering during the inauguration.

Professor Kanti V. Mardia (University of Leeds, U.K.) gave the first plenary presentation "Past Revolutions and Future Prospects in Science and Statistics" which set the tone for this conference's theme, namely, 'visions of futuristic methodologies'. Professor Albrecht Irle (University of Kiel, Germany) gave the second plenary presentation in the interface of mathematics, statistics and finance, a fast growing field in its own right.

The participants were represented from countries including Australia, Austria, Canada, Finland, Germany, India, Malaysia, New Zealand, Singapore, South Africa, Sri Lanka, Switzerland, Syria, Thailand, United Kingdom and the United States of America. Larger contingents came from Australia, Canada, India, New Zealand, United Kingdom and the United States of America. The largest contingent consisted of colleagues of Sri Lankan origin, residing in Sri Lanka and elsewhere.

There were thirty invited paper sessions on varied topics such as adaptive and algorithmic approaches, applied time series, Bayesian methodology, biological applications, biostatistics, clinical trials, computational statistics, corporate decision making, data mining, data warehouse and analysis, estimation, financial econometrics, hypothesis testing, likelihood based inference, modeling on-line auction data, operations statistics, option pricing models, regression techniques, reliability analysis, sampling

designs, sequential methodology, statistical methods, statistics in health science and environment, and statistics in sport.

There were few cancellations or delayed arrivals of participants. Everyone around understood the situation and painfully sympathized. Those who could not attend the conference were sorely missed by the participants.

A high point included the compilation of the refereed conference proceedings before the conference started and a printed copy was given to each participant at the conference. It is a delight to report that the refereed proceedings include both plenary papers and forty two selected invited papers filling nearly six hundred pages. Exact details of this copyrighted volume are furnished below:

Proceedings of the International Sri Lankan Statistical Conference: Visions of Futuristic Methodologies. Basil M. de Silva and Nitis Mukhopadhyay, eds. (December 2004), pp. 588. PGIS, University of Peradeniya, Sri Lanka and RMIT University, Melbourne, Australia (ISBN 0 86459 339 2).

One of the goals of this international conference was to create a bridge of communication to share the cutting edge ideas and methodologies with the younger generation in Sri Lanka. The occasion gave everyone a wonderful opportunity to meet and interact with many local graduate students and younger colleagues. Many students enthusiastically asked if this kind of international conference could be held again next year! They were definitely energized and so were the foreign delegates. This exercise was surely a win-win proposition for everyone involved.

Sri Lankan hospitality will remain in the memories of all participants for a very long time. Every participant will surely remember how courageous Sri Lankan colleagues and others have been against all odds when the chips were down, especially in the face of unimaginable high stakes and casualties of tsunami of December 26, 2004.

The ultimate hope is that the friendship and collegiality that were nurtured among scientists from Sri Lanka and other countries during December 28-30, 2004 will continue to reign. This bond would then grow into better and more elaborate scientific exchanges in the future. In a global environment of our existence, no one can really afford to leave anyone behind, because everyone's legacy surely affects everyone else's!

Nitis Mukhopadhyay
University of Connecticut, Storrs

ISI2005 will have an interactive panel session for Young Statisticians on Friday 8 April. For more information check out the conference program or email Anna Munday on anna@daa.com.au

SSAI
Statistical Society of Australia Inc.

Australian Bureau of Statistics

Attention: Young Statisticians and Students

Are you new to the profession or a statistical student and a member of SSAI wanting to attend ISI 55 in Sydney in April 2005?

The 2005 Session of the International Statistical Institute (ISI) will be held in Sydney from 5-12 April 2005.

SSAI has allocated money to contribute to young statisticians and/or students who need some financial assistance to attend the conference. Conference registration for supported SSAI members has been sponsored by the Australian Bureau of Statistics.

If you would like to be considered in obtaining some financial assistance to attend the conference please forward 1-2 page document addressing the section criteria.

Selection Criteria

- What would be the value to your both short term and your developing career to attend the conference?
- Which aspect of the conference is most interesting to you? Why?
- What is the level of assistance required?
- Provide two Professional Referees

You will also be required to provide a Report on return for the SSAI which may be reproduced in the SSAI Newsletter and/or posted to the SSAI website.

Please send your application, addressing the Selection Criteria together with your CV and transcripts of your academic results to:

Ms Jane Waslin
Executive Officer
SSAI
PO Box 5111
Braddon ACT 2612

Applications close Monday 7 March 2005

Applications Close Monday 7 March 2005

Should you have any enquiries please contact Jane Waslin
Ph: (02) 6249 8266 or email: admin@statsoc.org.au

SSAI's Canberra office has moved – The new postal address is: PO Box 5111, Braddon ACT 2612
The telephone remains the same (02) 6249 8266 – Our new Fax (02) 6249 6558

55th ISI Session – Sydney, Australia

Register now!

Discount Registration available for SSAI Members

This year the 2005 Session of the International Statistical Institute (ISI) will be held in Sydney, Australia, from 5 to 12 April.

In recognition of the contribution the SSAI is making to the 2005 ISI Session, the ISI National Organising Committee is pleased to announce that members of the Statistical Society of Australia (SSAI) can register at the ISI member rate of $730. This is a great opportunity for SSAI Members to attend an ISI Session on home soil and take advantage of this cost-effective and enjoyable way to stay in touch with the latest statistical developments.

If you are intending to participate, it is highly recommended that you register now. To register please complete the online registration form at www.tourhosts.com.au/isi2005 or return the Registration Form in Bulletin II to the Conference Managers. Even if you are still undecided as to whether to attend or not you should register your interest to ensure you are kept informed about the Session developments.

If you have already registered for the Session please continue to check the Session website www.tourhosts.com.au/isi2005 on a regular basis for program updates and conference news.

Key Dates

4 March 2005 – Speakers to email their presentation to the Conference Managers

4 April 2005 – Registration for the Session commences

5 April 2005 – Session opens

12 April 2005 – Session closes

Scientific Program

The Scientific Program for the ISI Session will feature leading keynote speakers from around the world and more than 100 scientific Sessions.

Geoff Lee, Local Program Committee Chair and Head of ABS Methodology Division said ''… the Invited Program is shaping up really well". "The opportunity to attend a Session of the ISI in Australia is a once in a lifetime opportunity".

Members of the SSAI will be assisting the ISI 2005 Local Program Committee to review the papers for the Session to ensure the Session is a success.

The Scientific Program will be supplemented with tutorials and short courses. Special theme days will cater for those with interests in finance and statistics, environmental statistics and genomics.

Details on the Scientific Program, including the full list of Invited and Contributed Paper Meetings, are listed on the Session website at www.tourhosts.com.au/isi2005.

Keynote speakers confirmed

Renowned mathematical biologist Lord Robert May, econometrician Professor Clive Granger and Deputy Governor of the Reserve Bank of Australia Glenn Stevens have been confirmed as key speakers at the 2005 Session of the International Statistical Institute (ISI) scheduled for Sydney next April 5-12.

Lord May, an Australian by birth, obtained his doctorate in theoretical physics from the University of Sydney in 1959 at the age of 23. He is a world authority on mathematical biology.

In 2000, he was appointed for five years as President of the Royal Society of London, a position with a rich tradition and one of the most esteemed in the world of science. That followed a five-year appointment as the Chief Scientific Adviser to the British Government and Head of the Office of Science and Technology, playing an influential role in national scientific affairs.

Lord May holds a Royal Society Professorship jointly in the Department of Zoology, Oxford University, and at Imperial College, London, and is a Fellow of Merton College, Oxford.

Clive Granger shared the 2003 Nobel Prize in Economic Sciences with Robert Engle for their discoveries in the analysis of time series data. The work has fundamentally changed the way that economists think about financial and macro-economic data and has led to significant breakthroughs in Statistics and Macro-economic forecasting.

Professor Granger is also noted for developing a formal statistical notion of causality based on which variables help to predict other variables. His discovery is widely used and is commonly known as "Granger causality". He is now Professor Emeritus at University of California, San Diego (UCSD).

Glenn Stevens has been the Deputy Governor of the Reserve Bank of Australia (RBA) since December 2001 and has spent most of his professional career in RBA, joining the bank's Research Department in 1980. He holds degrees in Economics from the University of Sydney and the University of Western Ontario, Canada.

In 1990, he was a Visiting Scholar at the Federal Reserve Bank of San Francisco. He was Head of the Economic Analysis Department of the Reserve Bank of Australia from August 1992 to September 1995 and head of its International Department from September 1995 to December 1996.

Since December 1996 he has been Assistant Governor (Economic), responsible for overseeing the economic analysis and research of the Bank's staff and formulating policy advice for the Governor and the Board of the Bank. Glenn is currently a Member of Advisory Boards for the Melbourne Institute of Economic and Social research and the Hong Kong Institute for Monetary Research..

Satellite Meetings

A number of satellite meetings will be held before or after the 2005 ISI Session. Details and links for each meeting are listed below:

31 March – 2 April 2005

Issues for Official Statistics for Small Countries (especially island nations) Noumea, New Caledonia (www.stat.fi/iaos/future_activities.html)

29 March – 1 April 2005

14th International Workshop on Matrices and Statistics Auckland, New Zealand (http://iwms2005.massey.ac.nz)

4 – 5 April 2005

Statistics Education and the Communication of Statistics Sydney, Australia (http://www.stat.auckland.ac.nz/~iase/conferences.php?show=iase2005)

General Schedule

	MORNING	EARLY AFTERNOON	LATE AFTERNOON	EVENING
Monday 4 April	Short Courses	Registration	Registration	
		Short Courses	Short Courses	
Tuesday 5 April	Registration	Registration	Opening Ceremony	Welcome Reception
	Short Courses	Short Courses	Short Courses	
Wednesday 6 April	Scientific Meetings	Scientific Meetings	Scientific Meetings	Optional Social Event
Thursday 7 April	Scientific Meetings	Scientific Meetings	Presidents IPM Meeting	Australiana Night
Friday 8 April	Scientific Meetings	Scientific Meetings	Scientific Meetings	Optional Social Event
Saturday 9 April	Scientific Meetings	Excursions	Excursions	Optional Social Event
Sunday 10 April	Excursions	Excursions	Excursions	Optional Social Event
Monday 11 April	Scientific Meetings	Scientific Meetings	ISI General Assembly	Farewell Party (optional)
Tuesday 12 April	Scientific Meetings	Scientific Meetings	Scientific Meetings	

13 – 16 April 2005

Fourth International Symposium on Business and Industry Finance, near Cairns, Queensland, Australia (www.action-m.com/isbis4)

14 – 15 April 2005

Measuring Small Populations Wellington, New Zealand, (www.stats.govt.nz/ISIsatellitemeeting)

Social Program

The Social Program will be a highlight of the Session and has been designed to provide participants with an opportunity to relax, experience Sydney and maximise networking opportunities. The following events are included in the registration fee for delegates and accompanying persons:

Tuesday 5 April 2005

Opening Ceremony "Centenary Celebration – from Dreamtime to the Future

Tuesday 5 April 2005

Welcome Reception "Faces of Australia"

Thursday 7 April 2005

Australiana Evening – "The Way of Life Down Under"

The following **optional events*** will be offered to delegates and accompanying persons.

Wednesday 6 April 2005

Discover the Historic Pubs of the Rocks

Friday 8 or Saturday 9 April 2005

A night at the Sydney Opera House

Sunday 10 April 2005

Australian Wildlife by Night

Monday 11 April 2005

Farewell Party "A Floating Affair"

ISI 2005 Sydney, Australia 5-12 April 2005 – Come and see Sydney, an exciting and cosmopolitan city located on one of the largest and most beautiful harbours in the world.

* Optional events are not included in the registration fee.

See the website www.tourhosts.com.au/isi2005/social.asp or Bulletin II for more details.

Contact Details

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SYDNEY NSW 2001
Telephone: +61 02 9248 0800
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Email: isi2005@tourhosts.com.au
Website: www.tourhosts.com.au/isi2005

Have you seen Information Bulletin II?

Information Bulletin II provides the latest details on the arrangements for the 2005 ISI Session and the final registration form. A copy is available on the ISI Website www.tourhosts.com.au/isi2005. If you would prefer a hard copy email isi2005@tourhosts.com.au and a copy will be sent to you.

We look forward to seeing you in Sydney!

Three Doors with Borek Puza (Edition 1)

Welcome to a new feature of the SSAI Newsletter, titled *Three Doors*. From now on, each issue will contain this regular column whose purpose is the discussion of interesting questions, paradoxes, conundrums, etc. in the field of probability and statistics. In each edition there will be a puzzle for readers to solve. All persons who submit a correct solution will be eligible for a fabulous mystery prize donated by the Statistical Society. That prize, its winner (or winners), and of course the solution, will be announced in the subsequent edition.

The Monty Hall Three Doors Problem

In this inaugural edition of *Three Doors* we will discuss and expand on the problem from which that name derives, namely the famous Monty Hall Three Doors Problem. Much has been written on this perennial topic. For example, type "Monty Hall" into *Google*, and see Morgan *et al*. (1991), Gillman (1992), Barbeau (1993), Chun (1999) and Eisenhauer (2000). Morgan *et al*. quote the problem as follows:

Suppose you're on a game show and given a choice of three doors. Behind one is a car; behind the others are goats. You pick door No. 1, and the host, who knows what's behind them, opens No. 3, which has a goat. He then asks if you want to pick No. 2. Should you switch?

The most popular solution to this problem is that it makes no difference what you do. Another solution is that if you were to play the game many times and never switch then you would effectively be ignoring that option and so would win about 1/3 of the time. Consequently, by switching every time you would win about 2/3 of the time. It follows that switching in the current game will *double* your chance of winning the car.

However, there are serious objections to both of these solutions, as discussed by Morgan *et al*. Their solution is to interpret p, the probability that winning will win you the car, as the *conditional* probability that the car is behind No. 2, given that you pick No. 1, and given that the host opens No. 3 and offers the option to switch. In the Appendix it is shown that $p = 1/(1 + q)$, where q is the probability with which the host was going to open No. 3 and offer the option to switch in the event of you correctly picking No. 1. This result assumes that: (a) the car was hidden randomly; (b) you were definitely going to pick a door randomly; and (c) the host was definitely going to open a goat door (other than the door picked by you) and offer the option to switch.

Now q is not specified in the problem and could be anything from 0 to 1, inclusive. Therefore p could be anything from 1/2 to 1, inclusive. This means that you should switch, although doing so will not *necessarily* guarantee you an advantage. For example, it is possible that the host always opens the door with the highest number when presented with a choice. If that is the case then $q = 1$ and so $p = 1/2$.

The Two Monties Puzzle

Suppose you're on a game show and given a choice of three doors. Behind one is a car; behind the others are goats. You pick door No. 1, and the host, who knows what's behind them, opens No. 3, which has a goat. He then asks if you want to pick No. 2. Find the probability that the car is behind No. 2 under the following assumptions: (a) the car was hidden randomly; (b) you were definitely going to pick a door randomly; (c) the host was definitely going to open a goat door (other than the door picked by you) and offer the option to switch; (d) the host is one of two (called M1 and M2) who take turns at staging the show on alternate nights; (e) whenever presented with a choice of two doors to open, M1 opens the door with the lowest number, and M2 decides by flipping a coin; and (f) you randomly chose a night on which to play and have no extra information regarding the host's identity.

For your chance to win a fabulous mystery prize, send your solution by email to <borek.puza@anu.edu.au>. To be eligible, your solution must be supported by clear working (in less than one page, with no special characters) in the body of the email.

Appendix

Let "1" and "2" stand for the car being behind doors No. 1 and No. 2, respectively, let A be the event that you pick No. 1, and let H be the event that the host opens No. 3 so at to reveal a goat and offers the option to switch. Then by Bayes' rule, the probability that the car is behind No. 2 equals

$$
\begin{aligned}
p &= P(2 \mid AH) = P(2AH) \,/\, P(AH) \\
&= P(2)P(\mathrm{A} \mid 2)P(H \mid 2A) / \{\, P(1)P(A \mid 1)P(H \mid 1A) + P(2)P(A \mid 2)P(H \mid 2A) \,\} \\
&= P(H \mid 2A) / \{\, P(H \mid 1\mathrm{A}) + P(H \mid 2A) \,\} \text{ by assumptions (a) and (b)} \\
&\qquad \text{whereby } P(1) = P(2) = P(A \mid 1) = P(A \mid 2) = 1/3 \\
&= 1 \,/\, (1 + q) \qquad \text{by assumption (c) whereby } P(H \mid 2A) = 1, \\
&\qquad \text{and where } q = P(H \mid 1A).
\end{aligned}
$$

References

Barbeau, E. (1993). The problem of the car and the goats. *The College Mathematics Journal*, **24**(2), 149-154.

Chun, Y. H. (1999). On the information economics approach to the generalized game show problem. *The American Statistician*, **53**, 43-51.

Eisenhauer, J. G. (2000). The Monty Hall matrix. *Teaching Statistics*, **22**(1), 17-20.

Gillman, L. (1992). The car and the goats. *American Mathematical Monthly*, **99**(1), 3-7.

Morgan, J. P., Chaganty, N. R., Dahiya, R. C., and Doviak, M. J. (1991). Let's make a deal: The player's dilemma. *The American Statistician*, **45**, 284-289, 347-348 (with discussion, including Marilyn vos Savant's reply and a rejoinder to her).

SSAI Congratulates the Australian Bureau of Statistics on its Centenary

Election of SSAI Office Holders

A Discussion Paper

This discussion paper was prepared in response to concerns expressed by members at the 2004 SSAI Annual General Meeting in Cairns. The Society would like to hear the opinions of members about the options outlined in the paper below. If you wish to express a view, please contact the Secretary of the Society, or the President or Secretary of your Branch. Email addresses for Society and Branch Secretaries are listed on page 15 of this Newsletter.

Doug Shaw
Secretary, SSAI

1. Background

At the SSAI Annual General Meeting in July, 2004 several members expressed the view that SSAI elections would be more democratic if office bearers were elected by a vote amongst all members, rather than by a vote amongst Central Council members as at present. The meeting unanimously passed a motion requesting that Central Council consider this issue.

The current Rules of the Society, adopted at the 2004 Annual General Meeting, make the following provisions for the election of office bearers.

(1) The Council shall elect the office-bearers of the Society from nominations in accordance with Sub-Rules (2) and (5) as follows.
(2) There shall be a Nominating Committee consisting of the President as convenor, the Vice-President, the Secretary, the Treasurer, the Australian Editor of The Australian and New Zealand Journal of Statistics, and the President for the time being of each Branch of the Society.
(3) By 28th February in each year, the Nominating Committee shall submit to Council a list of not more than three names for each of those of the offices of Vice-President, the Secretary, the Treasurer that require election for the ensuing year. In the event that an election is necessary, a ballot shall be conducted before 31 March. Council shall appoint a member of the Society as returning officer; the returning officer shall determine the manner of conducting the ballot.
(4) Nominations of candidates for election as office-bearers of the Society may be made by any member of the Society or by any Branch Council of the Society to any member of the Nominating Committee, by 31st January in each year.
(5) The Nominating Committee, before 31st October of the previous year, shall seek from each Branch nominations of candidates for election as office-bearers of the Society, for those offices that require election for the ensuing year.

The following observations can be made in relation to the application of these clauses, noting that the only change made to them in the most recent revision of the Rules was in relation to the returning officer for the ballot amongst Central Council members.

a. Elections for Society office bearers, such as that for Vice-President in 2004, are rare
b. The opportunity for members of the Society to nominate candidates for election was not publicized in the most recent elections
c. For the most recent elections, the Nominating Committee did not meet as a Nominating Committee. The members of the Nominating Committee were asked to put forward nominations for Vice-President, three nominations were made and all three went forward (one nominee withdrew before the ballot was held).

2. Practice in other Societies

The Rules of some other bodies were examined to obtain a view of common practice in this area.

New Zealand Statistical Association

The President, Secretary, Treasurer and a committee are elected, after being proposed and seconded, by members attending the Annual General Meeting.

International Biometric Society

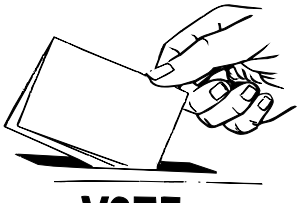
A Vice-President is elected every second year by a ballot of the Council; the person elected serves one year as Vice-President, two years as President and a fourth year as Vice-President. A nominating committee puts forward a nomination or nominations for Vice-President, and a ballot is held even if there is only one nominee. The nominating committee writes to all Regions seeking nominations; nominations must be supported by more than one Region. The nominating committee also puts forward nominations for Secretary; id there is more than one nominee a ballot of the Council is held.

Australian Mathematical Society

Elections are held for President-elect (in odd years), Vice-President and ordinary members of Council. The Council acts as a nominating committee; in addition any two members can make a nomination. The ballot contains the names of the Council nominees and the names of members' nominees. Voting is by postal ballot of members, although e-voting is allowed. The Secretary and Treasurer are appointed by Council.

American Statistical Association

Postal ballot elections are held annually for President-elect and Vice-President. A Committee on Nominations is required to submit at least two candidates for each of President-elect and Vice-President. In addition, nominations may be made by members' petition; a petition requires at least 100 signatures. The Association employs an Executive Officer who is the Secretary; the Board of the Association appoints a Treasurer.



continued on page 14

Royal Statistical Society

The Council consists of a President, an Honorary Treasurer, three Honorary Secretaries, twenty-six Ordinary Members, three Past Presidents, and co-opted members. Council nominates a candidate for President; in addition, any six members can nominate a Fellow for President. Council calls for suggestions for the remaining elected positions, and forwards to members one nomination for Honorary Treasurer, one nomination for each of the Honorary Secretary positions, and twice as many nominations as there are Ordinary Member positions to be filled. Any four members can nominate a Fellow for one of these positions. Voting is by a postal ballot of all members.

Institute of Mathematical Statistics

Elections are held for a President-elect and fifteen council members. The President selects a Nominating Committee which produces at least one nomination for President-elect and at least two nominations for each council position. Other nominations may be made by a petition of at least twenty members. The election is by postal ballot of all members. The council elects administrative and editorial officers by majority vote.

International Statistical Institute

Elections are held for a President-elect and three Vice-Presidents, as well as Council members. Council appoints a Nominating Committee to propose officers and council members. Nominations can also be made by a petition of five or more individual members. Voting is by a secret mail ballot. The roles of Secretary and Treasurer are taken on by the Institute's Permanent Office.

Setting aside the practices of the New Zealand Statistical Association and the International Biometric Society, the clear commonalities amongst the other bodies are

a. A ballot of all members for Presidential positions
b. A Nominating Committee to nominate candidates for elected positions
c. Provision for some number of members to make nominations in addition to those made by the Nominating Committee

There does not appear to be unanimity about the election of Secretaries and Treasurers for those bodies where these positions are elected rather than being paid positions. Some include them in the general election process, others reserve their election for the body's council.

3. Options for SSAI

Before considering options relating to elections, it would appear that

a. There should be a Nominating Committee charged with producing at least one nomination for each position to be filled by election. Mandating that the Nominating Committee should produce at least two nominations, and hence ensure an election, appears to be unnecessary – it is usually all that the Committee can do to come up with one nomination!
b. The process of nomination by members should be clarified to ensure that such nominations are in addition to the nominations made by the Nominating Committee. Requests for such nominations should be advertised to all members, perhaps in the November issue of the Newsletter. A decision must be made as to how many members must support a valid nomination; two or five seem to be the right sort of numbers.

With this background, three options are considered. Note that, in all options, an election would only be required if there is more than one nomination for a position.

Option 1 – The Status Quo

Under this option, elections for Vice-President, Secretary and Treasurer would continue to be held amongst the members of Central Council.

Advantages:
- Minimises changes to the Rules
- Cheaper than a ballot of all members

Disadvantages:
- Does not address member concerns about the current 'undemocratic' process
- Leaves SSAI visibly out of line with contemporary practice

Option 2 – Election amongst all members for Vice-President only.

Under this option, the Vice-President would be elected by a ballot of all members, but the Secretary and Treasurer would continue to be elected by a ballot of Central Council members.

Advantages:
- Satisfies member requirements for a democratic process in respect of the most visible office
- May ensure more continuity in the 'operational' positions of Secretary and Treasurer
- The model is adopted by some other bodies

Disadvantages:
- Members may still feel disenfranchised in respect of the positions of Secretary and Treasurer
- There would be a significant cost associated with the election of a Vice-President

Option 3 – Election amongst all members for Vice-President, Secretary and Treasurer

Under this option, all of the Vice-President, Secretary and Treasurer would be elected by a ballot of all members.

Advantages:
- Satisfies member requirements for a democratic process
- This model is adopted by some bodies

Disadvantages:
- Introduces a possibility of loss of continuity in the 'operational' offices of Secretary and Treasurer
- There would be a significant cost associated with an election.

Conferences

IWMS-2005: 14th International Workshop on Matrices and Statistics
29 March – 1 April 2005, Auckland, New Zealand
http://www.iwms2005.massey.ac.nz

55th Session of the International Statistical Institute
5-12 April 2005, Sydney
isi2005@tourhosts.com.au

ISBIS – Fourth International Symposium on Business and Industrial Statistics
13-16 April 2005, Palm Cove, Queensland
http://www.action-m.com/isbis4/

IASS 55: Complex sampling, retrospective sampling and missing data
A conference in honour of Alastair Scott, International Association of Survey Statisticians
13-14 April 2005, Auckland, New Zealand
http://www.stat.auckland.ac.nx/iass55

Recent Advances in Biometrics, Bioinformatics and Markov Chain Monte Carlo
7-8 July 2005, Sydney
biomcmc@maths.unsw.edu.au

20th International Workshop on Statistical Modelling
10-15 July 2005, Sydney
k.matawie@uws.edu.au

Stochastic Modelling of Complex Systems (SMOCS-05)
10-16 July 2005 Daydream Island, Queensland
www.conferences.unimelb.edu.au/smocs05

3-7 July 2006 Auckland, New Zealand

Hosted By

The Statistical Society of Australia (SSAI) and The New Zealand Statistical Association (NZSA).

Contact Details

ASC/NZSA 2006 Conference Managers
GPO Box 128
Sydney NSW 2001
Phone: +61 2 9265 0700
Fax: +61 2 9267 5443
Email: statsnz2006@tourhosts.com.au

Expression of Interest
If you are interested in attending the Conference, please register your interest on-line www.statsnz2006.com

Scientific Program

A stimulating and cutting edge Scientific Program is being developed to cover a wide range of topics relevant to all statisticians. The program will provide practical knowledge and insights from prominent international and Australasian speakers and will address the latest developments in statistical research, education and practice.

Workshops

Technical workshops that are of particular interest to practitioners will be included in the Conference Program. The Scientific Program Committee is seeking potential workshop presenters. If you are interested in contributing please contact David Scott at d.scott@auckland.ac.nz.

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Further contact details for Society Secretaries and Section Chairs can be obtained by contacting the Society on (02) 6249 8266

SSAI's Canberra office has moved – The new postal address is: PO Box 5111, Braddon ACT 2612
The telephone remains the same (02) 6249 8266 – Our new Fax (02) 6249 6558

SSAI Review of Statistics at Australian Universities

Update

The Review is now well underway with the review team visiting Canberra, Sydney, Brisbane, Melbourne, Adelaide and Perth between 14th and 25th February 2005. Meetings for individuals and groups with the team are being arranged in each city.

Canberra – 14th/15th February 2005
Contact: Alan Welsh (Alan.Welsh@anu.edu.au)

Sydney – 16th/17th February 2005
Contact: David Steel (dsteel@uow.edu.au)

Brisbane – 18th February 2005
Contact: Tony Pettitt (a.pettitt@qut.edu.au) or Bronwyn Harch (Bronwyn.Harch@csiro.au)

Melbourne – 21st/22nd February 2005
Contact: Neville Bartlett (neville@nrbartlett.com.au)

Adelaide – 23rd/24th Febraury 2005
Contact: (Academics) Chris Brien (Chris.Brien@unisa.edu.au) or (Industry) Margaret Swincer (mswincer@workcover.com

Perth – 25th February 2005
Contact: Jodie Thompson (jodie@daa.com.au)

The current timetable for the remainder of the review is as follows:

Visit by Review Team:	**14th – 25th February 2005**
Draft report sent to SSAI:	**15th April 2005**
SSAI response sent to Review Team:	**17th June 2005**
Final report sent to SSAI:	**29th July 2005**

AusCan Scholar Program

A scheme to promote scientific exchanges between outstanding Australian and Canadian statistical researchers.

The AusCan Scholar program was developed by the Statistical Society of Australia Inc and Statistical Society of Canada to foster young researchers and promote collaborative activities between the societies.

The objectives of the AusCan Scholar program are:

1. Promote scientific interaction between the Australian and Canadian statistical communities, particularly in areas of Statistics relating to current and important practical problems.

2. Provide the opportunity for outstanding young Canadian/Australian researchers in these areas to visit a number of leading research centres in Australia/Canada, to present their current research and interact with a number of researchers in that country.

Applications are sought from Australian statisticians who wish to be considered for the position of the inaugural AusCan Scholar to visit Canada in 2005. The visit will be of 4-8 weeks' duration, one week in each of a few cities, and extendable if made in conjunction with participation in a national conference. The primary objective is to move around the country to meet people.

Eligible scholars will be post-PhD with a strong preference given to researchers who are within five (active research) years of gaining their PhDs, with a demonstrated strong interest in both theory and applications and members of the Statistical Society of Australia.

The Scholar will be required to provide a 2-page report within one month of completing the visit outlining activities carried out, key contacts made and expected follow-up collaborative activities. The report will also be published on the SSAI and SSC websites and the Scholar may be requested to make a presentation at his/her Society's national conference.

Selection of the 2005 scholar will be made by a Committee chaired by the SSAI President and a representative of the Canadian Statistical Society. The costs of this program will be shared by SSAI and SSC. Funding is available to the Scholar to cover airfares, accommodation, meals and incidental expenses. Scholars will be responsible for their own travel insurance.

Applications (maximum of two pages addressing the eligibility criteria detailed above) current CV and the names and contact details of three referees should be forwarded to:

Jane Waslin
Executive Officer
Statistical Society of Australia Inc
PO Box 111
Braddon ACT 2612
Australia

or faxed to (02) 6249 6558
by close of business, Friday 11 March 2005.

The Scholar for 2005 will be announced by the end of April 2005 and the visit must be completed by the end of 2005.

WESTERN AUSTRALIA

In the October talk of the SSAIWA Branch Dr Nazim Khan spoke to the title "On a resampling approach for tests on the number of clusters with mixture model-based clustering of tissue samples" which in fact is the title of a joint paper by McLachlan and Khan (2004) in volume 90 pp.90-105 of the Journal of Multivariate Analysis. This work came about when Nazim was doing postdoctoral work at the Department of Mathematics, University of Queensland following the completion of his PhD at the University of Western Australia. Nazim currently holds a lecturing position in the School of Mathematics and Statistics at the University of Western Australia.

The talk was essentially on the use of mixture model-based clustering to analyse gene expression micro array data. It was inferred that the statistical methodology mentioned has an important role in the discovery, validation and understanding of various classes and subclasses of cancer. In particular the talk considered a mixture model-based approach to clustering of tissue samples of a very large number of genes from microarray experiments. A feature of microarray data that one has to deal with is that the data involve n, the number of tissue samples in the order of $10 - 10^2$, and the number of variables p, the number of gene expressions in the order of $10^3 - 10^4$. Standard statistical methodology is appropriate for $n>>p$ *but we have here* $p>>n$.

In classifying tissues, e.g. one may have 2 classes such as disease free or metastases, Nazim introduced in his talk the use of mixture models, adopting elliptically symmetric components such as the normal or t-densities. By including an additional parameter, the degrees of freedom, these fall into the one framework and the degrees of freedom can be estimated from the data. By including t-densities the assertion is that the methodology is robust against outliers. Questions of the order of a mixture model involve bootstrapping of the Likelihood Ratio Statistic. A discussion of published data and comparison using the EMMIX-GENE software ensued.

Questions following the talk reflected the growing interest in microarray data and in particular the motivation behind such studies. Just as an example, are we interested in identifying particular groups of genes as reflecting a link to cancer and if so what is the information going to be used for?

November 2004

After the interest created in microarray analysis in the October talk, Marty Firth stepped into the breach to speak at the November meeting of the SSAIWA branch to the title 'A Statistician's Introduction to Microarrays'. Marty was well equipped to speak to this topic as he is employed as a biostatistician at the Telethon Institute for Child Health Research where his interests include applied statistics in the areas of vaccine trials, asthma, and leukaemia research and microarray analysis. He has been involved in microarray analysis for the last 2-3 years and in fact some of the graphs shown in "Chloe's Story" on Channel 2 were his.

After giving a brief view of the Telethon Institute for Child Health Research and his background as a statistician Marty talked biology explaining DNA, RNA, and gene expression arrays. He talked about array design, genechip probe arrays and cDNA microarrays. Then turning probe intensities into a single probe set expression, and including background correction, summarizing and normalization finally leads to statistical analysis. The latter involves common questions: *Which genes are differently expressed? How do the patients cluster? How do the genes cluster? Which genes best classify the groups? Which genes are changing over time?*

Marty pointed out the importance of working with biologists in his talk and noted the vast number of statistical procedures applied to microarray data. He then spoke of his own research involving classification trees and random forests. After the talk interest appeared to be in whether the different statistical analyses were arriving at the same conclusions and indeed whether there is an 'optimal' approach.

Brenton R. Clarke

QUEENSLAND

What were those statistical sightseers doing?

It is hard to resist using more catchy headlines like `Moreton Bay BUGs Meet' or `BAYESWATCH' to describe the Bayesian workshop held in October on Moreton Island. The Inaugural ASBA Bayesian Retreat: "Bayesian Topics in the Tropics" was held on North Stradbroke Island, just off the coast of Brisbane. A cluster of statisticians, some like me with very vague priors, boated across Moreton Bay to North Stradbroke Island to attend a 3 day workshop. The meeting started on Tuesday the 5th and over the following 3 days participants were engrossed in discussion of Bayesian statistics from advanced topics to practical problem solving. The workshop provided a forum for the analysis of several case studies in the areas of ecology, epidemiology/health and genetics. Special topics included Bayesian modelling, expert opinion and priors, computational issues and MCMC.

The workshop presentations began with guest speaker Professor Judith Rousseau, Dauphine University, CEREMADE, Paris and followed with participant presentations with almost all workshop participants presenting some work directly involving Bayesian methods or analyses that they believed could be improved using Bayesian methods but were not sure how they should proceed. Approximately 30 participants enjoyed the informal atmosphere that generated great discussions.

It was not all hard work. Thursday evening saw participants test their skill (mainly skills associated with cheating) at Pictionary. A singing competition saw Rob Reeves' musical talents prove themselves by providing witty and poignant lyrics to the song `There is a chapel in the town' for his group to take the prize for the best song of the workshop. I have placed a copy of the words at the end of this report.

Preceding the Stradbroke Island workshop a 1-day workshop was held in Brisbane titled `Practical Bayes for Beginners'. Some of the participants from this workshop found their way out to `Straddie'.

The venue, the University of Queensland's Moreton Bay Research Station, was a great choice. Lunch and dinner were provided at the Little Ships Club a small walk from the Research Station. Several participants accepted Kerrie Mengersen's offer of transport to several swimming spots at various sheltered and not-so-sheltered beaches and lakes. Many thanks go to Petra Kuhnert and Kerrie Mengersen for their efforts in organising such a great workshop.

"There is a chapel in the town" lyrics by Rob Reeves.

There is a chapel in the town, in the town
And there my true Tom lays him down, lays him down
And I'll hang my career on subjectivity
And may the world go well with thee

A man, Ron Fisher was his name, was his name
Thought that he would change the game, change the game
"It isn't real till there's a frequency"
And may the world go well with thee

He had hypotheses to test, yes to test
His way seemed better than the rest, yes the rest
With rejections based on alpha and p
We'll know the world objectively

But experiments and trials must be designed, yes designed
And there we're sure that you will find, you will find
A healthy dose of subjectivity
To make the world go well with thee

Now when I've a matter to infer, to infer
To Reverend Bayes I will defer, will defer
And I'll draw my conclusions a-posteriori
And praise the word MCMC.

October meeting

Members were addressed at the October 12th meeting by Professor Judith Rousseau (Unniversité de Paris 5) on work done by herself and Brunero Liseo (Università di Roma "La Sapienza") titled "Nonparametric Bayesian estimation of the spectral density for Gaussian long-memory processes and semiparametric estimation of the long-memory parameter" at the Queensland University of Technology.

The talk discussed their study of the estimation of the spectral density of a Gaussian long memory processes which has been extensively studied in the frequentist literature, where rates of convergence have been obtained for some classes of functions. However the speakers considered a Bayesian non-parametric approach and discussed how they obtained a general result giving consistency and rates of convergence, under general conditions on the prior distribution. Further work examined a class of prior based on the FEXP models, for which they gave precise rates of convergence. Semiparametric estimation of the long memory parameter was also discussed and consistency was shown.

Brenton Clarke

CANBERRA

Talk on the analysis of microarray data by Peihua Qiu

At the monthly meeting of the Canberra Branch of the SSAI on 26 October 2004, Associate Professor Peihua Qiu of the School of Statistics at the University of Minnesota gave a talk titled "Segmentation Of cDNA Microarray Images By Local Smoothing". This presentation was a summary of joint work with Mr Jingran Sun and a foretaste of Peihua's book "Image Processing and Jump Regression Analysis" which is soon to be published by Wiley.

Gene microarray data are widely employed in pharmaceutical and clinical research. By comparing gene expression in normal and abnormal cells, microarrays can be used to identify genes involved in particular diseases, allowing these genes to be targeted by therapeutic drugs. Most gene expression data are produced from cDNA microarray images. A microarray image consists of thousands of spots, with individual DNA sequences printed at each spot first and then equal amount of cDNA samples from treatment and control cells mixed and hybridized with the printed DNA sequences. To obtain gene expression data, the image needs to be segmented first to separate foregrounds from backgrounds for individual spots, and then averages of the foreground pixels are used for computing the gene expression data. Several image segmentation procedures have been suggested and included in software packages for handling gene microarray data, such as *ScanAlyze, Genepix, Quantarray* and *SRG* (the Seeded Region Growing procedure). From the audience Professor Sue Wilson of the Australian National University also mentioned *Spot*, a package developed at the CSIRO.

Having outlined the nature and uses of microarray data, Peihua presented a new image segmentation methodology based on local linear kernel smoothing. He described several theoretical arguments and numerical studies which show that this methodology has some good statistical properties. After illustrating with an application to the study of the defense reaction of *Arabidopsis* leaves, Peihua concluded with some avenues for future research. These avenues include robustification of the procedure and the post smoothing of estimated boundary curves.

Borek Puza

The Knibbs Lecture 2004: On selling cheap things, by Adrian Baddeley

At the Australian National University (ANU) in Canberra on Tuesday the 2nd of November, Professor Adrian Baddeley of the University of Western Australia presented the Knibbs Lecture 2004, titled: "The Difficulty of Selling Cheap Things". Adrian began by noting that although statistics is potentially useful in every field of science, there is no obligation on scientists to use it. Indeed there is plenty of resistance to it, as typified by Einstein's famous quip that God does not play dice. There is also no guarantee that statistics will be used correctly. For example, it is widely agreed that roughly 75% of medical publications contain statistical flaws which are severe enough to potentially invalidate the conclusions.

One of the most perplexing forms of resistance to statistical thinking is the disregard for *efficiency*, in the sense of performance per unit effort. For example, many scientists would instinctively disbelieve that it is possible to accurately estimate the average income of all one billion persons in India using a sample fraction of only *one millionth*. Such skepticism is related to a general tendency within science to prefer expensive and complex technology over cheaper, simpler and equally effective methods for the same task. Thus, increasing the efficiency of statistical methods may in fact make them less attractive. This paradox is part of a broader phenomenon called "the difficulty of selling cheap things", whereby consumers do not always choose the commodity which offers the best value for money (*e.g.* a cheap wine or car), and whereby lovers sometimes play 'hard to get'.

One prominent example of this phenomenon is in the field of *stereology*, which has to do with extracting quantitative information from microscope images. Suppose we are interested in V, the average fraction of *volume* in a solid rock that is occupied by some *mineral* of interest M. Then one estimate of V is A, the fraction of *area* occupied by M on a polished plane section of the rock. Another estimate of V is L, the length fraction of equally spaced *lines* on this plane which lie over M; and yet another is P, the fraction of equally spaced *points* on these lines which cover M.

It can be shown that if the said plane, lines and points are selected in a certain way, then A, L and P are all unbiased for V. Of these three, P is the estimate of choice,

Alan Welsh, Adrian Baddeley and Simon Barry at the Knibbs Lecture.

on the grounds of efficiency, and *A* is the least efficient. However, since *A* was first proposed in 1847 by the French geologist A.E. Delesse (a great breakthrough at the time), it took the scientific community about 50 years to accept *L* as better, and then another 30 years to finally accept *P* as best. Thus, whilst the idea of progressively subsampling from *A* to *L* to *P* may seem obvious to modern-day statisticians, each successive step encountered long and stiff resistance historically.

Adrian went on to discuss the variances of the three estimators, and noted some interesting paradoxes. For example, in some situations *P* may be more accurate than *A*, which is counterintuitive since *A* is based on full information from the section plane. Adrian resolved this paradox by considering covariance contributions, and explained why the Rao-Blackwell theorem is not applicable in this case. He also gave an example of ignorance regarding sampling methods in the journal *Trends in Neurosciences*. Several letters were recently published therein which heatedly but incorrectly argued that sampling techniques are not reliable for estimating the number of neurons in the brain on account of it having a highly organised architecture.

Adrian's second main illustration of "the difficulty of selling cheap things" was in the sphere of Markov chain Monte Carlo (MCMC) methods. After listing several uses of these methods, *e.g.* for estimating maximum likelihood estimates (MLEs), he noted some of their disadvantages, such as being highly computer-intensive. This led him to describe a simple alternative technique called *maximum pseudolikelihood* (MPL). Although this technique may be criticised for being an ad hoc invention, in high dimensional models MPL estimates are typically much easier to compute than MLEs whilst being reasonably close to them. For these and other reasons, Adrian envisages that future developments in inference for highly structured systems will be working at the "cheap end" (pseudolikelihood) rather than the "expensive end" (MCMC maximum likelihood).

Adrian concluded by saying that since efficiency seems not to be the highest priority for many users of statistics, we need either to understand and accept these users' priorities, or to become more persuasive.

The first discussant, Professor Alan Welsh of the ANU, commended Adrian for a highly interesting, stimulating and provocative lecture, and noted the absence of the frequentist-Bayesian debate. He also raised questions regarding whether some of the ideas in Adrian's paper extend to the infinite case, and mentioned the tendency of users to love simplicity even when wrong, for example to blindly apply ANOVA to everything, and to use linear regression for binary data (which however is not always wrong). The second discussant, Dr Simon Barry of the Bureau of Rural Sciences, noted that sometimes statistical methods are used to produce an elegant solution to the wrong problem, and that there is not enough penalty for making mistakes. He also questioned whether accuracy per unit of computer time is really a good measure of efficiency, and drew some very entertaining parallels with boating habits. The lecture and discussion were followed by a sumptuous dinner in the Drawing Room of the ANU's University House, with food provided by Boffins Restaurant.

Borek Puza

NEW SOUTH WALES

NSW Branch Annual Dinner Outlier-Robust Model Selection Alan Welsh

The J. B. Douglas Postgraduate Awards were followed by the Annual Dinner of the NSW Branch. Guest speaker for the occasion was Professor Alan Welsh from the CMA at ANU. Alan wanted to share with us some of his work on model selection methods that are robust against outliers in the data. However, he began with the unwelcome discovery that his CD, written on a Mac computer, could not be read by the PC-based system at the venue and that his presentation would have to be hand-written on the two sides of an electronic whiteboard. In spite of this the audience was given a wonderfully clear and concise exposition, demonstrating that lack of technology is no impediment to quality of presentation for a speaker clearly as robust as his selection methods !

The work Alan presented was motivated by the need for models in large chemical data sets for which existing selection methods often fail because the expected prediction loss function does not have the usual smooth, unimodal variation. The criterion function used in model selection contained terms penalising poor fit to the given data and poor prediction of the response at new data (prediction loss). The key to making the selection method (minimisation of the criterion function) robust against outliers lay in breaking the link between the form of these penalty functions and that used in the calculation of model parameters. Thus, if for example least squares regression is used to obtain the models, the function used in obtaining the parameters is $r(x) = x^2$, but the penalty functions used in the selection criterion function may be truncated versions of r which are constant if the magnitude of x exceeds a certain value. In this way, large models which "fit" outlying data are not necessarily favoured over smaller models which do not.

The calculation of the prediction loss term, strictly speaking, requires new data. If it can be assumed that the data to which the model will be applied has the same distribution as that used to derive the model then bootstrap sampling from the latter can be used to simulate "new" data. Ordinary bootstrap sampling does not work well, however. Instead, *m* out of *n* sampling is needed, where *m*/*n* is in the range 0.25 – 0.5. Unfortunately, this introduces the

problem that bootstrap samples may be chosen which contain a large proportion of outliers. The innovation proposed by Alan to overcome this difficulty is the use of stratified bootstrap sampling. A stratification is imposed on the model residuals and bootstrap sample allocated proportionately to the resulting strata. Alan presented some results which indicated that the method works well even when the proportion of outliers in the data set is as high as 25%. For higher values, the method begins to perform poorly, essentially because of bias in the estimation of population variance. These are high values for proportions of outliers, but may not be unrealistic in situations where simple modelling is used to explore large and rich data sets.

The presentation gave rise to some penetrating questions and observations from the audience after which technical discussion gave way to the relaxed conviviality of the annual dinner.

Jos Beunen

Clair Alston (second from right), winner of the Peter Wright Prize, with Christine Curran, Jim Douglas (left) and Alun Pope.

J. B. Douglas Postgraduate Awards

The fifth annual J. B. Douglas Postgraduate Awards event was held on the afternoon of 24 November 2004 at the University of Sydney. It was followed by a talk by Professor Alan Welsh from the ANU, and then the Branch Annual Dinner the same evening.

The NSW Branch created these awards to encourage excellence in postgraduate work in any area of Statistics or Econometrics and to recognise the contributions to the profession of Professor Jim Douglas. This year, for the first time, the first prize was dedicated to the memory of Dr Peter Wright, a former Branch Councillor, who died suddenly in May.

The awards are open to graduate students, late in their research programs for masters or PhD degrees, and are decided on the basis of 20-minute presentations. As Branch President, I was chair of the judging panel and the Branch was delighted to have Alan Welsh and Dr Philip McCloud of Roche Pharmaceuticals as the other members of the panel.

Talks – all of a very high standard, both in presentation and content – were given by the following students, nominated by their departments:

Alistair Merrifield, University of Sydney (Statistics)

Shuling Chen, UNSW (Statistics)

Piea Peng Lee, Macquarie University (Statistics)

Daniel Melser, UNSW (Econometrics)

Clair Alston, University of Newcastle (Statistics)

CaroleBirrell,University of Wollongong (Statistics)

The event was attended by about 60 people and it was good to see that the members and supporters included sizable contingents from Newcastle, as well as other out of town centres such as Wollongong. The task of the judges was extremely difficult, because of the high quality of the presentations, but the decision was to award the Peter Wright Prize and a cheque for $500 to Clair Alston (Newcastle) for her talk on *Bayesian mixture models for CAT scan interpretations*. Prizes of $400 each were awarded to Daniel Melser (UNSW) and Carole Birrell (Wollongong).

The judges (from left, Philip McCloud, Alan Welsh, Alun Pope) had a difficult task.

Before the presentation of the awards, Associate Professor Ken Russell of the University of Wollongong gave a presentation entitled *Remembering Peter Wright*, in which he painted a quick, affectionate picture of the man. The Branch was honoured to have as its guest Christine Curran, who presented the award named in honour of her late husband.

After Alan Welsh's talk (reported elsewhere in the Newsletter) members and guests celebrated the end of the year at a well-attended Annual Dinner.

Special mention and thanks must go once again to Dr Shelton Peiris (University of Sydney) for organising such a successful event. The event also could not have taken place without the generous support of our sponsors: CSIRO, Macquarie University, Roche Pharmaceuticals, SAS Australia, St George Bank, UNSW Department of Statistics and the Wollongong Statisticians.

Alun Pope