

newsletter

A. C. Aitken Centenary Conference 28 August - 1 September 1995 A Great Success!

The organisers are to be congratulated for a most successful conference. The invited addresses were presented by: Elmer Rees, Peter Fenton, Garry Tee, Anne Penfold Street, Herbert David, Hans Schneider, Walter Ledermann, Len Cook, Geoffrey McLauchlan, Ernie Tuck, Shayle Searle, Yahuda Kahane, Alistair Watson, and George Styan. Abstracts are in the December 1995 *New Zealand Statistician*.

Student Prize



Ray Hoare with participants in the students prize. From left to right, back row: Ray Hoare; John Koolaard, winner of the SPSS prize for statistics donated by Hoare Research Software; Chris Stephens, highly commended; Mahammad Salehi; Sifa Mvoi; Front: James Curran; Andrew Balemi

NZSA Employment Workshop for Young Statisticians



Some of the participants in this workshop, held during the A. C. Aitken Centenary Conference

The workshop provided information to young statisticians about careers in Statistics. Thanks to Statistics New Zealand, New Zealand Aluminium Smelters, Waikato Centre for Applied Statistics for sponsorship and to the organizers Katrina Sharples, Marianne Vignaux and Ray Littler.



A group at the conference dinner

Chance

George Styan is the new editor of *Chance* magazine. He has a number of New Zealanders on his team and is pictured here with some of them at the Aitken Conference.



Robert Gentleman, Bryan Manly, George Styan and Alan Lee

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President's Column



As your new President I first wish to acknowledge the sterling work that Harold Henderson put into NZSA affairs during his term as President. Looking back on the past couple of years under his leadership we see that a considerable number of issues have arisen with many of them requiring his wise counsel.

During his term the Executive initiated closer statistical relations with Australia, formulated a Code of Ethics for members of the Association, been involved with the production and promotion of the books, "Women with Maths: Making a Difference", "History of Women through Statistics", made submissions on Science Funding, participated in the formation of the Mathematical and Information Sciences Council of NZ (MISCNZ), cooperated with financial support in the production of a "Careers in Mathematical Sciences" brochure and eight publicity posters and maintained an active Education subcommittee with a strong commitment to the improvement of statistical education in New Zealand.

Many of these activities are ongoing. In particular we are waiting for a response from the Statistical Society of Australia to proposals regarding a cooperative Australian and New Zealand Journal of Statistics. As highlighted at the AGM we will need to be clear of the financial impact not only on the NZSA but also on members. At the AGM it was agreed that subscriptions for 1996/7 remain the same as for 1995/6 unless a joint SSA and NZSA Journal is implemented in which case the base subscription should not be raised by more than \$15 per year to ensure that the benefits achieved do not impose an excessive burden on the Association members.

The Code of Ethics is an important development which was approved at the AGM. A copy is included in this newsletter and members are encouraged to consider the ethical implications inherent in any activity they undertake as statistical consultants. The Association owes a debt to Garry Dickinson for his major input into developing and improving the code. As an extension, the SSA is looking at accreditation. We shall continue to monitor this development but at this stage we have no plans to push ahead with a similar proposal.

The MISCNZ consists of representatives from the NZSA (Jeff Hunter, Jean Thompson), NZMS (Marston Conder, Douglas Bridges), ORSNZ (Jonathon Lermit), NZAMT (Bill Elwood, Sylvia Bishton), Infomatics Group of NZCS (Ian Graham), the RSNZ Fellows (Alex McNabb, Derek Holton), and the RSNZ (Graeme Wake). The committee, a subcommittee of the RSNZ, is exploring ways that activities in the Mathematical and Information Sciences can be publicised. It is also attempting to set up procedures to see that meetings of the member societies do not clash and to provide a forum where member societies can explore the possibility of joint conferences. The committee also coordinates responses to various groups including the NZQA, and Science agencies of the Government (FRST, PGSF and Marsden Fund). In relation to the latter item it is of interest to note that the first round of the Marsden Fund resulted in \$514,796 of funding being split between ten proposals out of an initial 130 preliminary proposals in the Mathematical and Information Sciences area. The doubling of funds next year will hopefully see a wider distribution of funds. The initial allocations tended to favour those with established research records which was understandable. However we must ensure that those with new ideas and well formulated proposals are not be discouraged by the process as one of the key criteria for funding is the "contribution to development or broadening of research skills in New Zealand, particularly those of emerging researchers".

The Education Subcommittee is one of the more hard-working subcommittees of the Executive, ably chaired by Mike Camden who also serves on the Mathematics Advisory Group of the NZQA. The NZSA is seeking additional representation on the Advisory Group. The establishment of Unit Standards in Mathematics for implementation at secondary school and the increasing integration of unit standards into Polytechnic programmes has put pressure on this subcommittee to ensure that any unit standards in Statistics are developed by interested persons with a competency in Statistics. The Universities are very concerned at these developments especially since there has been an agreement of the integration of University degrees ("Provider Degrees") onto a single harmonised National Framework. There is agreement that the University degrees will not be credited in a piecemeal, unit standard way, as for the "National Degrees" which will be based on unit standards, but approved as entire programmes. This creates conflict with university staff naturally quite reluctant to be

Continued on page 4.

Editorial



This is my last issue as editor of this *Newsletter*. Most of the time I have enjoyed my stint immensely, the exceptions being when the work came at a time that conflicted with other things that I was supposed to get done at the same time. I could not have got these issues

out without the support and help of Harold Henderson, who was himself busy being President at the time - not to mention the many other things that people at Ruakura and the University rely on him for. I am very pleased that Richard Penny has agreed to take on the role of *Newsletter* Editor. I was going to say something about Richard's youth and enthusiasm when I remembered that he has actually been on the scene for quite some time now. However *relative* to the outgoing editor he is youthful and enthusiastic and I am sure that we are in for a treat under his editorship!

I am now going to take on the other editorship that the NZSA has to offer, that of the *New Zealand Statistician*. Fortunately I know from my attempts to establish myself as a published academic that this is a very much easier task. All that you need to do, so far

as I can determine, is to send off letters rejecting peoples articles, or alternatively asking them to rewrite the article to be one-tenth of the original size and/or to make a completely different point from the original article.

In a more serious vein, I would like to hear from members of the Association about the *New Zealand Statistician*. As you know we are in discussions with the Statistical Society of Australia concerning the establishment of a combined journal. Although different models have been talked about by which this might happen, they have in common the idea that the existing editorial teams of the two journals take over the running of a section of the combined journal. For example the Australian team might edit a theory and methodology section and we might edit an applications section. In the early days of the *New Zealand Statistician* it played a "domestic" role similar to that currently played by this *Newsletter* but now it is a refereed professional journal similar to many others, although one with a special brief for matters touching on the profession of Statistics in this country.

It is our hope that the changes that we plan will improve the quality and usefulness of the statistical articles published on both sides of the Tasman. But if we are to preserve the best of the *New Zealand Statistician* we need to know more about what it is you value in this publication. So I am asking you to write, email, fax or phone me about this. (For once I won't demand email!) Let me know about features of the *New Zealand Statistician* that you want to see retained, let me know of any ideas that you may have for improving the publication. We can always use input like this at any time, but it is especially valuable to us as we get ready to enter into this joint venture. *Continued on page 15.*

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President's column continued from page 2.

involved with the development of unit standards for a system that will be in direct competition to their existing degrees and well established approval process. Many academics are very concerned at the fragmented nature of unit standards, many set up without a prerequisite structure, and all of them concentrating on an excessive assessment process. I would suggest that the Education Subcommittee move cautiously. At a first step they should see that unit standards in Statistics written for the higher levels of secondary school and first year tertiary programmes are well written, soundly developed and take full recognition of the well established programmes of instruction that exist elsewhere.

One activity that needs highlighting is the very successful Employment Workshop organised by the "Young Statisticians" Subcommittee at the Aitken Conference. Thanks especially to Marianne Vignaux and Katrina Sharples for their hard work at setting up this workshop.

I wish to thank all the retiring members of the Executive, in particular Ray Littler and John Waller for their secretarial support, Katrina Sharples and Marianne Vignaux for all their assistance. I also wish to welcome to the team James Reilly of AGB McNair, Caryn Thompson from the University of Otago and Richard Penny and Sharleen Forbes both from Statistics New Zealand.

A change in Editorship of both the Newsletter and NZ Statistician is taking place at the end of the year with Murray Jorgensen stepping down as Editor of the Newsletter but taking over the Editorship of the NZ Statistician from Hugh Morton with Richard Penny picking up the reins of the Newsletter. These activities are very important for the overall organisation of the Association. I wish to thank you all for your commitment, both in the past and the future to the maintenance of the Associations publications.

One important financial implication of recent efforts of the Executive is that the NZSA (Inc) now has attained charitable donee status by including appropriate changes in the constitution which have been approved by the IRD. The major result of these changes is that if you wish to donate funds to the NZSA you will be able to claim a tax deduction. The Treasurer will obviously see that you are all informed at the time of requesting your subscriptions. (We are not thinking about a door to door collection yet!)

I look forward to serving the Association. The support given by many of you so willingly and the efforts that you put into ensuring the subcommittees and the activities of the Association keep ticking over is very much appreciated. The Executive has agreed to meet four times a year by teleconference and attempt to handle routine business by email where possible.

Jeff Hunter

Executive Committee Activities

The new Executive Committee has met twice, since coming into office at the Aitken conference in August. The first meeting was at the Aitken conference. This meeting was effectively a 'handing-over' ceremony, although there were informal discussions about the direction of the NZSA. The second meeting took place on November 2nd, via teleconferencing. In this small article, I shall summarise some of the matters which the Executive has discussed or is grappling with at the moment. If you feel like making any contributions on these matters, please write to the Secretary of the Association. Note that there are a lot of other 'routine business' stuff which are not reported here.

1. The Young Statisticians workshop at the Aitken conference was very successful, and the Exec. plans to continue this at the next conference, which should be held in Wellington in August next year. 2. About the 1996 NZSA conference, the theme is likely to be on Statistical Education, and considerable participation from High School teachers is expected. This is still to be confirmed, however...see the next Newsletter for details about the conference.

3. The Executive plans to design a logo for the Association. The initial idea was to get a competition going, but this is likely to result in a NIL entry...so it is proposed to make it a student project (for a Polytechnic student). The options are being investigated. 4. A final version of our Ethical Code has been reproduced in this issue of the Newsletter. Across the Tasman, the Aussies appear to be going for an Accreditation process. The Executive has decided to just watch how this Accreditation business develops, and feels that there is no need for our Association to even consider it at the moment. 5. The Executive is constantly looking for sponsors for prizes in Statistics in the Science Fairs...if you (or your company/organisation) feels like taking this on, please let us know.

6. Many members are aware of the fact that there have been moves to have a joint journal with the Australian Stats Association. Several discussions have taken place (even at the last AGM) about this, and we await developments and response from across the Tasman on this. 7. We now have "charitable donee status" with the IRD (as a result of a change in our constitution, which was decided at the last AGM). This means that you can now donate some money to the NZSA and claim some tax rebate for it. Most of the donated money will most likely go into supporting young statisticians and various projects run by NZSA.

7. The Executive is considering setting up a World Wide Web page for NZSA, and is currently investigating costs and various options. If you have any ideas (including sponsoring it?) please us know.

That is all, for the moment. The next Executive meeting is scheduled for early February....because of the high teleconferencing costs, the Exec is limiting its meetings to about four a year.

Charles Lawoko

Pringle Reigns

According to a press release dated 4th August 1995, AgResearch has appointed Dr R D (Rob) Pringle to a new position of Corporate Manager of Technology Development and Services.

This position has been created to provide an "effective interface between AgResearch's research and technology development activities, and its industry partners, both on a national and international front".

Rob's portfolio will include "the development and co-ordination of research strategies, technology development, the provision of technical services to clients, as well as the generation, acquisition and management of intellectual property".

Rob has previously been Director of the Levin Horticulture Research Centre and more recently Corporate Science Manager for AgResearch.

Members of this association will also remember Rob, before his career in MAF and AgResearch, as a Senior Lecturer in Statistics at Massey and a co-author of a celebrated monograph on generalized inverse matrices and their applications in statistics. We wish him well in his new position.

Education Committee

Our current concerns include: the NZSA 1996 Conference, a Prime Time page on Statistics (to appear about March in the INL newspapers), NZQA and its Maths Advisory Group (on which we're aiming to strengthen our representation) and the production (by an NZQA group) of Unit Standards for early tertiary Statistics.

The Monday of the Aitken Conference contained sessions on Education. This gave a valuable chance for conference goers to get together with some local schoolteachers, and share experiences on Curriculum and Assessment changes which surround us all.

Alex Aitken was a statistical educator, of course, along with his other varied activities. Statistical education has travelled a long way in the decades since he was teaching in Edinburgh. From being a speciality for the lucky few, it is becoming a core competency for many tertiary programmes, an accepted part of the School curriculum, and a necessity for life in a high-information democracy. NZSA has a role in keeping NZ in the forefront.

New Member

We welcome Lesley Hooper onto the Committee. She forms a valuable link with Statistics NZ.

NZSA Conference 1996

The 1996 Conference will be at Victoria University of Wellington, on Thursday and Friday 29 and 30 August, and with a theme of 'Research in Statistical Education'. There will be parallel sessions for general statistical papers. Details next *Newsletter*.

The theme arises from the view of the Education Committee that the Association can provide a forum where NZ Statistical Education researchers can get to know each other and their work, disseminate their findings to the statistical teaching and practising community, analyse the current changes in NZ education and plan for the impacts of these. A theme of Statistical Education Research will give this Conference a different focus from that of the Sydney International Statistical Congress, and will give a boost to people establishing research in this area in NZ.

Honour for Bill Warren

Bill has been elected as a Fellow of the American Statistical Association and we extend our congratulations to him..

Statistician* on a Soapbox

**Graham McBride denies being a statistician. Somehow I never got around to asking him what he thinks he is. I suppose he would answer to "Applied Mathematician". Nevertheless he meets my criterion for this series of having passionate feelings about a statistical question. As always you are welcome to respond to any issue he raises. The new editor may even decide to publish your response! - Editor*

WHY TEST A FALSE HYPOTHESIS?

In the last few years I have worked on practical issues in environmental statistics with colleagues at Colorado State University. In 1993 we had a paper published in the journal *Environmental Management* [vol. 17(4):423; errata in vol. 18(2):317]. It had the somewhat cheeky title: "What do significance tests really tell us about the environment?" (answer: not a lot if you don't use appropriate methods and interpret them correctly). We obviously struck a chord, receiving nearly 200 reprint requests, mostly from environmental professionals.

The main points of the paper would be familiar to statisticians:

- don't confuse statistical significance with practical significance;
- rely on estimation as well as testing;
- in two-sided tests of point hypotheses, p-values tend to decrease with sample size;
- consider the power of a test;
- test meaningful hypotheses.

But these points seem not to be so well-known to the many people using statistical methods in environmental science and management. They need to be, and it seems to call for enhancing the way applied statistics is both taught and communicated (in texts and software manuals). There are two main issues, as below.

Inappropriate interpretations

We gave examples from the literature of where silly answers had been obtained by inappropriate interpretation of the results of applying statistical

methods:

- inferring differences between sites, on the basis of comparing p-values, when site sample sizes were remarkably different, from 3 to 78 (in Nature!);
- claiming that there was no association between the density of microbiological indicators of animal faecal material and illness risk to bathers (because the p-value was 5.9%, not <5%)—try convincing your local GP about that one!

We also gave examples of where statutory Regulations (e.g., in USA groundwater management) have greatly confused statistical significance with practical significance.

Such inappropriate uses of statistical methods above are of course avoidable by interpreting well-known methods properly—but it is a surprise to find such mistakes in the literature. Maybe the books and software manuals aren't always as clear as they should be?

Testing meaningful hypotheses

This is more troubling, and the books and manuals are almost silent on the issue, which is: just how does one pose a meaningful two-sided hypothesis for continuous variables, and how does one test it? Perhaps you've seen the glazed look that comes into the eye of a student or course participant when you explain, as we did in the paper, that (at least for continuous environmental variables such as pH, or pollutant concentration) a point null hypothesis is seldom (if ever) true. Their very sensible response can be:

- so why are we testing it?
- I've done stats courses before, but was I told this?

Good questions. In the paper we responded by advocating moving away from testing a point hypothesis, to testing an interval hypothesis (i.e., an "equivalence" test, using noncentral distributions, based on Patel & Gupta, *Biomedical Journal* 26(5):471). Then the null hypothesis could be true. Maybe that's why we got so many reprint requests! To be sure there is some explaining to do:

- testers would have to state the bounds of the interval before doing the test (in testing a point hypothesis this is optional, and only required if one is calculating the power to detect a given difference)—they may not be prepared to do that (so should testing be done at all?);

- the test statistic uses sample estimates of population parameters, but the noncentrality parameter requires prescription of population parameters.

But this explaining can be done. Why isn't it? I know of only one piece of software that does (the "N" package, IDV, Gauting, Germany). So far as texts go there's very little ("In practice these possibilities are rarely used, and we shall not discuss them further" say Pratt et al. 1995, Introduction to Statistical Decision Theory, MIT Press).

Or has this non-statistician missed something?

Graham McBride, NIWA, Hamilton

New Executive Members

At the AGM in Dunedin several new members were elected to the executive: Sharleen Forbes, Richard Penny, James Reilly, and Caryn Thompson. I had hoped to have photos and biographical sketches published in this *Newsletter* but as I go to press I have only Caryn's available.



Caryn Thompson

Caryn is a native of Saint John, New Brunswick, Canada, and has been a lecturer in the Department of Mathematics and Statistics at the University of Otago since August of 1993. She received a B.Sc.(Agr.) in Microbiology and an M.Sc. in Statistics from the University of Guelph. More recently, she obtained a Ph.D. from Oregon State University, under the supervision of Dr. Fred Ramsey. In addition to teaching and research responsibilities, Caryn spends a considerable amount of time on "in-house" consulting, primarily with the Zoology and Biochemistry departments at Otago. Her current research interests include spatial statistics, genetic linkage analysis, and biological and ecological applications of statistics.

Caryn is the new convenor of the Young Statisticians Subcommittee.

I will leave to Richard the job of introducing himself, Sharleen and James in the next Newsletter. -Editor.

anzstat: An e-mail bulletin board for Statistics in Australia and New Zealand

MOTIVATION. Following the success of other statistics bulletin boards in the USA ("stat-l"; also available as the internet newsgroup sci.stat.consult) and the UK ("allstat"), a similar electronic forum has been created for statisticians in Australia and New Zealand.

OBJECTIVE. The list is intended to provide statisticians with a network for cheap, fast and paperless dissemination of information regarding statistical activity in Australia and New Zealand.

WHAT TO BROADCAST. The intention is to create a bulletin board rather than a discussion list, although usage will evolve according to prevailing wishes of subscribers. Appropriate announcements might include (and this list is not exhaustive)

- conferences and workshops (domestic and overseas);
- job opportunities (domestic and overseas) (academic and other);
- seminar schedules for a semester or half-semester;
- overseas visitors;
- useful WWW sites and ftp repositories;
- technical report series titles.

WHAT NOT TO BROADCAST. Please avoid items which might only be of interest to folk in a small geographical area (e.g., this afternoon's seminar at the University of Thargamindah), or of a commercial nature (e.g., my latest book), or of a fairly routine consultancy nature over which a local expert should be approached (e.g., how do you find a confidence interval for a proportion?); or of a one-off nature (e.g., my latest tech report). Exceptions might include announcements of SSA and NZSA meetings, as it is hoped that this list will serve those Societies (although not to the exclusion of non-member subscribers).

HOW TO JOIN. Send email to mailserv@qut.edu.au with no subject and the one line message
subscribe anzstat

HOW TO LEAVE. Send email to mailserv@qut.edu.au with no subject and the one line message
unsubscribe anzstat

HOW TO ADVERTISE. Note that this is **••NOT••** the address for joining and leaving the list! Send email to anzstat@qut.edu.au with an informative subject line and message text. Users of Pegasus mail, inter alia, should be careful that their messages are not encrypted when imported from a file.

HOW TO GET HELP WITH MAILSERV. Send email to mailserv@qut.edu.au with no subject and the one line message
help

ADMINISTRIVIA. This list was established by Dr Rodney Wolff (QUT) and Dr Tania Prvan (UNSW), and operates under the auspices of the Computing Service, Queensland University of Technology, Brisbane, Australia.

Biometrics 95, Coolangatta

Biometrics 95, the biennial conference of the International Biometric Society Australasian Region, was held at the Greenmount Beach Resort at Coolangatta, Queensland, Australia from 25th to 27th September. About 140 delegates attended, mostly from Australia and New Zealand.

The conference was kicked off by Lynne Billard, president of the International Biometric Society, and rolled on smoothly thereafter. Other invited speakers were Adrian Bowman, Brian Cullis, Malcolm Faddy, Walter Federer, Roger Gosden, Charles McGilchrist, Kerrie Mengersen, Emlyn Williams, and Richard Zobel.

A mixture of theoretical and applied talks on a wide spread of topics was delivered. From computer generated designs to Monte Carlo Markov Chains, geostatistics to neural networks, rye-grass to the ovary, the talks demonstrated the diversity of the discipline. The average standard of presentation was pleasingly high. In particular, the students' talks were excellent. Congratulations to Alison Frensham for winning the prize for the best student presentation. Seven posters were also on display.

A meeting of the members of the Australasian Region was also held. Discussion centred on a proposal to alter the by-laws of the Region.

The Greenmount Beach Resort is only a short walk from the beach, and various delegates would emerge from the water in time for breakfast or the next session of talks. A conference dinner on the first day, and lunches provided each day, ensured that most people met one another, making it a very friendly gathering. Good weather prevailed, and delegates were able to concentrate on the conference on hand, secure from the torrential downpours besetting Sydney or the eruption of Mt Ruapehu in New Zealand.

Sincere congratulations to the conference organisers, led by Kaye Basford and Malcolm Faddy, for a job well done. The next conference, in 1997, is being organised by an Adelaide team under Ari Verbyla.

Ken Russell

Statistics at NZAMT

The New Zealand Association of Mathematics Teachers (NZAMT) Biennial Conference was held in Auckland this year. The conference was held over 5 days, Sunday 27 August through to Thursday 31 August.

At NZAMT conference this year NZSA was represented by Sharleen Forbes and Pip Arnold from the Education Sub Committee. Our presentation had three main parts. Sharleen talked about activities arising from the Children's Census she was involved with in 1990. She also discussed Statistics New Zealand's which will be available free to schools for next year's census.

I then focused on two activities for the secondary classroom - using means to derive scores in diving competitions and using spinners as a probability activity.

The third part involved making living histograms and living scattergrams. This was great as we had 80+ people to do this with. The histogram used participants to represent their own resting pulse rate. Then Sharleen led the way for a run up a flight of stairs and around the buildings. We built the scattergram based on resting pulse vs pulse after exercise.

(Imagine a photograph of this living scattergram right here! Unfortunately it didn't reach me in time for this issue. Maybe next issue? -Editor)

At NZAMT conference this year there was in excess of 500 participants and approximately 170 different workshops, including keynote addresses. Of these workshops approximately 10% had a special focus on statistics.

Pip Arnold, NZSA Education Subcommittee

IMS Bulletin Home Page

Sue Wilson writes:

I thought you might like to know that selected parts of The IMS Bulletin are now marked up to appear on WWW; home page:

<http://www.maths.anu.edu.au/ims/>

Not only do we have announcements about IMS meetings, abstracts, employment opportunities, and so on, but also the International Calendar of Statistical Events is published there.

Statistics as a Profession

To many people, the discipline of "statistics" comprises a body of techniques for the effective collection, organisation, communication and summary of data. To the professional statistician, it is more importantly the science of decision making under uncertainty. Statistics is an important tool in research applications from astronomy to zoology. As a result, the trained statistician may have a considerable variety of professional possibilities, including:

Actuarial Science: determining premium rates for insurance risks; measuring effectiveness of loss prevention and loss control programmes

Agriculture and Fisheries: developing superior varieties of farm products; assessing the effectiveness and potential dangers of pesticides and fertilisers; estimating crop production

Biology: exploring the interactions of species with their environment; studying evolution; DNA sequencing

Business: assessing the market for new products; estimating the volume of retail sales; designing inventory control systems

Economics: predicting changes in economics conditions, measuring indicators such as labour force size, and standard of living; analysing consumer behaviour

Education: developing tests for educational aptitude and achievement; assessing school effectiveness; examining the impact of changes in educational programmes

Engineering: developing models for empirical data; determining product safety, reliability and maintainability; statistical design of experiments

Environment and Public Policy: monitoring ground water and soil on industrial land fill sites; environmental risk assessment

Health and Medicine: developing and testing new drugs; delivering improved medical care; preventing, diagnosing and treating disease; epidemiology.

Process Control and Improvement: designing for quality; the control of process variability; the establishment of product standards

Psychology: measuring learning ability, personality characteristics and intelligence; creating psychological scales and other measurement tools

Social Sciences: testing theories about social systems; designing and conducting sample surveys; studying population growth; election polling

Teaching: teaching the science of statistics at the high school level, in liberal arts colleges and in Universities

I stole the above from the home page of an American university. I think that it may have been Ohio State University. I think that it gives a usefully broad and comprehensive picture of the scope of Statistics. -Editor.

Third International S Conference

The third International S conference is planned to take place in Sydney, Australia from the 15th to 17th of July. The conference is intended for a target audience of S developers and high end users both of the language itself and its advanced application modules. Numbers will be strictly limited to 70 delegates.

Program

The program will involve parallel streams, one concentrating on computational issues, such as

- The S language itself, Version 4 and beyond - Graphics in S
- User Interfaces (GUI's etc.)
- Large Objects

and a second stream with emphasis on advanced applications, covering (possibly) areas such as Wavelets, Survival analysis and Spatial Statistics.

Registration

The registration fee is not yet fixed but is likely to be somewhere between AUS\$100 and AUS\$200 (US\$75 - US\$150). Expressions of interest will be invited via the WWW page address below.

Venue

The venue will be Macquarie University, North Ryde, NSW 2113, Australia. The university campus is set on a 135 hectare site about 18 kilometres north-west of the central business district of Sydney.

Accommodation

Accommodation has been reserved in the Stamford Hotel (approx. AUS\$130 per night) and Robert Menzies College (approx. AUS\$55 per night including meals).

Further information is (or will be) available via the WWW page

http://www.dms.CSIRO.AU/sisc/third_s.htm

New Zealand Statistical Association

The Public Interest

Ethical Code

Introduction

The New Zealand Statistical Association (NZSA) has as its object the encouragement of theoretical and applied statistics in New Zealand.

In general, the public has no ready means of judging the quality of professional service except from the reputation of the provider. Membership of an association of professionals, such as the NZSA, will often be taken by the public as an assurance of ability and integrity. Thus it is essential that the highest standards are maintained by all members of the NZSA whenever they are acting professionally and whatever their level of qualification.

This code aims to provide guidance to members of the NZSA in matters of ethics. It is expressed in aspirational terms as a standard to which all can aim. The NZSA accepts for membership all those with an interest in statistics, and membership in itself does not give any guarantee of ability.

CONSTITUTIONAL AUTHORITY

The constitutional authority for the ethical code derives from its formal adoption by the NZSA at its Annual General Meeting on 31 August 1995. The NZSA binds itself to observe the principles of the code.

GUIDELINES FOR ETHICAL CONDUCT

As an aid to understanding, these guidelines have been grouped into the principal duties which all members should endeavour to discharge in pursuing their professional lives.

1. Members should ensure that within their chosen fields they have appropriate knowledge and understanding of relevant legislation, regulations and standards and that they comply with such requirements.

2. Members should in their professional statistical practice have regard to basic human rights and should avoid any actions that adversely affect such rights. Enquiries involving human subjects should, as far as practicable, be based on the freely given informed consent of subjects. The identities of subjects should be kept confidential unless consent for disclosure is explicitly obtained.

Duty to Employers and Clients

3. Members should carry out work with due care and diligence in accordance with the requirements of the employer or client and should, if their professional judgment is over-ruled, indicate the likely consequences.

4. Members should not disclose or authorise to be disclosed, or use for personal gain or to benefit a third party, confidential information acquired in the course of professional practice, except with prior written permission of the employer or client, or at the direction of a court of law. In respect of personal information members should observe the provisions of the Privacy Act 1993. Members should seek to avoid being put in a position where they may become privy to, or party to, activities or information concerning activities which would conflict with their responsibilities in 1 and 2 above.

5. Members should not purport to exercise independent judgment on behalf of a client on any product or service in which they knowingly have any interest, financial or otherwise.

6. Members should not allow any misleading summary of data to be issued in their name. In

particular, a statistical analysis may need to be amplified by a description of the way the data were selected, and the way any apparently erroneous data were corrected or rejected. Explicit statements will generally be needed about the assumptions made when selecting a method of analysis. Views or opinions based on general knowledge or belief should be clearly distinguished from views or opinions derived from the statistical analyses being reported.

Duty to the Profession

7. Members should uphold the reputation of the profession and seek to improve professional standards through participation in their development and use, and should avoid any action which will adversely affect the good standing of statistics and statisticians.

8. Members should seek to advance public knowledge and understanding of statistics, and to counter false or misleading statements which are detrimental to the statistical profession.

9. Members should encourage and support fellow members in their professional development and, where possible, provide opportunities for the development of new entrants to the profession.

10. Members should act with integrity towards fellow statisticians and to members of other professions with whom they are concerned in a professional capacity, and should avoid engaging in any activity which is incompatible with their professional status. Whilst members of the NZSA are free to engage in controversy, no member should cast doubt on the professional competence of another without good cause.

11. Members should not make any public statement in their professional capacity unless competent to do so and, where appropriate, authorised to do so. It is not permissible for a member to speak in the name of the NZSA without the authorisation of the Executive Committee of the NZSA.

Professional Competence and Integrity

12. Members should strive to upgrade their professional knowledge and skill and maintain awareness of technological developments, procedures and standards which are relevant to their field, and should encourage their colleagues to do likewise.

13. Members should seek to conform to recognised good practice including quality standards which are in their judgment relevant, and should encourage their colleagues to do likewise.

14. Members should only offer to do work or provide service which is within their professional competence and should not lay claim to any level of competence which they do not possess.

15. Members should accept professional responsibility for their work and for those under their direction.

16. The standards of integrity required of a professional statistician should not normally conflict with the interests of a client or employer. Members should aim to avoid any such conflict and clearly advise their client of any such potential or actual conflict. If the conflict cannot be resolved satisfactorily the public interest and professional standards must be paramount.

17. Members acting in private practice, or acting independently of salaried employment, have the right of disengagement in the face of a dilemma involving professional standards or conscience. They may wish to seek advice and support from the NZSA.

18. Members in salaried employment who are in serious conflict with their employer over a matter of professional standards or conscience are advised to notify the employer in writing of the contentious circumstances. If they are unable to resolve the conflict to their satisfaction, they may refer the matter to the NZSA, which may be able to advise and to take such action as seems appropriate. ADOPTED - 31 AUGUST 1995

Selections from the International Calendar of Statistical Events

edited by George Styan, McGill University, Montréal
(selections from the full Calendar made by Murray Jorgensen)

The full Calendar can be viewed at the web site of the Institute of Mathematical Statistics (IMS) which can be found at the URL <http://www.maths.anu.edu.au/ims> which also contains a lot of other information about the IMS and its publications. I am grateful to Sue Wilson, the editor of the IMS bulletin, and George Styan for making this information available. - Editor.

The symbol identifies IMS meetings, new or updated entries and >>>the (last) registration/abstract submission deadline date. For further information please contact the address(es) in square brackets: e-mail (internet) addresses appear in small caps & WWW identifies World Wide Web home pages; FAX (& telephone) numbers begin with the country-city codes in parentheses.

Please send additions (preferably using the format as followed below) & (any) corrections to George Styan by e-mail to MT56@MUSICA.MCGILL.CA or to STYAN@MATH.MCGILL.CA or by FAX to (1-514) 398-3899 (e-mail preferred).

1996

January 3-7: Los Angeles, California. 1st California Winter Workshop/School on Stochastic Partial Differential Equations. [Andrea Arata, Center for Applied Mathematical Sciences, Univ of Southern California, 1042 West 36th Place, Los Angeles, CA 90089-1113; spdeconf@cams.usc.edu] >>> November 1, 1995. See The IMS Bulletin 24(1995):532.

January 3-8: Patiala, India. 83rd Session: Indian Science Congress. Panjabi University. Special sessions: Statistical inference & stochastic processes; Probability, stochastic calculus & applications; Survival analysis & reliability. [BLS Prakasa Rao, BLSP@ISID.ERNET.IN] See The IMS Bulletin 24(1995):530.

January 9-12: Chandigarh, India. Workshop on Statistical Inference under Non-standard Conditions. [H. Singh, Dept Statistics, Panjab University, Chandigarh - 160 014, India]

February 23-24: Atlanta, Georgia. Workshop on New Directions in Decision Processes. Center for Applied Probability, Georgia Institute of Technology. [Bob Kertz, kertz@math.gatech.edu] See The IMS Bulletin 24(1995):630.

March 9-11: Cairo, Egypt. Statistics & Computer Modelling in Human & Social Sciences: 8th Annual Conference. [Conference Secretary, Dept of Statistics, Faculty of Economics & Political Science, Cairo University, Orman, Giza, Cairo]

March 10-16: Oberwolfach, Germany. Mathematical Stochastics. Mathematisches Forschungsinstitut. [Mathematisches Forschungsinstitut Oberwolfach, Lorenzenhof, D-77709 Oberwolfach-Walke; KRECK@TOPOLOGIE.MATHEMATIK.UNI-MAINZ.DE, FAX (49-7834) 97938]

March 14-16: Durham, North Carolina. IMS Seminar on Stochastic Processes. Duke University. [Program Chair: Greg Lawler; jose@math.duke.edu] See The IMS Bulletin 24(1995):555.

March 20-22: Villard de Lans, France. Analyse discriminante sur données qualitatives transversales et longitudinales. INRIA, Rhone-Alpes. [Bruno Millon, Unité de recherche INRIA Rhone-Alpes, 46 avenue Félix-Viallet, F-38031 Grenoble Cedex 1; FAX (33) 76.57.47.54]

March 21-24: Athens, Georgia. Symposium on Estimating Functions: IMS & Statistical Society of Canada. [Dawn Tolbert, Dept of Statistics, Univ of Georgia, Athens, GA 30602-1952; FAX (1-706) 542-3391, DAWN@STAT.UGA.EDU] See The IMS Bulletin 24(1995):563.

March 23: Framingham, Massachusetts. Trends in Introductory Applied Statistics Courses: Topics, Techniques, Technology. David S. Moore, Keynote Speaker. Boston ASA Chapter. [Anne Sevin, Dept of Mathematics, Framingham State College, 100 State Street, Framingham, MA 01701; ASEVIN@MECN.MASS.EDU]

March 25-27: Brugge, Belgium. Statistical Methodology in Non-Clinical & Toxicological Studies. [Ludwig Hothorn, HOTHORN@IFGB.UNI-HANNOVER.DE, FAX (49-511) 762-4966]

March 25-28: Guanajuato, Mexico. Workshop on Stochastic and Statistical Methods in Hydrology. [CIMAT, Apdo. Postal 402, Guanajuato, Gto. 36000, Mexico; tel +52-473-271-55; FAX 52-473-25749; PABREU@BUZON.MAIN.CONACYT.MX] See The IMS Bulletin 24(1995):627.

March 27-30: Kobe, Japan. International Federation of Classification Societies: 5th Conference. [International Communications Specialists, Kasho Building 2-14-9, Nihombashi, Chou-ku, Tokyo 103; FAX (81-3) 5620-9499]

April 1-4: York, England. State of the Art in Numerical Analysis. [Program Chair: G Alistair Watson, Dept of Mathematics & Computer Science, Dundee University, Dundee DD1 4HN, Scotland; GAWATSON@MCS.DUNDEE.AC.UK]

April 28-30: Manhattan, Kansas. Conference on Applied Statistics in Agriculture. Kansas State University. [GA Milliken, Dept of Statistics, Kansas State University, Dickens Hall, Manhattan, KS 66506-0802; FAX (1-913) 532-7736]

April 29-May 3: Les Houches, France. Long-Range Dependent Processes, from Models to Applications. Physics School. [P Flandrin (Ird96), Laboratoire de Physique, ENS Lyon, 46 allée d'Italie, F-69364 Lyon Cedex 07; Ird96@physique.ens-lyon.fr] >>> December 1, 1995. See The IMS Bulletin 24(1995):627.

May 8-10: Minneapolis, Minnesota. IMA Tutorial on Monte Carlo Methods. [IMA, Univ of Minnesota, 514 Vincent Hall, 206 Church Street SE, Minneapolis, MN 55455; IMA-STAFF@IMA.UMN.EDU]

May 19-24: Rebild, Denmark. Conference on Highly Structured Stochastic Systems. European Science Foundations Network on HSSS. [Steffen Liholt Lauritzen, Dept of Mathematics & Computer Science, Aalborg University, Fredrik Bajersvej 7e, DK-9220 Aalborg; FAX (45-98) 158129, REBILD@IESD.AUC.DK]

May 20-22: Muncie, Indiana. 19th Annual Midwest Biopharmaceutical Statistics Workshop. Ball State University. [J Whitmore, Hoechst Marion Roussel, PO Box 9627, Kansas City, MO 64134-0627; FAX (1-816) 966-6855, USMARLZ7@IBMMAIL.COM]

May 20-22: Victoria, British Columbia. Triennial SIAM Meeting on Optimization. Victoria Conference Centre. [B Buckley, Dept of Mathematics, Royal Roads Military College, FMO Victoria, BC V0S 1B0, BBUCKLEY@POST.ROYALROADS.CA, <http://www.siam.org>]

May 21-23: Fort Collins, Colorado. 2nd International Symposium on Spatial Accuracy Assessment in Natural Resources & Environmental Sciences. Lory Student Center, Colorado State University. [H Todd Mowrer, Spatial Accuracy Symposium, Rocky Mountain Forest & Range Experiment Station, 240 West Prospect, Fort Collins, CO 80526-2098] >>> 31 August 1995.

May 29-31: Gaithersburg, Maryland. Joint IMS/SPEs Research Conference on Statistics in Quality, Industry, & Technology: 3rd Spring Research Conference on Statistics in

Industry & 13th Quality and Productivity Research Conference. [Eric Lagergren: LAGER@CAM.NIST.GOV or Raghu Kacker, Statistical Engineering Division, Administration Building A337, Gaithersburg, MD 20899; KACKER@CAM.NIST.GOV; http://www.cam.nist.gov/caml/sed/, FAX (1-301) 990-4127] See The IMS Bulletin 24(1995):564.

June 2-5: University Park, Pennsylvania. Statistical Challenges in Modern Astronomy II. Pennsylvania State University. [Gutti Jogesh Babu, http://www.stat.psu.edu/astrostat, Fax (1-814) 863-7114, BABU@STAT.PSU.EDU] See The IMS Bulletin 24(1995):566.

June 2-5: Waterloo, Ontario. Statistical Society of Canada: 24th Annual Meeting. Univ of Waterloo. [CA Patrick, International & Professional Relations Division, Statistics Canada, RH Coats Building 25-F, Tunney's Pasture, Ottawa, Ontario K1A 0T6, Canada; FAX (1-613) 951-1231, PATRCHA@STATCAN.CA

June 13-16: Amherst, Massachusetts. Annual Meeting: Classification Society of North America & Numerical Taxonomy Group. Campus Center Hotel. [Melvin F Janowitz, Dept of Mathematics & Statistics, Univ of Massachusetts, Amherst, MA 01003; MELJ@MATH.UMASS.EDU, JANOWITZ@MATHSTAT.UMASS.EDU; FAX (1-413)-545-1801

June 17-21: Radzików (near Warsaw), Poland. 22nd International Conference on Mathematical Statistics. [Wojciech Zielinski, Dept of Mathematical Statistics, Warsaw Agricultural University, Rakowiecka 26/30, PL-02 528 Warsaw; CONFSTAT@IMPAN.IMPAN.GOV.PL

June 18-22: St. Petersburg, Russia. 2nd International Workshop on Mathematical Methods in Stochastic Simulation & Experimental Design. [V Melas, melas@niimm.spb.su; B Nelson, nelson@primal.iems.nwu.edu] See The IMS Bulletin 24(1995):628.

June 21-23: Minneapolis, Minnesota. Conference on Inference & Applications Commemorating the 25th Year of the University of Minnesota School of Statistics. University of Minnesota. [Shirley Mueffelman, Professional Development & Conference Services, 221 Nolte Center, 315 Pillsbury Drive SE, Minneapolis, MN 55455; SMUEFFEL@MAIL.CEE.UMN.EDU, FAX (1-612) 626-1632

June 23-26: Istanbul, Turkey. 16th Annual International Symposium on Forecasting: Financial Markets & Forecasting. Swiss tel-Istanbul. Sponsored by International Institute of Forecasters, Koç University & Bilkent University. [Muhittin Oral, Faculty of Business Administration, Bilkent University, 06533 Bilkent, Ankara; ORALM@BILKENT.EDU.TR, FAX (90-418) 656-7722] >>> February 15, 1996.

June 23-26: Tel Aviv, Israel. International Conference on Multiple Comparisons. [Dept of Statistics & OR, Tel Aviv University, Tel Aviv; MCP@MATH.TAU.AC.IL

June 24-26: Dunedin, New Zealand. SEEM 2 (Statistics and Environmental Monitoring 2): Decision Making and Risk Assessment in Biology. [Conference Administrator, Centre for Applications of Statistics and Mathematics, University of Otago, PO Box 56, Dunedin, New Zealand. CASM@MATHS.OTAGO.AC.NZ, FAX (64-3) 479-7774]

June 24-26: Dallas/Fort Worth, Texas. 4th International Applied Statistics in Industry Conference. International Statistical Applications Institute [T Caldwell, ISAI, 2183 South Cooper Court, Wichita, KS 67207-5834; TRACY.CALDWELL@ACGINC.COM, FAX (1-316) 689-6889] Previously announced for June 3-5.

June 24-26: Pullman, Washington. IMS Western Regional Meeting & International Biometric Society/WNAR Summer Meeting. [IMS Program Chair: Deborah Nolan, Dept of Statistics, Univ of California, Berkeley, CA 94720-3860; NOLAN@STAT.BERKELEY.EDU; FAX (1-510) 642-7092]

>>> February 1, 1996. See The IMS Bulletin 24(1995):574.

June 24-August 14: Madison, Wisconsin. Summer Internships in Probability and Stochastic processes [Probability Intern Program, Center for the Mathematical Sciences, University of Wisconsin-Madison, 1308 West Dayton Street, Madison, WI 53715-1149; PIP@CMS.WISC.EDU, or call T. Kurtz at (608) 263-4659.] See The IMS Bulletin 24(1995):633.

June 27-30: Banff, Alberta. Psychometric Society: Annual Meeting. [Shizuhiko Nishisato, OISE, 252 Bloor Street West, Toronto, Ontario M5S 1V6; SNISHISATO@OISE.ON.CA, FAX (1-416) 926-4725

June 30: Amsterdam, The Netherlands. Multivariate Dependencies & Graphical Chain Models. Short Course by Sir David Cox & Nanny Wermuth. Precedes the IBC-96 (July 1-5). [Bureau PAOG Amsterdam, Tafelbergweg 25, NL-1105 BC Amsterdam; FAX (31-20) 696-3228, VANHOUEW@RULLF2.MEDFAC.LEIDENUNIVERSITYNL] >>> February 1, 1996.

June 30-July 3: Edinburgh, Scotland. 3rd International Conference on Forensic Statistics. University of Edinburgh. [Colin Aitken, Dept of Mathematics & Statistics, Univ of Edinburgh, Mayfield Road, Edinburgh EH9 3JZ; ICFS96@MATHS.ED.AC.UK

July 1-5: Amsterdam, The Netherlands. 18th International Biometric Conference: IBC-96. Free University. [Bureau PAOG Amsterdam, Tafelbergweg 25, NL-1105 BC Amsterdam; FAX (31-20) 696-3228, VANHOUEW@RULLF2.MEDFAC.LEIDENUNIVERSITYNL] >>> February 1, 1996.

July 3-5: Leeds, England. 16th Leeds Annual Statistics Research Workshop: Image Fusion & Shape Variability Techniques. University of Leeds. [Christine A. Gill, Dept of Statistics, University of Leeds, Leeds LS2 9JT; workshop@amsta.leeds.ac.uk, FAX (44-113) 233-5157

July 6: Amsterdam, The Netherlands. Sample Size Determination in Efficacy & Equivalence Trials. Short Course by Simon Cleall & Ann Whitehead. Follows the IBC-96 (July 1-5). [Bureau POG Amsterdam, Tafelbergweg 25, NL-1105 BC Amsterdam; FAX (31-20) 696-3228, VANHOUEW@RULLF2.MEDFAC.LEIDENUNIVERSITYNL] >>> February 1, 1996.

July 8-12: Sydney, Australia. Sydney International Statistical Congress: IMS Special Topics Meeting: Contemporary Nonparametrics; 13th Australian Statistical Conference: Quality & Environment; Computer Science & Statistics: 28th Symposium on the Interface. [N. Fisher, Division of Mathematics & Statistics, CSIRO, Locked Bag 17, North Ryde NSW 2113; FAX (61-2) 325-3200, SYDNEY96@syd.dms.csiro.au] See The IMS Bulletin 24(1995):575.

July 15-19: Orvieto, Italy. 11th International Workshop on Statistical Modelling. [Brian Marx, Dept of Experimental Statistics, Louisiana State University, Baton Rouge, LA 70803-5606; FAX (1-504) 388-8344, brian@stat.lsu.edu

July 17-19: Gold Coast, Australia. 2nd Australia-Japan Workshop on Stochastic Models. ANA Hotel. [RJ Wilson, Dept of Mathematics, Univ of Queensland, Brisbane 4072; FAX (61-7) 3870-2272, RJW@MATHS.UQ.OZ.AU

July 18-19: Shrewsbury, England. 5th International Workshop on Matrix Methods for Statistics. Gateway Centre. [RW Farebrother, 11 Castle Road, Bayston Hill, Shrewsbury, Shropshire SY3 0NF; FAX (441-61) 275-4812, r.w.farebrother@man.ac.uk

July 21-23: St. Petersburg, Russia. Int. Conference on Problems of Statistical Education. [V Shvykov, Sonoma State University, Rohnert Park, CA 94928; FAX (1-707) 664-4009

July 25-31: Moscow, Russia. Int. Conf. on Applied Statistics in Business & Economics. [V Shvykov, Sonoma State University,

Rohnert Park, CA 94928; FAX (1-707) 664-4009

July 27-30: Cambridge, England. Conference on Numerical Mathematics Celebrating the 60th Birthday of M. J. D. Powell. [MD Buhmann, Mathematics Dept, ETH Zentrum, CH-8092 Zürich; MDB@MATH.ETHZ.CH]

III August 4-8: Chicago, Illinois. Joint Statistical Meetings: IMS (59th Annual Meeting), American Statistical Association (ASA) & International Biometric Society (ENAR/WNAR). Hyatt Regency. [MEETINGS@ASA.MHS.COMPUSE.RVE.COM; ASA, 1429 Duke Street, Alexandria, VA 22314-3402; FAX (1-703) 684-2037] See The IMS Bulletin 24(1995):577.

August 12-16: Jilin, China. 2nd China Matrix Theory Conference. Chinese Mathematical Society & Jilin Normal College. [Bit-Shun Tam, Dept of Mathematics, Tamkang University, Taiwan 25137; BSM01@HPAP.TKU.EDU.TW, FAX (886-2) 620-9916]

Ô August 20-24: Brno, Czech Republic. Environmental Statistics: Satellite Conference to the Vienna World Congress. [Ivana Horov Ω , ESES, Dept of Applied Mathematics, Jan Ω (c,sup4(\dot{U}))kovo n Ω m. 2a, CZ-662 95, Brno; ESES@MATH.MUNI.CZ, FAX (42-425) 4121-0337, <http://www.karlin.mff.cuni.cz/akce/eses/eses.html>]

Ô August 21-24: Györ, Hungary. Stochastic Equations: Satellite Conference to the Vienna World Congress. [Laszlo Markus, Dept of Probability & Statistics, Eötvös Lorand University, H-1088 Budapest; MARKUS@LUDENS.ELTE.HU]

Ô August 23-25: Wrocław, Poland. Stable Processes & Other Heavy-Tailed Models for Highly Volatile Phenomena. Satellite Meeting to Vienna World Congress. [Alek Weron, Hugo Steinhaus Center for Stochastic Methods, Technical University of Wrocław, Wyspińskiego 27, PL 50-370 Wrocław, FAX (48-71) 22-3664, weron@IM.PWR.WROC.PL]

August 24-29: Malang, Indonesia. 5th Islamic Countries Conference on Statistical Sciences. Brawijaya University. [Akhlaq Ahmad, Executive Director-ISOSS, RB-2 Awami Complex, Usman Block, New Garden Town, Lahore 54600; FAX (92-42) 586-9659]

Ô August 26-30: Barcelona, Spain. COMPSTAT'96: 12th Symposium on Computational Statistics. Universitat Politècnica de Catalunya. [A Prat, Dept of Statistics, Universitat Politècnica de Catalunya, Avenida Diagonal 647, E-08028, Barcelona; COMPSTAT@EIO.UPC.ES, FAX (34-3) 401-6575]

ÔIII August 26-31: Vienna, Austria. Bernoulli Society for Mathematical Statistics & Probability: 4th World Congress. Wirtschaftsuniversität Wien (Auggasse 2-6). [Georg Pflug, Dept of Statistics, OR & Computer Science, Universität Wien, Universitätsstraße 5, A-1010 Wien; FAX (43-1) 407-63.55.88, WC96@SMC.UNIVIE.AC.AT, <http://smc.univie.ac.at/~bernoulli>] See The IMS Bulletin 24(1995): 582. >>> May 1, 1996.

NZSA Conference 1996

The 1996 Conference will be at Victoria University of Wellington, on Thursday and Friday 29 and 30 August, and with a theme of 'Research in Statistical Education'. There will be parallel sessions for general statistical papers. Details next *Newsletter*.

September 2-4: Budapest, Hungary. IASS Conference on Problems & Experiences of Sample Surveys in Transition Countries. [L Vita, Dept of Statistics, Budapest University of Economic Sciences, POB 49, H-1828 Budapest 5; FAX (36-1) 217-6118, VITA@URSUS.BKE.HU]

Ô September 2-6: Berlin, Germany. Asymptotic Methods in Stochastic Dynamics & Nonparametric Statistics: Satellite Conference to the Vienna World Congress. [Michael Nussbaum,

Angewandte Analysis und Stochastik, Weierstrass Institut Berlin, Mohrenstraße 39, D-110117 Berlin; NUSSBAUM@WIAS-BERLIN.DE, FAX (49-30) 204-4975, <http://www.wias-berlin.de>

Ô September 2-6: Guildford, England. Royal Statistical Society General Conference. University of Surrey. [Paul Marriott, Dept of Mathematical & Computing Services, University of Surrey, Guildford GU2 5XH; P.Marriott@mcs.surrey.ac.uk, FAX (44-1483) 259385]

September 11-13: London, England. 2nd International Conference on Survey & Statistical Computing. Imperial College. [Randy Banks, Assoc. for Survey Computing, ESRC Centre on Micro-Social Change, University of Essex, Colchester CO4 3SQ; FAX (44-1-206) 873151, RANDY@ESSEX.AC.UK]

Ô September 16-19, Wrocław, Poland. 26th International Biometrical Colloquium. [S Mejza, Agricultural University of Poznań(n,sup1(\llcorner)), Wojska Polskiego 28, PL-60-637 Poznań(n,sup1(\llcorner)); FAX (48-61) 487-146, smejza@au.poznan.pl]

September 23-27: Karlsruhe, Germany. German Statistical Week. [Verband Deutscher Städtestatistiker, Amt für Statistik und Wahlen, Schwartzstraße 73, D-46045 Oberhausen]

October 14-17: Madrid, Spain. 20th Conference on Regional & Urban Statistics. [Antonio Martínez López, Instituto Nacional de Estadística, Paseo de la Castellana 183, E-28046 Madrid; FAX (34-1) 583-7918]

Ô October 15-18: Nantucket, Massachusetts. Modelling Longitudinal & Spatially Correlated Data: Methods, Applications & Future Directions. Jointly sponsored by International Biometric Society (ENAR), American Statistical Association (Biometrics Section, Section on Statistics & Environment) & International Environmetrics Society. [Timothy G. Gregoire, College of Forestry & Wildlife Resources, Virginia Polytechnic Institute & State University, Blacksburg, VA 24061-0324, FAX (1-540) 231-3698; TGG@VT.EDU; <http://tgg.fw.vt.edu/Nantucket/>]

ÔIII October 17-19: Chapel Hill, North Carolina. IMS Special Topics Meeting (in conjunction with Hotelling anniversary) [Ross Leadbetter, Statistics Dept., Univ. of NC, Chapel Hill N.C. 27599 USA; FAX (1-919) 962-1279; MRL@STAT.UNC.EDU] See The IMS Bulletin 24(1995):584.

Ô October 23-25: Kalamazoo, Michigan. 4th Great Lakes Symposium on Experimental Design: Industrial & Medical. [Joseph W. McKean, Dept of Mathematics & Statistics, Western Michigan University, Kalamazoo, MI 49008-5152; joe@stat.wmich.edu, FAX (1-616) 387-4530]

December: Cape Town, South Africa. International Society for Bayesian Analysis Conference. [Gina Joubert, Afdeling Biostatistiek, Univ of the Orange Free State, PO Box 339(G6), Bloemfontein 9300; GNFMGJ@FRM.UOVS.AC.ZA]

December 14-16: Cairo, Egypt. Statistics, Computer Science & Operations Research: 31st Annual Conference. [Elham Shoukry, Institute of Statistical Studies & Research, Cairo University, Orman, Giza, Cairo; FAX (20-2) 342533]

Ô December 29, 1996-January 1, 1997: Cochin, India. Quality Improvement Through Statistical Methods. University of Cochin. [Bovas Abraham, Director: Institute for Improvement in Quality & Productivity, University of Waterloo, Waterloo, Ontario N2L 3G1; FAX (1-519) 746-5524, BABRAHAM@MATH.UWATERLOO.CA]

1997

January 10-13: San Diego, California. Joint Mathematics Meetings: American Mathematical Society (AMS) & Mathematical Association of America (MAA). [H Daly, AMS, PO Box 6887, Providence, RI 02904-6887; MEET@MATH.AMS.ORG]

February 13-18: Seattle, Washington. AAAS Annual Meeting. [AAAS, 1333 H Street NW, Washington, DC 20005; FAX (1-202) 289-4021]

Statistical visitors to New Zealand

The following information is extracted from List 42, dated 1 November 1995, of the series "Mathematical Visitors to New Zealand" compiled by Dr David Robinson for the New Zealand Mathematical Society. The editor wishes to thank the NZMS and David for making this information available. Please support David in this work by sending details of your visitors to him.

The main purpose of this list is to enable other institutions to invite visitors to spend time with them. Anyone wishing to issue such an invitation should do so through the principal contact person.

The information for each item is arranged as follows:

Name of visitor; home institution; whether accompanied; principal field of interest; dates of visit; principal host institution; principal contact person; comments.

Professor Odo Diekmann; University of Utrecht, The Netherlands; mathematical biology; February 1996; Professor G C Wake (also AgResearch Wallaceville; Mick Roberts); ANZIAM 96 invited speaker

Philip Dixon; University of Georgia; accompanied by wife, Janet Dixon (next entry); statistics; January to December 1996; University of Otago; Prof Bryan Manly.

Janet Dixon; University of Georgia; accompanied by husband, Philip Dixon (previous entry); algebra and calculus; January to December 1996; University of Otago; Prof Bryan Manly.

Professor Bernard Flury; Indiana University; 1 September to 30 November 1995; University of Auckland; Professor George Seber.

Dr Marti McCracken; Universidad De Concepcion, Chile; statistics; 1 July to 31 December 1995; University of Otago; Prof Bryan Manly.

Dr Soeren Perrey; University of Bielefeld; accompanied by wife (Marlies) and son (Samuel); combinatorics (game theory), mathematical biology; November 1995 to October 1997; Massey University; Prof. Mike Hendy; Post-doctoral Fellow.

Professor Romano Scozzafava; School of Engineering; Universita 'La Sapienza', Rome, Italy; subjective theory of probability in engineering; 9 August to 30 September 1996; University of Canterbury; Dr Frank Lad; Erskine Fellow.

Professor Anne Penfold Street; University of Queensland; combinatorics; February 1996; University of Canterbury; Dr Derrick Breach.

Dr Tandy Warnow; Department of Computer Science, University of Pennsylvania; unaccompanied; theoretical computer science, combinatorics, computational biology, linguistics; 6 November to 2 December 1995; University of Canterbury; Dr Mike Steel; recipient NSF Young Investigator Award.

Please note: Production of these lists is dependent on

me receiving information. When you know about a visit (whether it be definite, very likely, or possible), would you please forward the details to me at the earliest convenient time. Thank you.

David Robinson
N.Z. Mathematical Society Visitors' Co-ordinator
Department of Mathematics and Statistics
Private Bag 4800
University of Canterbury
Christchurch, New Zealand

email: d.robinson@math.canterbury.ac.nz
fax: (03) 364 2587

Statistics and Environmental Monitoring 2: Decision Making and Risk Assessment in Biology.

June 24-26: Dunedin, New Zealand. [Conference Administrator, Centre for Applications of Statistics and Mathematics, University of Otago, PO Box 56, Dunedin, New Zealand. CASM@MATHS.OTAGO.AC.NZ, FAX (64-3) 479-7774]

ANZIAM Conference 1996 at Masterton

The Director of ANZIAM '96, Professor Graeme Wake, wishes to remind people that Registration for ANZIAM '96 is needed before 8th December 1995 since accommodation at the Solvay Park Travelodge cannot be guaranteed after that date. So, if you intend to go to the Conference will you please register as soon as possible. Would you also let your students know. Information on the Conference can be obtained by email to anziam@massey.ac.nz

Bill Summerfield, Hon. Sec. ANZIAM

Editorial

Continued from page 3.

Finally, keep up your support of this *Newsletter!* I have enjoyed continuing the tradition of my predecessors in keeping this a lively publication. I believe that the NZSA has been a stabilizing force for the statistical profession as the public sector, a traditional employer of statisticians, has gone through many changes in the past decade. Apart from email, executive conference calls and personal contact at conferences the *Newsletter* is the main means of communication that we have, and its health is an index of the health of the Association.

Murray Jorgensen

maj@waikato.ac.nz

Local News

University of Waikato and Ruakura

The dawning of the new Department of Statistics at Waikato is nearly upon us, but in many ways it has already arrived. Although the Department officially comes into existence on the 1st of January 1996, we have actually been functioning informally as a Department for some time. You might even say formally in the sense of having minutes taken down by our newly appointed secretary, Karen de Voy. It feels good to be going to meetings dedicated to the improvement of statistics teaching and research as their main purpose, rather than forming a minor part of the business of a combined department. I would like to record thanks, though, to Douglas Bridges, Professor and Chairperson of the predecessor Department of Mathematics and Statistics for his understanding of and sympathy to the aspirations of the subject of Statistics. The support of Ian Graham, Professor and Dean of the School of Computing and Mathematical Sciences for the creation of a third Department in his school was also important, and our thanks go to him as well.

Jocelyn Dale is on maternity leave for the first semester of 1996, and Lyn Hunt has been appointed to a temporary lectureship for 1996. Bill Bolstad plans leave in the second semester of 1996. Jane Andrew, from the UK, joins us as a senior tutor in January.

The new Department has three honorary lecturers: Neil Cox and Harold Henderson from AgResearch Ruakura, and Peter Hill of Hillcrest Chapel (Open Brethren). Peter left the Department of Mathematics at Waikato ten years ago to teach at a mission school in India.

Joseph Jonazi, of the University of Malawi, has been an MSc student under a Commonwealth Scholarship. He has been having a close look at repeated measures data under the guidance of Neil Cox. He will shortly return to Malawi, but he has been joined by Samuel Manda, also from Malawi, who is here to do a DPhil. Our other overseas graduate student is Shapiee Abdul Rahman from East Malaysia who is doing an MSc. The DPhil study award made possible by Nye John's Marsden Fund grant has been taken up by Kathy Ruggiero of the Victoria State Department of Agriculture. She will be working with Nye on a problem in the design of complex experiments.

Nye John, Harold Henderson, Martin Upsdell and Nye John participated in Biometrics 95 at Coolangatta in September. Nye is President of the Australasian Region of the International Biometric Society. Murray Jorgensen and Lyn Hunt attended a workshop given by Martin Tanner (Tools for Statistical Inference) at Central Queensland University. We met Graham Wood in his new fiefdom.

Recent seminar speakers:

Neil Cox (AgResearch Ruakura), Application of HGLMs to Paired Comparison of Binomial Data; Shayle Searle (Cornell University), A unifying derivation of BLUP; and some sum-to-zero properties; H A David (Iowa State University), The Paired t-test under Artificial Pairing; Malcolm Faddy (University of Queensland), Extended Poisson process modelling and analysis of count data; Ann Mitchell (Imperial College), On Rao's distance measure; Bruce Benseman (Industrial Research Ltd, Wellington), Optimising Opportunities in Australasian Companies.

Murray Jorgensen

Massey University

Since the publication of the last Newsletter Jeff Hunter has been converted from an Acting Dean into a real one. With all uncertainty about its future removed, the Faculty of Information and Mathematical Sciences is busily polishing regulations for its new degrees, the Bachelor of Information Science and associated Diplomas and Masterate. Uncertainty about the meaning of 'we' creates new difficulties however...

We had three visitors to shed brightness on the darker moments of the second semester. Despite our best efforts we were only able to persuade one, Govindaraju (Raj), to stay. Chuck Gates and Ann Mitchell have returned home. Raj is from Bharathier University in India. His interests (apart from keeping warm) are in statistical quality control and acceptance sampling. His wife and child are predicted to complete immigration formalities some time around the end of the year.

Our persuasive efforts have failed too with Charles Lawoko. He is leaving to become the statistical guru for the Business Faculty at Queensland University of Technology. Charles will be missed not only by the Department, but by Massey and Palmerston North.

Richard Barker has completed his PhD and is now working for Landcare in Christchurch. More temporarily, Siva Ganesh has returned and Doug Stirling has gone. Doug has been at Wollongong writing the Models'n'Data book with David Griffiths, but is now on his way to Britain.

Seminars (individuals are from the Statistics Department unless otherwise stated)

Renate Meyer (Department of Statistics, Auckland University), 'Nonlinear eigenvector algorithms for local optimization' Bruce Dunning, 'Use of statistical language' Yu Hayakawa (ISOR, Victoria University), 'Mixed Poisson-type processes with applications in software reliability'

Chin Diew Lai, 'On the increase of the expected lifetime by parallel redundancy' Bernard Flury, (Department of Mathematics, Indiana University) 'Principal points and self-consistent approximations' Charles Gates, (Texas A&M University) 'Estimating Arribada size using a modified instantaneous count' Ann Mitchell, (Imperial College, London) 'Rao's distance measure' K Govindaraju, 'Fractional acceptance numbers' Terry Moore, 'Distributions for hazard data with bounded lifetime' Shayle Searle, (Cornell University) 'Notes on BLUP: A unifying derivation and some summing-to-zero properties' Greg Arnold, 'Trellis' Richard Barker, 'Multi strata mark-capture models with ancillary re-sightings' Hugh Morton, 'The effects of lane choice for 200 and 400 metre running' Prof G Ferrari, (Department of Statistics, University of Florence) 'On purchasing power parities calculation at the basic headings level and related topics' Mark Bebbington, 'Synthetic seismicity models'

Greg Arnold

VUW

By the August vacation, ISOR was getting quite thin on numbers. Peter Smith commenced study leave in June, while Megan Clark and David Vere-Jones started in August. There was a further exodus of staff to conferences, in particular the Aitken Conference in Dunedin.

Peter Smith initially visited the University of Washington in Seattle, and is now visiting the University of Exeter/British Telecom. Megan Clark is visiting Chester College of Higher Education at Chester.

David Vere-Jones has been working in China and is now at the Tokyo Institute of Technology until March 1996. In China he was working with Professor Ma Li at the State Seismological Bureau in Beijing, as part of a joint Asia 2000 project.

In August, Peter Thomson attended the ISI Meeting in Beijing. Tony Vignaux attended a Maximum Entropy Workshop in Santa Fe, and then went on to London to attend his book launch. The book is entitled "Interpreting Evidence: Evaluating Forensic

Science in the Courtroom", and is coauthored with Bernard Robertson, who was a member of the Law Faculty at Victoria, and is now a member of the Business Law Department at Massey.

Bevan Blair (Stochastic Models in Finance), Suzette Lizamore (Topics in Maximum Entropy Applications) and Grant Telfar (Acceleration Techniques for Simulated Annealing) have submitted their MSc theses. Bevan is now studying for a PhD at Lancaster University. Grant has joined a number of other ISOR graduates working at Core Management Systems Limited, in Wellington.

Ross Renner has recently been promoted to Reader/Associate Professor. Ross work as consulting statistician is well known and highly appreciated by staff and generations of graduate students whose research and careers, have been assisted by his expertise. His success is due to the breadth and dept of his knowledge and ability to use statistics in an innovative way to solve a wide range of problems. Less well known, is the international reputation that he has gained through the application of these skills in independent research and collaborative work with scientists from several disciplines. In particular, his development of the new technique of endmember analysis is considered seminal, in that it provides earth and marine scientists with a much better approach to the solution of fundamental problems than has previously been available.

Visitors in the last few months have included Professor Norberg from the University of Copenhagen and Professor Mark Matthews from MIT. Mark worked with David Vere-Jones on evaluating the M8 Algorithm, an earthquake prediction algorithm used by Russian seismologists.

Yu Hayakawa and David Harte

Applied Statistics Group, MAF Quality Management.

You would never believe it, but we are back in the Dominion Farmers' Institute, now known as Seabridge House, partly because it isn't a house. It is all pink and yellow and black, with a seven storey foyer, and the moa is now browsing among a whole lot of greenery, trying to avoid the tentacles of a seven storey jellyfish floating near the ceiling. This is a temporary move until we find new premises, with the threat of an airless and windowless environment on The Terrace hanging over us if we fail to find substitutes to put up with it instead.

We are battling on in the usual way, sometimes wishing we had more to do and sometimes wishing we had less to do, but always trying to pay our way. Current work involves helping to develop performance based audit systems and a premises rating system for the meat industry, work for the Dairy Industry Training Council, validation of NZ methods for ring trials in the Dairy Industry and development of maximum pest limits for importation of certain bulk products. John spent a bit of time at Crop and Food at Levin filling in while Ruth Butler was overseas, and has continued to be involved in a smallish way with Wallaceville.

The inter-lab comparison program has spread overseas, but incognito, while our seed testing work will largely be taken over by Zurich, using our programs.

Peter Lee will be leaving us in the new year (O.E. - is this lurgi still around? I though Mr Birch and Dr Smith had developed an effective vaccine, but apparently it hasn't worked very well with Peter, or possibly he just escaped being vaccinated). He will be remembered as long as we stay in DFI through the Lee Memorial Window (the one that opens). In any case, it looks as though we may have a vacancy coming up.

John Jowett.

Applied Maths, Industrial Research Limited.

Thanks to the organisers of the Aitken Conference for a most enjoyable conference! Aitken's life and work provided a unifying theme that saw linear algebraists sharing haggis with actuaries at the conference dinner.

The Applied Maths team has recently gained its ISO 9001 accreditation. You can find out more about us by navigating through Industrial Research's WWW pages on, <http://www.irl.cri.nz>

Aaron Tindale, who has just completed a BSc in Statistics and Management Science from the University of Canterbury, is our summer student. He's busy learning Splus and FORTRAN at the moment in preparation for some non-linear modelling of rainfall series.

Dr Russell Boyles will be visiting Applied Maths from about January 24 to February 14 next year. He will be giving seminars/workshops on Statistical Process Control at venues to be arranged/announced.

Donal P Krouse

Some Web Sites

Announcing the "Probability Web", a growing collection of Web pages on Probability; see <http://www.maths.uq.oz.au/~pkp/probweb/probweb.html>
Phil Pollett, Department of Mathematics, The University of Queensland

Those of you with web pages at your department or institution should consider asking your local webmaster to add a link to the SSC (Statistical Society of Canada) home page:

<http://mast.queensu.ca/~ssc/>

There isn't much there yet (other than the e-mail directory) but more is on its way...

Peter D.M. Macdonald, McMaster University

And you can find the SSA (Statistical Society of Australia) home page at:

http://www.mathstat.flinders.edu.au/stats/stat_soc.html

Find out many other statistical sites by going to

<http://lib.stat.cmu.edu/www/otherplaces/>

Statlib's "other places" index.

Here's Chapman & Hall:

<http://www.thomson.com/chaphall.html>

and you must visit the Louvre at, say,

<http://cutl.city.unisa.edu.au/louvre/>

then there's the Journal of Statistical Software at

<http://www.stat.ucla.edu/journals/jss/>

and at

<http://www.stat.ufl.edu/vlib/statistics.html>

there's a site calling itself "The World-Wide Web Virtual Library: Statistics".

Finally if you are a Gilbert and Sullivan fan like me you will want to visit

<http://diamond.idbsu.edu/gas/GaS.html>

the Gilbert and Sullivan Archive Home Page. Have fun!

Murray Jorgensen

Aitken Memoir

In association with the Aitken Centennial the University of Otago has published *To catch the spirit* an autobiographical memoir by A.C. Aitken with an introduction by P. C. Fenton. For information contact the Otago Department of Mathematics and Statistics, Email casm@maths.otago.ac.nz

The New Zealand Statistical Association (Inc)

PO Box 1731
Wellington

The NZ Statistical Association, founded in 1948, is New Zealand's only association for professional statisticians. The association has about 400 individual members and is growing strongly. Many of its members are employed by universities, government departments, or research institutes, with growing participation by senior students, who are offered free membership for their first year.

The constitutional aims and objectives of the association are *the encouragement of theoretical and applied statistics in New Zealand*. In 1992 the association agreed on a more comprehensive set of vision and mission statements including the short description:

The mission of the NZSA is to lead New Zealand to value and make intelligent use of statistical thinking and good statistical practice.

(The complete vision and mission statement, which serves to guide the executive and membership in planning and decision-making, is available from the secretary.)

Services to Members

Members receive the official journal *The New Zealand Statistician* twice yearly and are kept up to date on statistical happenings within New Zealand and interesting overseas developments with regular newsletters. A feature of the New Zealand statistical year is the annual three-day conference, normally held in mid-year. In addition to invited and contributed papers on a wide range of topics, there are often special sessions with panel discussion on topics of current concern to the profession.



Ken Jury at the Flexi poster paper with David Wheeler. Martin Upsdell is demonstrating on the PC.



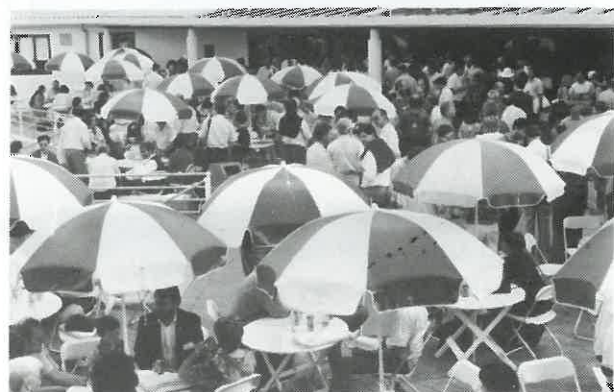
Professional Standards

At the 1995 annual conference the association adopted a 'Code of Ethics'. Particular attention was paid to the positions adopted by kindred organisations in Australia, UK, and USA on the question of formal accreditation of statisticians. No immediate action will be taken on a formal accreditation scheme but work is continuing on the preparation of guidelines of good practice.

Links with other Bodies

The association is an affiliated organisation of the International Statistical Institute and maintains close relations with a number of statistical societies around the world. It is also a member body of the Royal Society of New Zealand and is part of the Mathematical Sciences Council of New Zealand.

Cooperation with related societies sometimes leads to joint conferences such as the International Biometric Conference (IBC) held in Hamilton at the end of 1992.



On the terrace at the IBC

Survey Appraisals and Public Questions

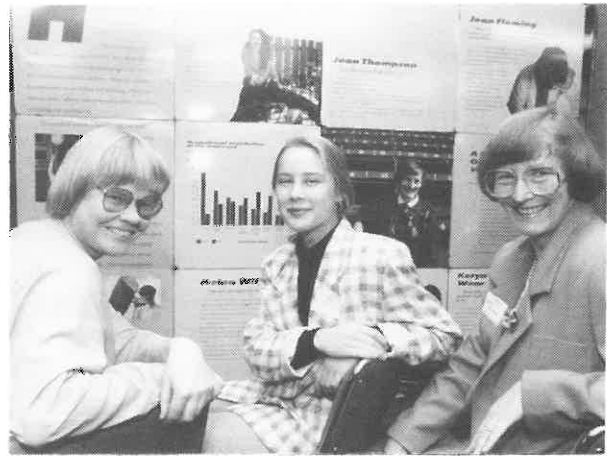
The Survey Appraisals and Public Questions Committee aims to raise the standard of statistical practice and the level of public understanding of statistics in New Zealand by conducting independent appraisals of sample surveys, opinion polls and other statistical statements in relation to the statistical validity of their results. It is regularly called upon to comment on contentious polls and surveys.

Education

The Education Committee aims to improve the quality of statistical education for New Zealand students. It participates in advisory groups related to curriculum matters and helps organise conferences and courses for the benefit of those teaching statistics at all levels. With the support of some of our corporate members, the association sponsors prizes for statistical excellence at each of the regional Science Fairs.

Special Projects

The association has pursued a number of special projects in recent years. The focus for 1993, our Suffrage Centennial Year, was on a series of initiatives culminating in a book celebrating the role of women in statistics, and an associated display.



Helen Stott, convenor women's suffrage project, Megan Hurnard, seventh former at Wellington Girls College, and Jean Thompson, then President NZSA, at the launch of the NZSA display 'Opportunities - Living Numbers' in April 1993.

Officers of the New Zealand Statistical Association

- President** **Jeff Hunter**
Information and Mathematical Sciences,
Massey University
- Secretary** **Charles Lawoko**
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University of Otago
- Jean Thompson**
JAD Associates, Wellington



NZSA Executive meeting at IBC

Application to join NZSA

I wish to join the New Zealand Statistical Association

Name:.....

Address:.....

Phone:.....

Fax:.....

Email:.....

Occupation:.....

Employer:.....

Areas of Interest: eg, Experimental Design, Time Series, Stochastic Processes, Official Statistics, etc

Please circle membership category and enclose cheque made out to NZ Statistical Association.

Ordinary members NZ \$30, Overseas \$35

Student and Retired \$15, Overseas \$17.50

(NOTE: First year free for students)

Signature:.....

Date:.....

Post to NZSA, PO Box 1731, Wellington

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