

Ken Jury retires



Ken Jury retired as General Manager of the Dairying Research Corporation in April.

Ken graduated MSc with 1st Class Honours from the University of Canterbury. He began working at Ruakura in 1958 and within a year was awarded a Shircliffe

Fellowship to Cambridge University from 1959-60, where he studied for a Diploma in Mathematical Statistics.

He assumed responsibilities for biometrics and computing in 1969 at Ruakura Animal Research Station and supervised the development of computing facilities for the research campus. He saw, at an early stage, the possibilities in electronic data processing techniques for handling the large data sets generated by the Genetics Section. Systems of data handling and manipulation were derived and analysis packages developed that allowed the sequential fitting of linear models to the characteristically unbalanced data that arises from many animal experiments.

Ken's contribution was to provide constructive biometrical support to scientists through developing a rapport and respect which encouraged them to acknowledge and seek out the contribution he could make in experimental design and analysis. The fact that he is a co-author of over 60 scientific papers reflects his contribution.

This role of encouraging and helping fellow scientists and particularly young scientists was carried through in his position as Director of

Animal Research at Ruakura between 1979 and 1987. His academic and administrative abilities, interest in the advancement of young people and the application of biological and mathematical sciences in agriculture led to his appointment from 1979 to the Council of the University of Waikato. Ken's contributions were honoured when he was presented the Animal Production Society's McMeekan Memorial Award in 1988 and he served as its President in 1990.

Although Ken moved into management he was not lost completely to statistics! As a manager he continued to use his statistical eye in reviewing projects and publications. He was involved in setting up the Waikato Centre for Applied Statistics as a joint Ruakura and University Centre to foster the development and effective use of statistical methods in applied science and to offer a statistical consultancy service. Ken led the NZ delegation to the 1990 International Biometric Conference in Budapest and chaired the local organizing committee for the subsequent conference, when more than 500 statisticians converged on Hamilton in 1992.

Ken has been the first Chief Executive of the Dairying Research Corporation, established in 1990 as a joint venture between MAF and the NZ Dairy Board. The budget has risen from \$4 million at the start to \$6 million this year.

He plans to pursue his interests in his deer farm and to reduce his golf handicap. We wish Ken all the best in his retirement.

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President's Column



1996 commenced with the announcement that Charles Lawoko was resigning to take up the position of Statistical Consultant to the Business Faculty at Queensland University of Technology. Charles had made my transition into the Presidency

smooth and for a short time it looked as if we would have to look outside Massey University for a replacement. I breathed a sigh of relief when Greg Arnold and Siva Ganesh agreed to share the secretarial responsibilities. Greg is taking sabbatical leave in the second semester of this year and Ganesh will carry on after having had the opportunity to "pick up the ropes". I am grateful for the offers of assistance from these two able colleagues.

There has been much going on behind the scenes as members of the Executive have been active with their portfolios.

Let me briefly survey this activity. Some items deserve more detailed attention and these have been covered in more depth elsewhere in the newsletter. In particular I have written a report on the February meeting of the Mathematical and Information Sciences Council (MISC), a Standing Committee of the RSNZ, to indicate the diversity of items under consideration.

Also included in this newsletter is a report by Professor Graeme Wake who, with sponsorship of the RSNZ, NZMS and NZSA attended the Mathematical Sciences Symposium in Sydney on 23 February 1996 to publicise the release of "Mathematical Sciences: Adding to Australia", the report of the "Strategic Review of Mathematical Sciences Research and Advanced Mathematical Services in Australia". Related to this is a proposal to carry out a review of the Mathematical Sciences in New Zealand. The scoping document for this proposal, which has been submitted to Professor Don McGregor, Chief Scientist, Ministry of Research Science and

Technology, through MISC, is also included in this newsletter.

Discussions are taking place with the Statistical Society of Australian Inc (SSAI) regarding the proposal for a combined journal. Obviously a number of details need to be sorted out, including the financial aspects. The Central Council of SSAI have extended an invitation for me to attend the AGM of SSAI Central Council in Sydney immediately prior to SISC-96 Conference. Following on from this it is planned to have a joint NZSA/SSAI Executive meeting during SISC-96. Members of the NZSA should also be interested that the AGM of the SSAI in July will be considering the implementation of a proposal for optional accreditation of members to become a Graduate Statistician (GStat) or a Chartered Statistician (CStat). Needless to say we look forward with interest to such a proposal.

Other items that the Executive have been exploring include the design of a logo for the Association - a Graphic Design student at Wanganui Polytechnic is working on this as a project; the organisation of the NZSA Annual Conference in August; and the external sponsorship of the distribution of *Models 'n' Data*, a Macintosh based software product with an associated book of exercises developed by Doug Stirling, Massey University, as a free service to New Zealand Schools.

I wish to thank everyone who is working behind the scenes to ensure that the activities of the Association keep ticking over. Your involvement to ensure that the Association's commitment to the profession is relevant and meaningful is appreciated. In particular, I would like to acknowledge the efforts of Richard Penny who has put together this, his first, issue of the Newsletter. Thanks Richard for your assistance.

Jeff Hunter, NZSA President

NZSA President

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Editor's Musings



This is my first issue as editor of this Newsletter, and a jolly long time coming it has been. Wrestling with Pagemaker has been an interesting, albeit sometimes frustrating experience. Hopefully as time goes on things will get easier. One difficulty is getting everything to fit in, or not as the case may be. I became very familiar with modulo 4 arithmetic (and I thought I was a statistician).

As I become more familiar with what I am doing, I will be implementing some changes in the Newsletter. I hope these will enhance the fine publication that has been built up by John Reynolds, Dick Brook, Harold Henderson, Peter Danaher and Murray Jorgensen. Murray's dry wit in referring to "Richard's youth and enthusiasm" (I'm not going to let good praise die) has caused great hilarity where I work.

Of course I will state, like all editors, that the document you are reading is only as good as:

- a) what submissions are received. So please send stuff to me (see below about how to get in touch).
- b) the response from the readers as to the content they want.

One of the things that faced me when I considered the enormity of the task I had foolishly agreed to take on (and Gary, I haven't forgotten I had agreed to become joint editor) was what is this Newsletter supposed to achieve? At present all I have to go on is why I read it. I read it to find out what other statisticians are up to, is there anything going on in the statistical world that affects me, and is there anything in the Newsletter that can help me be a better statistician? So I will work on this premise until I receive feedback. The community of statisticians is a very friendly one, and I hope this Newsletter will continue to reflect this.

Effectively this is the newspaper of the New Zealand statistical community, so it should contain all the news that's fit to print. But the problem I face, other than getting it out on time, is getting that news. Rather than wait for the news to come to me I will be commissioning work, so if I approach you I hope you will try to fulfill my request.

So look forward to the next one in August with reports from the Sydney International Statistical Congress, plus the usual information on what the NZSA is up to, plus local news and another contest.

I will promise to try and confine my humour(?) to this column, but I'm afraid I regard levity as the leavening of life, it makes it rise a little higher.

Richard Penny

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NEW ZEALAND

New Zealand Statistical Association

President: Jeffrey Hunter

Secretaries: Greg Arnold & Siva Ganesh

Treasurer: Gary Dunnet

Editors: *NZ Statistician* Murray Jorgenson

Newsletter Richard Penny

Committee: Sharleen Forbes, Harold Henderson, Donal Krouse, James Reilly, Jean Thompson.

Subcommittee convenors: Stephen Haslett (SAPOC), Mike Camden (Education), John Waller (Publications), vacant (Science Fairs), Jeffrey Hunter (Standards), Caryn Thompson (Young Statisticians).

Further Information from:

Secretary

New Zealand Statistical Association

PO Box 1731

Wellington, New Zealand

Email: nzsa@massey.ac.nz

Deadline for next Issue

All submissions for the next *Newsletter* to me by 6pm Friday 26 July.

February Meeting of the Mathematical and Information Sciences Council of the Royal Society of New Zealand

This committee consists of representatives of NZSA (Jeff Hunter, Jean Thompson), NZMS (Marston Conder, Douglas Bridges, Graeme Wake), ORSNZ (Jonathan Lermitt), NZAMT (Bill Ellwood, Sylvia Bishton, Jan Wallace), NZCS (Ian Graham), Fellows of RSNZ (Alex McNabb, Derek Holton) and the CEO of RSNZ (Ross Moore). The committee typically meets twice a year with the February meeting taking up most of a day.

Let me focus primarily on matters that may be of interest to NZSA members.

1. A report giving the summary statistics of the 1995 Marsden Fund was tabled. Replacement members of the Mathematical and Information Sciences Assessment Panel Members were suggested. [The 1996-97 panel has been announced in Issue 15 (March 1996) of the Science Digest, the monthly newsletter of the RSNZ. The panel consists of Prof Marston Conder (Chairperson), Sir Ian Axford, Prof John Butcher, Prof Rob Goldblatt, Prof Ian Witten, Prof Bryan Manly.]
2. Professor Don McGregor, Chief Scientist (MORST) met with the committee and discussed issues related to the report on "A Review of Applied Mathematics in New Zealand" and the response from FRST. As a result of this discussion it was agreed that, in consultation with the committee, Prof Graeme Wake would prepare a scoping paper, which would outline concerns within the Mathematical Sciences community. This would be submitted to MORST for consideration towards undertaking a review by MORST.

3. David Hood, CEO of NZQA, spoke to the committee about the positive and negative aspects of the implementation of unit standards on the tertiary curriculum in Mathematics. Discussion also centred around points raised by the committee, including assessment, public relations, results and evaluation of trials, costing and charging for credits, teaching overload and the entrance criteria for maths courses in Universities. Prof Wake agreed to prepare a paper for David Hood, which would outline the issues raised. This paper would be prepared in consultation with members of MISC.

4. *Coordination of 1997 Conferences* Conference dates of the member societies were discussed. The NZMS and the Australian Mathematical Society are involved with the NZ Maths Colloquium, 7-

11 July 1997 to be held in Auckland. It was suggested that NZSA could consider linking in with this meeting to possibly form a NZ Mathematical Sciences Congress. [It has since transpired the ORSNZ will be linking with the Australians through the Asia Pacific ORS Conference in Melbourne, 30 Nov - 4 Dec 1997 and NZAMT will be meeting in Palmerston North in Sept 1997. We have also had a proposal from the Statistical Society of Australian that we should join them in 1998 for ASC14 on the Gold Coast. It has been suggested that NZSA should plan a big meeting in NZ in the odd years and smaller ones, still incorporating the AGM, in even years anticipating NZ'ers going to the Australian Conferences those years. There has also been some interest expressed in having a Statistical Conference in Auckland in 1999 but details need to be sorted out so as not to conflict with the proposals for 1997. The Executive have yet to consider these proposals in depth.]

5. *WWW Home Pages for Societies*. The RSNZ is setting up a WWW address and it was suggested other Societies link to this address. [The NZMS url is <http://www.math.auckland.ac.nz/nzms>.]

6. *Committee Objectives for 1996*

- i. Funding and quality of teaching/research in Mathematical and Information Sciences in New Zealand.

- ii. Actively raising the standard/retention and recruitment of teachers and recognising good teacher awards.

- iii. Watching the unit standards development.

7. *RSNZ Board Membership*. The Chairperson of the MISC is a member of the Board of the RSNZ. The term of Graeme Wake, a nominee of NZMS, ends in October 1996 and it has been suggested that the NZSA provide the next nominee. [The Executive of NZSA have endorsed the nomination of Prof Jeff Hunter to take over this role. Elections to take place in Oct/Nov.]

8. *International Linkings*. Ross Moore informed committee members that funds were available to establish and maintain international linkages with NZ Societies. [The ISI linkage needs to be explored to see if there are opportunities for the NZSA.]

The NZSA has been asked to enquire into whether a liaison officer for the NZSA would be used by other RSNZ committees or Government/non-governmental agencies for assistance in preparing statistics for reports/submissions, given the need by

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NZSA

New Zealand Statistical Association
47th Annual Conference

Research in the Learning of Statistics

Victoria University of Wellington
Friday 30 - Saturday 31 August 1996

Theme, Purposes and Papers

The 47th Annual Conference of the New Zealand Statistical Association will be held at Victoria University of Wellington, on Friday 30 & Saturday 31 August 1996, with the theme: **Research in the Learning of Statistics**.

The conference will include:

Papers, workshops and presentations on this theme (including sessions at which teachers offer considered reflections on their particular approaches to the teaching of statistics); Papers on statistical methods and practice; and Sessions devoted to important current issues in mathematics and statistics education (including the current school curriculum and the proposed Unit Standards).

The conference aims to provide a forum where:

Statistics education researchers can get to know each other and share their work; Teachers, researchers and statisticians can debate current issues in statistics education; and Teachers can reflect with each other on their professional practice.

It is hoped that teachers, researchers and statisticians from all sectors will participate in this conference.

Call for Papers and Workshops

If you wish to present a paper, run a workshop, or make some other kind of presentation in line with the theme and purposes stated above, please supply a brief indication of what you intend to cover and what sort of presentation you intend to use, before 30 July 1996. In the case of a conference paper this will involve supplying an abstract.

If you wish to have a paper included in the proceedings, please supply the completed paper before 30 July 1996.

Keynote Speakers

The conference organisers are currently having discussions with a number of statistics education researchers from both overseas and within New Zealand, with a view to providing keynote speakers of a high calibre. Two New Zealand keynote speakers are confirmed: Professor David Vere-Jones of Victoria University of Wellington, and Maxine Pfannkuch of the University of Auckland.

Conference Organisers

This Conference is jointly organised by the NZ Statistical Association, the Institute of Statistics and Operational Research at VUW, the Mathematics and Science Education Centre at VUW, and the Mathematics and Statistics Team at Wellington Polytechnic. The Mathematics and Science Education Centre is principally sponsored by BP New Zealand and Mitsubishi Motors.

Specifications for Papers to be Included in the Proceedings

Please send papers before 30 July 1996 to:

Jim Neyland
Mathematics and Science Education Centre
Victoria University
P O Box 600
WELLINGTON

Papers should be no more than 5 pages (including references) of single spaced, black and white, 12 point, Times script, with left and right justification.

An abstract should be included. The abstract should be no more than 80 words, and should not have a heading.

Do not include page numbers (but lightly write the page numbers on the backs of the pages, in pencil).

Use 3 cm margins left, right, top and bottom.

For citations and references use APA format, as in the MERGA journal (use italics rather than underlining).

For quotations and the abstract, indent both left and right.

Paper heading: title (16 point, bold): (new line) authors (12 point, not bold): (new line) institution and address (12 point, not bold) - all these centre justified.

Main subheadings: bold, 14 point, centre justified - leave a gap before the following text. Sub-subheadings: bold, 12 point, left justified - text follows on next line. Sub-sub-subheadings: bold, 12 point, followed by a colon - the text follows on the same line.

Do not use headers, footers, or footnotes. If necessary group notes at the end of the text before the references.

Do not place a gap between paragraphs. Indent the start of each paragraph.

Do not use underlining - use italics if you need to emphasise any words.

Send camera ready copy with diagrams in place.

Send a disk copy, too (preferably Word for Mac).

Student Attendance and Papers

Each University Department and College of Education will be asked to nominate a postgraduate student whose cost of attendance (travel, registration fee, conference dinner, accommodation) may be shared between the Association and that Department or College. These students will be expected to present papers on their work, and it is intended that a prize, jointly contributed by Hoare Research Software and SPSS, will be presented for the best paper.

Students wishing to be considered for the prize will need to submit two copies of their paper and abstracts before 30 July 1996 as above, and mark it clearly as 'Student Paper'.

Young Statisticians

An employment workshop for 'Young Statisticians' will be held during the conference. The aim is to provide information to recent graduates and students about the types of employment available to statisticians, and to provide an opportunity for young statisticians from all over New Zealand to meet and discuss their work.

Annual General Meeting and Conference Dinner

The AGM of NZSA will be scheduled for about 5.00pm on the Friday evening, and the Conference Dinner will begin about 8.00pm in the VUW Staff Club.

Accommodation

Accommodation at Victoria University will not be available and participants will need to make their own arrangements.

If you would like more information about hotels, motels and hostels near the university, please contact the conference organisers (preferably by email) and a list will be supplied.

Statistics Conference, ISOR
Victoria University of Wellington
P O Box 600
WELLINGTON
NEW ZEALAND

Our email address is: NZSA96@ISOR.VUW.AC.NZ

Registration and Fees: please see the next page.

NZSA 1996 Conference Registration and Fees

We would welcome hearing from you as soon as possible, but registrations will be accepted at any time. The late fee applies where payments are received on or after 30 July 1996.

Name and Title: _____

Address: _____

E-Mail: _____

I wish to present a workshop _____ or paper _____ (please tick).

Title of workshop or paper: _____

Note that all Registrations include proceedings, lunches and morning and afternoon teas, but not dinner or accommodation.

Registration (both days)	\$85.00	\$ _____
Registration (one day)	\$55.00	\$ _____
Student Registration (both days)	\$55.00	\$ _____
Dinner (Friday, Staff Club)	\$35.00	\$ _____
Late Fee (30 July 1996 onwards)	\$10.00	\$ _____
TOTAL:		\$ _____

Payment by cheque (made out to 'NZSA') is preferred, and payment by credit card is acceptable. All prices are in \$NZ and include GST. Note that the NZSA is not GST registered.

For Credit Card payment (Mastercard/Visa), please give:

Cardholder Name: _____

Card Number: _____

Signature: _____

Expires: _____

Date: _____

Please return this to:

Statistics Conference, ISOR
Victoria University of Wellington
P O Box 600
WELLINGTON
NEW ZEALAND

Our email address is: NZSA96@ISOR.VUW.AC.NZ

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by certain committees for Statisticians. [Any nominations?]

9. *NZS&T Medals* The committee noted the low response from Universities concerning the Science and Technology Awards. Committee members were asked to advise constituent Societies and colleagues of the Awards.

10. *Accreditation/Certification of MIS Practitioners* This was raised as many societies were considering the issue. There was support that the Code of Ethics for RSNZ was sufficient for general adoption, with societies to take specific stances as they saw fit. [The NZMS Council in following the Australian Mathematical Society, is considering a proposal for the introduction of optional accreditation of members of the society. It is advocating a 3-tier system to be overlaid on the existing membership structure to enable ordinary Members to apply to be certified as Graduate Members, Accredited Members or Fellows. Members so accredited may use the appropriate abbreviation GNZMS, MNZMS or FNZMS. The members of NZMS will be voting on a scheme at their AGM in 1996.]

Jeff Hunter

Education Committee:

Plans for the August Conference have dominated our time recently.

On the Qualifications Authority front, some things are moving. The group writing unit standards for first-year tertiary courses has met 4 times, and a fairly complete set of these units has recently been circulated by the writer, David Nightingale. I think our current philosophy on this is that units in statistics are useful (in terms of ensuring that statistical content is available to people designing programmes which consist of unit standards, and in ensuring that it is got right), but that we'll stick to first-year skills. These draft units, about 16 of them, are mostly Framework Level 5. However, the Maths Advisory Group remains a sleeping giant, and has not been roused since about July 95. An urgent proposal for a National Standards Body to oversee developments in Science and Technology while dormant for a while appears to be springing back to life.

We hope you noticed the PrimeTime page on the Census recently in your (INL) newspaper. We had some input into that, and we hope to get more statistical coverage in the future. Feedback welcome. At the end of last year, we farewelled Pip Arnold, who has moved to Auckland (Penrose High School).

We benefited from her penetrating view of how school teachers would perceive things, and from her lively contributions in the NZSA session at the NZAMT Conference last August. Robin MacIntyre is temporarily replacing Diane Legget (both of Teacher Support Services) on the committee.

The Maths Advisory Group met on 22 April, for an update of unit standard developments, an update on the school "trials" of Units, replacement of Chair (Stuart Laird), discussion of a National Standards Body for Science and Technology, membership of the MAG, etc.

Mike Camden

Nick Pirihi - Rhodes Scholar



Congratulations to Nick Pirihi on being awarded a Rhodes Scholarship. Nick graduated with a masters in statistics from the University of Waikato in 1995. He continues to teach at St Paul's Collegiate in Hamilton until he goes to Oxford later this year. Nick has represented Waikato

in hockey and Hamilton in cricket and hopes to play for Oxford in both sports.

ISIS: Information, Statistics and Induction in Science, Melbourne, Australia, 20-23 August 1996

This conference will explore the use of computational modelling to understand and emulate inductive processes in science. The problems involved in building and using such computer models reflect methodological and foundational concerns common to a variety of academic disciplines, especially statistics, artificial intelligence (AI) and the philosophy of science. This conference aims to bring together researchers from these and related fields to present new computational technologies for supporting or analysing scientific inference and to engage in collegial debate over the merits and difficulties underlying the various approaches to automating inductive and statistical inference.

Information is available at: <http://www.cs.monash.edu.au/~jono/ISIS/ISIS.shtml>

Final registration: 1 July, 1996

Australian Strategic Review of the Mathematical Sciences

Over the last eighteen months, the National Committee for Mathematics of the Australian Academy of Sciences, has initiated and overseen a Review of the Mathematical Sciences. The final report was published in January 1996 and was publicised widely at a symposium held in Sydney on 23 February of this year. I was privileged to attend the symposium with the support of the Royal Society of New Zealand, the New Zealand Mathematical Society and the New Zealand Statistical Association. The motivation for attending was that a similar kind of exercise should be undertaken in New Zealand. Indeed the sub-committee for the Mathematical and Information Sciences of the Royal Society of New Zealand has recommended to the Ministry of Research, Science and Technology through its Chief Scientist that a similar exercise be held in New Zealand. His response is awaited.

The report that was produced across the Tasman is wide ranging and relevant. It contains specific recommendations for the enhancement and continued development of the Mathematical Sciences (including pure and applied mathematics, operations research, statistics, actuarial science, etc). It is clear that there are specific concerns to do with the research funding base in Australia, albeit that being probably better than it is in New Zealand, the ageing of the profession of mathematicians in Australia, and under-representation of certain groups (gender, ethnicity, etc). There are specific recommendations about forming cooperative research centres in locations across Australia of finite life, building up centres of excellence and moving these around the country as opportunities permit. The forerunner of this kind of exercise was the Centre of Mathematical Analysis at ANU in Canberra. At present there are no such CRCs in the mathematical sciences in Australia, although a number of bids are currently being considered. The relative immobility of staff between institutions is addressed and recommendations for enhancement of this movement, and perhaps joint appointments even, are canvassed.

The structure of the report is impressive.

There are recommendations directed to professional societies, academic departments, scientific organisations and federations of industrial private stakeholders in the areas considered. Specific follow-up action has been signposted. The report is backed by good research and technical information.

To publicise the report, a forum was held with noted speakers from across the nation in the University of New South Wales in February of this year. Politicians attended as well as representatives of industry, though the publicity generated was perhaps overshadowed by the soon to follow federal elections in Australia. However, the National Committee for Mathematics in Australia (chaired by Professor Ian Sloan of the University of New South Wales) had geared itself up to produce a number of newsworthy items concerning the use, structure and power of mathematics across and within other disciplines at that time. A stream of news items and articles subsequently appeared. The impact will be hard to measure, although my feeling was that it was a success quite well managed. Congratulations to our Australian counterparts.

I am definitely of the opinion that we should follow up the exercise that our sub-committee has initiated and that we strongly urge that this process be managed by the profession in this country, possibly augmented by outside experts. There needs to be a thorough survey of groups within the country and regional meetings held to evaluate the health of our profession and the needs in the current funding programme. Previous admissions on Key Science Areas have signified that mathematics is everywhere but nowhere and is often falling through the cracks in the current science fabric, which stresses output areas rather than fundamental disciplines. It would be an interesting exercise to follow through the Australian one here to see how we measure up to our Australian cousins. One thing is certain - it is a big undertaking to do a Review of this size and complexity. Some risks are present but are worth taking for the good of our discipline(s), I believe.

I would like to thank the two professional societies and the Royal Society of New Zealand who supported my attendance at the symposium in Sydney in February.

Graeme Wake

Massey University

At the end of March the principal concern of the Department is the appointment of a new Professor. Dick Brook has been Acting Head since Jeff Hunter's elevation; he is the one most concerned to see an early outcome to the appointment process.

New arrivals in the Department are Alasdair Noble, an ex-school teacher who is lecturing at Palmerston North for a year; Rohan, from Sri Lanka, a Graduate Assistant, also at Palmerston North; and Thomas Yee, from Auckland University, a part-time lecturer at Albany. On his way to a full time lectureship at Albany from Newcastle-on-Tyne is Paul Cowpertwait. Then we have a number of visitors expected at Palmerston North later in the year: Larry Weldon from Simon Fraser University, Canada; Tom Hassard from the University of Manitoba, Canada; and Chris Theobald from Edinburgh University, Scotland. All these people can be financed because the rest of us teach far more students than we ought.

Paula McMillan was our Secretary even before the Department began, but she has now become Faculty Secretary. Her replacement, Manvir Edwards, is quietly organising Dick and the rest of us in a very pleasant sort of way.

After many years of cheerful assisting around the Department, John Koolaard has moved across the road to Crop and Food Research.

Last year Hugh Morton was awarded a prestigious Fulbright Fellowship, from which he has just returned. The news so far is that the snow was depressing, but the research excellent. More will be reported in due course.

As a special biennial treat Palmerston North students visit Statistics New Zealand in Wellington. Unfortunately Howard Edwards has set new standards by taking Albany students to the casino. Palmerston North would be grateful for ideas on how to compete.

The rather short seminar list suggests that we had little energy left for academic pursuits: Charles Lawoko, 'A discussion of a selection of results on contextual classification of hyperspectral data'; Anthony Edwards, (Cambridge) 'The method of minimum Chi-square'; Jenny Edwards, 'Statistics packages on the Massey network'; George Seber, (Auckland), 'Two stage adaptive cluster sampling'.

AgResearch

First, of course, news from Lincoln. David Baird has continued to be involved in the development of the Windows Interface for Genstat following four months working on it at Rothamsted last year. This version of Genstat has now been released to the wider world. Dave Saville has been busy with the galley proofs of his paperback mini-book with Graham Wood, entitled "Statistical Methods: A Geometric Primer," ISBN 0-387-94705-1. The publishers say this will be on sale in June. Cheap(er) copies will be available from Dave!

Country-wide, AgResearch biometricians were visited in March by Gary Krause and Mark Ellersieck, statisticians at the University of Missouri at Columbia. AgResearch and their College of Agriculture have a cooperative research programme. Gary and Mark were most impressed by Genstat, which could now be set to invade the US!

Ruakura-based Martin Upsdell attended the BUGS (Bayesian analysis Using Gibbs Sampler) workshop in Brisbane in December and continues to be an incurable Bayesian. He really has the bug now! Martin reports: "The course was very much a hands-on experience going through the analyses of several data sets. All of the data sets were analysed taking into account features which no other package I have come across would have attempted to analyse. What other package will allow you to analyse data allowing for variances to change across the data set or directly model round-off error and censored data? Move over GLMM! BUGS directly models the full distribution not just the means and variances. The complexity of possible models seemed unlimited but with enough form so the analysis did not fall apart from having more parameters than data. BUGS is obtainable free (including a beautifully typeset manual, ready for binding) from ftp.mrc-bsu.cam.ac.uk by anonymous ftp provided that your internet connection properly gives the return IP number."

Last, but not least, news from Wallaceville. Currently their staff consist of Mick Roberts, Rowland Kao and Asit Saha "on the modelling side," plus Lilian Morrison as a part-time statistician. They were kept busy with the ANZIAM'96 conference at Masterton in

AgResearch continued

February. AgResearch sponsored a plenary speaker, Odo Diekmann, who is Professor of Applied Mathematics at the University of Utrecht. Odo's paper entitled "Physiologically structured populations: modelling and analysis" showed how useful results could be obtained from integral equations. He remarked later that biologists appear to have less difficulty than applied mathematicians when he talks about measures! Other AgResearch contributions to ANZIAM'96 were:

Kao & Smith: A new approach to modelling cell receptor aggregation phenomena through Gibbs and reaction ensemble simulations.

Kopetschny, Lambert, Louie, Springett & Wake: Dynamical systems model of earthworms and litter.

Louie: A continuum mechanics approach to determining the cellular velocity field within a wool follicle.

Metherell, Woodward & McCall: Modelling phosphorus fertiliser requirements for grazed pastures.

Pleasants, McCall & Wake: Modelling pasture mass through time with stochastic differential equations.

Roberts: Possums, parasites and population dynamics.

Saha & Sarbadhikar: Immune system functions - a simple mathematical approach.

Vetharaniam, McCall & Garrick: Growth theory for an animal.

Woodward: Dynamical systems modelling of grass pasture and grazing.

Following ANZIAM'96 Odo Diekmann visited AgResearch at Wallaceville and Whatawhata, as well as Auckland University. The Dutch invasion at Wallaceville continued with a two-week visit in March from Hans Heesterbeek from the Agricultural Mathematics Group at Wageningen, a visit made possible by a Prince and Princess of Wales Science Award. Hans spent the time on joint work with Mick Roberts, and gave a seminar "The Mystical Significance of Arnold" which detailed the history, current state and outstanding problems in mathematical epidemiology.

*Dave Saville, Harold Henderson
and Mick Roberts*

Applied Maths, Industrial Research Limited.

We've had a number of staff changes over the past few months. Rona Bailey has left to do a Master's degree at Victoria, David Rhoades is now predicting earthquakes full-time at the Institute of Geological and Nuclear Sciences and Dr Robin Willink is our new statistician.

Rob comes to us from the Auckland University school of engineering. Before that he completed his PhD in Doppler ultrasound signal analysis through the University of Leicester. His main interests are in the statistics of signals and images, particularly with medical applications.

Kit Withers has left us too, albeit temporarily. He is presenting a paper on temperature extremes and implications for global warming at "Global Warming 7" in Vienna. From there he visits Adri Buishand of the Netherlands Meteorological Institute and Richard Smith at Cambridge University.

Donal P Krouse

Contest Number 1

Set by Mr Ree

As I keep saying to the editor, you need something to liven this newsletter up. Of course he asks "What do you suggest?" "Have a contest," says I. "Great idea, you run it."

Like all good contests this one has a prize, a brand new copy of *Facts New Zealand*. The contest is open to any current member of the NZSA, you can enter as often as you like, but the judge's decision (that's me) is final.

Oh yes, the contest. I'd like you bright people to come up with a collective noun for statisticians, or a sub-group thereof (eg Bayesians, biometricians, etc). For example we could refer to a movement of musicians, or a confession of priests (now you know why I set contests, not enter them).

Entries to be sent to the editor, who will pass them on to me. If emailing put "Contest Entry" in subject line. Contest closes 28 July. Results in the next Newsletter.

CHANCE it! —Be an Author and a Reader

George P. H. Styan, *McGill University, Montréal*

CHANCE is a magazine about statistics and its use in society. It is published jointly by the American Statistical Association and Springer-Verlag New York, Inc.

As the new Editor of CHANCE, I encourage readers to submit ideas and manuscripts on topical issues that illuminate statistics and its use in any form of human endeavor. We have recently featured articles and regular columns on scientific problems, public policy, statistics in sports, statistical computing, graphical innovations, statistical methods, and humor—as well as the inside view from Washington, DC. We also publish reviews of the latest statistical books and software.

Although CHANCE is not a technical research journal it records events and ideas from an evolving field and the role that this field plays in society. CHANCE is intended to entertain and inform through its articles and regular columns, which are written in an informal style but with a technically correct statistical perspective. We hope that you will help us provide that perspective!

We encourage authors to write in a relaxed, expository style and to include pictures and other graphics. Opinion and historical comments can (and should) be intermingled to make lively reading. Humor and controversy are welcome!

While we invite authors to submit articles in ready-to-publish form, we also wish to encourage prospective authors to submit articles that are not yet in "final" form or ideas for articles, and we will try to help with their development. All articles will be peer reviewed. CHANCE does not accept simultaneous submissions.

Articles in "final" form may be submitted electronically, preferably in LATEX or as a fully-formatted file in Microsoft Word. For hard copy please send us three nicely-printed copies.

Please contact us by e-mail at styan@math.mcgill.ca or MT56@musica.mcgill.ca, or by regular mail in the Department of Mathematics and Statistics, McGill University, Burnside Hall, 805 ouest, rue Sherbrooke Street West, Montreal, Quebec, Canada H3A 2K6. Our phone number is (1-514) 398-3333 and FAX is (1-514) 398-3899.

Coming in the next issue of CHANCE! The first issue of CHANCE for 1996 (vol. 9, no. 1) is expected to be off press in March and features these stimulating articles and columns:

"The Geometry of Random Images" by Keith J. Worsley,

"The Politics of Statistical Reform: A Cautionary Tale, 1978–1980" by James T. Bonnen,

"A Nobel Graph" by John W. Durso and Howard Wainer (Visual Revelations),

"Time Management in Sport: Ball Control and Other Myths" by Harold Sackrowitz and Daniel Sackrowitz,

"Can the World Wide Web Make Statistics More Fun?" by Graeme D. Ruxton,

"The Winds of Change: Opportunity or Disaster for US Federal Statistics"

by Janet L. Norwood (Window on Washington),

"Designing Cost-effective Environmental Sampling Using Concomitant Information"

by Glenn D. Johnson, Barry D. Nussbaum, Ganapati P. Patil, and N. Phillip Ross,

"Stat-Acrostic" by Thomas B. Jabine (Puzzle Corner),

"Sufferein' Succotash!" by Miron Straf (On the Lighter Side)

and a review by John D. Fox of *An Introduction to Regression Graphics* by R. Dennis Cook & Sanford Weisberg (Wiley, 1994).

Join us as an author and reader of **CHANCE** Magazine.
We'll all enjoy it!

ISIS: Information, Statistics and Induction in Science. 20-23 August 1996 Monash University, Melbourne, Australia

Conference Chair: David Dowe
Co-chairs: Kevin Korb and Jonathan Oliver

Invited Speakers

Henry Kyburg, Jr. (University of Rochester): "Bayesian Inference and Inductive Inference"

Marvin Minsky (MIT): "Discovering Theories of Discovering"

J. Ross Quinlan (Sydney University): "First-Order Induction: Techniques and Applications"

Jorma J. Rissanen (IBM): "A Universal Regression Model"

Ray Solomonoff (Oxbridge Res): "Does Algorithmic Probability Solve the Problem of Induction?"

ISIS Program

This conference will explore the use of computational modelling to understand and emulate inductive processes in science. The problems involved in building and using such computer models reflect methodological and foundational concerns common to a variety of academic disciplines, especially statistics, artificial intelligence (AI) and the philosophy of science. This conference aims to bring together researchers from these and related fields to present new computational technologies for supporting or analysing scientific inference and to engage in collegial debate over the merits and difficulties underlying the various approaches to automating inductive and statistical inference.

The ISIS program will be built around the eight major themes of the conference:

- * Concept Formation and Classification.
- * Minimum Encoding Length Inference Methods.
- * Scientific Discovery.
- * Theory Revision.
- * Bayesian Methodology.
- * Foundations of Statistics.
- * Foundations of Social Science.
- * Foundations of AI.

Tutorials

ISIS will hold four tutorials on 20 August, 1996, the day before conference presentations begin. These tutorials will introduce concepts, tools and techniques of direct interest for understanding and employing automated statistical and inductive techniques. The presenters are world-class researchers in the inductive methods treated.

10am - 1pm

Tutorial 1: Peter Spirtes: "Automated Learning of Bayesian Networks"
Tutorial 2: Michael Pazzani: "Machine Learning and Intelligent Information Access"

2pm - 5pm

Tutorial 3: Jan Zytkow: "Automation of Scientific Discovery"
Tutorial 4: Paul Vitanyi: "Kolmogorov Complexity & Applications"

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ISIS Web page

Registration forms and much more information about the conference are available at:

<http://www.cs.monash.edu.au/~jono/ISIS/ISIS.shtml>