IMS Bulletin



May/June 2003

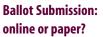
CONTENTS

- 1 IMS Elections
- 2 Members' News: Contacting the IMS
- 3 Highly Cited Researchers
- **5 ENAR Report**
- 7 Meet the Members
- **Candidate Information**
- 10 AAAS Report
- 11 The Future of Statistics?
- 12 Seminar on Stochastic **Processes**
- 13 Letters; Bayesian **Workshop Report**
- 15 Annual Survey of Math **Sciences: Highlights**
- 16 IMS Meetings
- 20 Other Meetings and **Announcements**
- 22 Employment **Opportunities**
- 25 International Calendar of Statistical Events
- 27 Information for **Advertisers**

IMS Elections: use your (e-)vote!

2003 IMS Elections

Any recent visitors to the IMS website (http: //www.imstat.org) will have seen the information about the 2003 elections to IMS Council.



We encourage electronic submission. It's fast, easy and secure.

You can cast your votes at the IMS website election pages (http://www.imstat.org/elections/). Because of the new method of counting the votes (outlined by Bernard Silverman in the last issue) please read the instructions carefully below before voting.

If you prefer, you can vote using paper ballots, which have been mailed. But please submit only one ballot-either paper or electronic.

Note that the voting system will only allow you to vote once, so if you are not sure whether you've voted, you can try to vote online. If the system won't let you, then you have voted.

Voting Instructions

You will need your Member ID for voting. IMS sent your ID by e-mail on April 22, 2003. It can also be found on the top left corner above your name on

the mailing label of an IMS journal or this Bulletin, and is preprinted on the envelope in which the paper ballot is

> Five Members will be elected to the Council this year, using the new Single Transferable

> > Voting System. Their details are printed on pages 8-9. You will need to rank the candidates 1, 2, 3...r, in order of preference.

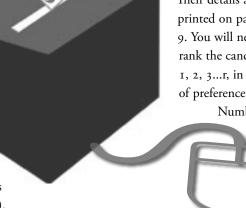
> > > Number as

many candidates as you wish; all remaining candidates will be treated as being of equal and lower preference (I=Ist choice, 2=2nd choice, etc. o=lower preference). No ties are allowed among the numbered preferences. Numbered rankings must be sequential. Examples of valid and rejected ballots are available online.

You may also vote for any IMS member for any office by printing the member name on a blank line and ranking the corresponding box.

Closing Date

The closing date for ALL voting, either electronically or by paper, is June 20, 2003. All ballots must be received by this date.



IMS Bulletin

Volume 32, Issue 3 May/June 2003 ISSN 1544-1881

To contact the IMS Bulletin:

Bulletin Editor Bernard Silverman

Assistant Editor Tati Howell

Submissions in MS Word (.doc) or plain text (.txt) please.

or mail:

please note the Bulletin's new mailing address!

Send by email: bulletin@imstat.org **IMS Bulletin** 20 Shadwell Uley, Dursley **GL11 5BW** UK

To contact the IMS regarding your dues, membership, subscriptions, orders or change of address:

Institute of Mathematical Statistics Dues and Subscriptions Office 9650 Rockville Pike, Suite L2310 Bethesda, MD 20814-3998 USA t 301.634.7029 **f** 301.634.7099

e staff@imstat.org

e ims@imstat.org

To contact the IMS regarding any other matter, including advertising, copyright permission, offprint orders, copyright transfer, societal matters, meetings, fellows nominations and content of publications:

Executive Director, Elyse Gustafson IMS Business Office PO Box 22718 Beachwood, OH 44122 **USA** t 216.295.2340 **f** 216.921.6703

2 · IMS Bulletin Volume 32 · Issue 3

News from IMS members

Peter Green elected FRS



Professor Peter Green has been elected as a Fellow of the Royal Society, a distinction earned for his 'wide-ranging achievements in computational statistics'. The citation refers to his early work on geometric algorithms, and their application in spatial statistics, and to his research bringing together ideas of generalized linear models and nonparametric regression, based on roughness penalties. Innovative methods based on the resulting semiparametric regression models include his own applications to agricultural field trials, reference

curves for human growth, and emission tomography.

Most recently, Peter has made various contributions to Markov chain Monte Carlo methods that are making a major impact in computational Bayesian statistics, especially the introduction and development of reversible jump methodology for model determination and other variable-dimension problems.

Peter has been Professor of Statistics at the University of Bristol, UK, since 1989, has served as Royal Statistical Society president 2001-03, and is a Fellow of IMS.

James O Berger Elected to National Academy of Sciences

SAMSI Director and Professor of Statistics at Duke University, NC, James O Berger was elected on 29 April 2003 to the National Academy of Sciences, in recognition of his "distinguished and continuing achievements in original research". He is the only statistician among the 90 new members and foreign associates thus honored. More details will appear in the next issue.

Naisyin Wang receives 2003 Distinguished Achievement Award in Research

Professor Naisyin Wang is a recipient of the 2003 Association of Former Students Distinguished Achievement Award in Research. These prestigious awards are one of the

most coveted recognitions that can be bestowed upon a faculty member of Texas A&M University. Professor Wang is being recognized for her outstanding research in the areas of missing data and measurement error models. She received her award at the Texas A&M annual Spring Awards Ceremony on May 8, 2003.

IMS Members:

If you have received a prize or been honored in some way, do write in and let us know... Don't be shy!

IMS Bulletin: contact details

Please note that the mailing address for the IMS Bulletin is now 20 Shadwell, Uley, Dursley, GL11 5BW, UK (though we much prefer to receive submissions electronically, wherever possible).

Please also note that the Bulletin email (bulletin@imstat.org) was out of action during the period March 13-20, and any emails sent during this time would not have bounced back. We apologise for the inconvenience, but would be grateful if you would resend any emails that were originally sent during this period.

l Highly Cited Researchers

Readers of IMS Bulletin have probably already heard of ISIHighlyCited.com, the web site that identifies those authors that have been most cited in the period 1981-1999. To be counted, an article and its citation both have to appear in the period (see the box below).

Recently, a list of 231 highly-cited mathematicians has been produced. Jane-Ling Wang and Bernard Silverman went through this list and identified 78 as being statisticians or probabilists, though the boundary with other parts of mathematics is sometimes fuzzy! While bibliometric analysis must always be treated with some care and scepticism, some interesting features appear. We could identify only one woman statistician on the list, this year's Wald Lecturer Grace Wahba.

The geographical distribution is perhaps as might be expected. Of those listed, 57 (73%) are based in the USA, and 7 (9%) in the United Kingdom. Other European countries can claim 10 (2 each from Denmark, France and Germany, and 1 each from the Netherlands, Belgium, Hungary and Switzerland). In addition there is one from each of Australia, Canada, Singapore and Taiwan. [In all cases the geographical designation is that given by ISIhighlycited.com]

Institutional affiliation is also as might be expected. No fewer than 8 come from Stanford, 5 from Berkeley and 4 from Harvard. There are three each from Chicago, Cornell, UC-Davis, University of North Carolina, and the University of Washington, and two each from Bristol (UK), Carnegie-Mellon, Johns Hopkins, Michigan, Minnesota and Wisconsin-Madison.

Of the 78, 58 are IMS Fellows. The other 20 are almost all in fields on the edges of IMS's traditional subject coverage, either in the direction of biostatistics or in the direction of pure mathematics. Not all the 58 IMS Fellows are still members of IMS, but it might be invidious to pursue this point too far.

What does all this say about our subject? Given that statistics articles are traditionally cited somewhat more than those in some other subject areas, are we doing well or badly as a subject? Is



there any hope of correcting the massive gender imbalance in the production of highly cited work? Is the geographical distribution unhealthily skewed or is it inevitable-or even a good thing? There is more spread than in some other subjects; in materials science seven institutions accounted for 20% of the highly cited authors in the entire subject category.

Do please look in more detail at ISIhighlycited.com and send us in your letters or articles!



ISIHighlyCited.com is a useful tool in identifying individuals, departments and laboratories that have made fundamental contributions to the advancement of science and technology in recent decades. The website carries information about researchers

in each of 21 subject categories (in life sciences, medicine, physical sciences, engineering and social sciences) who have demonstrated great influence in their field, as measured by citations to their work in the period 1981-1999. There is currently no sub-division in Mathematics, but they're working on it. More information about the process of identifying highly cited researchers is available online at www.isihighlycited.com

ISI is a Thomson Scientific Company providing e-information solutions to the scientific community.

President Raghu Varadhan

president@imstat.org

President-Elect Terry Speed

president-elect@imstat.org

Past President lain Johnstone

past-president@imstat.org

Alicia Carriquiry **Executive Secretary**

alicia@iastate.edu

Treasurer Julia Norton

jnorton@csuhayward.edu

Susan Murphy **Program Secretary**

samurphy@umich.edu

IMS Editors

Annals of Statistics Jon Wellner

jaw@stat.washington.edu

& John Marden marden@stat.uiuc.edu

Steven Lalley **Annals of Probability**

annals@galton.uchicago.edu

Annals of Applied Probability

Robert Adler

radler@ie.technion.ac.il

Statistical Science George Casella

statsci@stat.ufl.edu

IMS Lecture Notes - Monograph Series

Joel Greenhouse joel@stat.cmu.edu

Managing Editor - Statistics

Paul Shaman

shaman@wharton.upenn.edu

Managing Editor - Probability

Michael Phelan

phelan@chapman.edu

Electronic Journal of Probability

Ted Cox

ejp@math.washington.edu

Electronic Communications in Probability

Martin Barlow

ecp@math.washington.edu

Managing Editor - EJP/ECP

Zhen-Qing Chen

ejpecp@math.washington.edu

Bernard Silverman IMS Bulletin

& Tati Howell

bulletin@imstat.org

Web Editor Hemant Ishwaran

ishwaran@bio.ri.ccf.org

Associate Program Secretary

Maury Bramson

bramson@math.umn.edu

The Institute of Mathematical Statistics presents



The Sixth North American NEW RESEARCHERS CONFERENCE University of California Davis, California

July 29 to August 1, 2003

Conference Objective:

To promote interaction among new researchers by introducing them to each other's research in an informal setting.



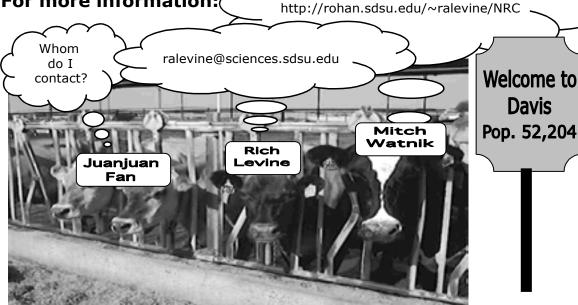


Participants:

Anyone who has received their PhD since 1998 or expects to receive a PhD by 2004 is eligible to attend. All participants expected to present a short, expository talk or poster on their research.

Abstract Deadline: February 1, 2003

check out
http://rohan.sdsu.edu/~ralevine/NR



ENAR 2003 Review

This year's International Biometric Society, Eastern North American Region meeting took place in Tampa, Florida. Chris Burdzy reports.

This year's ENAR Spring Meeting was held at the Marriott Waterside Hotel in Tampa, Florida from March 30 to April 2. The meeting was held jointly with IMS and Sections of the American Statistical Association.

There were more than 950 participants, 40 invited sessions, and 43 contributed sessions, 5 short courses (Statistical Methods and Software for the Analysis of Microarray Data; Design and Analysis of Studies of Diagnostic and Screening Tests; Smoothing for Smarties; Longitudinal Data Analysis; Introduction to Geographical Information Systems and Spatial Analysis for Environmental and Public Health Studies), 4 tutorials (Equivalence Testing; Dimension Reduction and Graphics in Regression; MCMC: How it Works, When it Fails; Sample Survey Methods for Biostatisticians), 10 roundtables (e.g., Publishing without Perishing, Current Issues in Environmental Research, What Should a Modern Statistics Degree Program Look Like), and a two special workshops entitled "Fostering Diversity in Biostatistics" and "The NIH Statistical Grant Review and Funding Opportunities". Of the 40 invited sessions, 8 were organized by IMS. There was one IMS contributed session and IMS co-sponsored 5 additional sessions. Tom Louis (Johns Hopkins) gave the presidential invited address entitled "Aids to Statistical Navigation", where he argued that an understanding of statistical philosophies (frequentist, likelihood, Bayes) needs to be complemented and

supplemented by navigational aids. He presented a selected sample of philosophy-based and practice-based aids. His talk can be found at http://b iosun01.biostat.jhsph.edu/ tlouis/

Two of the IMS invited sessions were focused around the contributions of three of this year's IMS Medallion lecture winners: Steve Marron (U North Carolina), Ker-Chau Li (U of

California at Los Angeles), and John Rice (U of California at Berkeley). In a Medallion session entitled "Applications of High-Dimensional Data Analyses to Microarray Data", Steve Marron described the 'Distance Weighted

Ker-Chau Li

Discrimination' method useful for classification of samples with microarray expression data, and compared it to the popular support vector machine approach. Ker-Chau Li gave an overview of microarray technology and described a new methodology named 'Liquid Association', which he illustrated on yeast cell-cycle data. Dennis Cook (U of Minnesota) served as a discussant. He described some of the methods for highdimensional data reduction in a geometrical context. In another Medallion session entitled "Functional Analysis of Longitudinal Data" John Rice delivered a lecture entitled "Borrowing Strength in the Analysis of Longitudinal and Functional Data", where he provided an overview of the interface between functional and longitudinal data analyses. Professor Naisying Wang from Texas A&M U next gave a talk entitled "Marginal Non- and Semi-parametric Kernel Regression of

Longitudinal Data", where she discussed a seemingly unrelated kernel method to effectively account for the withinsubject correlation. Professor Jane-Ling Wang (UC Davis) served as a discussant.

Other IMS invited sessions included "Recent Developments in Bayesian Non/Semi Parametrics"

Steve Marron

(Ramamoorthi, Michigan State; Berger, Duke), "Recent Developments in Clustering and Mixtures with Application to Spatial Models and Image Analysis" (Scott, Rice; Ishwaran, Cleveland Clinic; Vardi, Rutgers; Priebe, Johns Hopkins), "Innovative Approaches and Challenges in the Analysis of Recurrent Failure Time Data" (Strawderman, Cornell; Zhang, Central Florida; Glidden, UC San Francisco; Lawless, Waterloo), "Multi-Stage Decisions and Dynamic Treatment Regimes' (Robins, Harvard; Mueller, M.D. Anderson; Murphy, Michigan), "Causal Inference at

the Biostatistics-Econometrics Interface" (Varadhan, Johns Hopkins; Hansen, Northwestern; Little, Michigan; Lancaster, Brown), and "Genome-Scale Biology: Statistical Challenges and



John Rice

Solutions" (van der Laan, Berkeley; Ruczinski, Johns Hopkins; Bryan, British Columbia). The full meeting program can be found at http://www.enar.org/meetings.htm.

Special thanks to Oliver Schabenberger (SAS), Chair of the ENAR program committee, and Karl Broman (Johns Hopkins), the IMS Contributed Papers coordinator. Also, thanks to the IMS and co-sponsored session organizers and chairs: Rafael Irizarry (Johns Hopkins), Ramani Pilla (Case Western Reserve), Debashis Ghosh (Michigan), Lance James (Hong Kong University of Science and Technology), Tom Ten Have (Pennsylvania), Jane-Ling Wang (UC Davis), Joe Hogan (Brown), Jennifer Bryan (British Columbia), Doug Schaubel (Michigan), Francesca Dominici (Johns Hopkins), Hemant Ishwaran (Cleveland Clinic), Geert Verbeke (Katholieke Universiteit Leuven, Belgium), Xihong Lin (Michigan), Sastry Pantula (North Caroline State), Randy Carter (Florida), Kevin Dobbin (NCI), Diana Miglioretti (Group Health Cooperative, Seattle), Amita Manatunga (Emory), Natalie Blades (Jackson Laboratory)

SPRINGER FOR STATISTICS

PARTIAL IDENTIFICATION OF PROBABILITY DISTRIBUTIONS



C. F. MANSKI, Northwestern University, Evanston, IL

Sample data alone never suffice to draw conclusions about populations. Inference always requires assumptions about the population and sampling process. Statistical theory has revealed much about how strength of assumptions affects the precision of point estimates, but has had much less to say

about how it affects the identification of population parameters. Indeed, it has been commonplace to think of identification as a binary event - a parameter is either identified or not - and to view point identification as a pre-condition for inference. Yet there is enormous scope for fruitful inference using data and assumptions that partially identify population parameters. This book explains why and shows how.

CONTENTS: Missing Outcomes • Instrumental Variables • Conditional Prediction with Missing Data • Contaminated Outcomes • Regressions, Short and Long • Response-Based Sampling • Analysis of Treatment Response • Monotone Treatment Response • Monotone Instrumental Variables • The Mixing Problem

2003/200 PP./HARDCOVER/\$69.95 ISBN 0-387-00454-8 SPRINGER SERIES IN STATISTICS

DESIGN & ANALYSIS OF COMPUTER EXPERIMENTS

T. J. SANTNER, W. NOTZ, and B. J. WILLIAMS, all, Ohio State University, Columbus, OH

This book describes methods for designing and analyzing experiments conducted using computer code in lieu of a physical experiment. It discusses how to select the values of the factors at which to run the code (the design of the computer experiment) in light of the research objectives of the experimenter. It also provides techniques for analyzing the resulting data so as to achieve these research goals. It illustrates these methods with code that is available to the reader at the companion web site for the book.

2003/240 PP., 41 ILLUS. HARDCOVER/\$69.95 (TENT.) ISBN 0-387-95420-1 SPRINGER SERIES IN STATISTICS

MATHEMATICAL STATISTICS SECOND EDITION

J. SHAO, University of Wisconsin, Madison, WI

This graduate textbook covers topics in statistical theory essential for graduate students preparing for work on a Ph.D. degree in statistics. A large number of exercises in each chapter provide not only practice problems for students, but also many additional results. In addition to the classical results that are typically covered in a textbook of a similar level, this book introduces some topics in modern statistical theory that have been developed in recent years, such as Markov chain Monte Carlo, quasi-likelihoods, empirical likelihoods, statistical functionals, generalized estimation equations, the jackknife, and the bootstrap.

2002/604 PP./HARDCOVER/\$89.95 ISBN 0-387-95382-5 SPRINGER TEXTS IN STATISTICS

RESAMPLING METHODS FOR DEPENDENT DATA

S. N. LAHIRI, Iowa State University, Ames, IA

The book fills a gap in the literature covering research on resampling methods for dependent data that has witnessed vigorous growth over the last two decades but remains scattered in various statistics and econometrics journals. It can be used as a graduate level text for a special topics course on resampling methods for dependent data and also as a research monograph for statisticians and econometricians who want to learn more about the topic and want to apply the methods in their own research. Supplemental background material is added in the discussion of such important issues as second order properties of bootstrap methods, bootstrap under long range dependence, and bootstrap for extremes and heavy tailed dependent data. Further, illustrative numerical examples are given all through the book and issues involving application of the methodology are discussed.

CONTENTS: Scope of Resampling Methods for Dependent Data • Bootstrap Methods • Properties of Block Bootstrap Methods for the Sample Mean • Extensions and Examples • Comparison of Block Bootstrap Methods • Model Based Bootstrap • Frequency Domain Bootstrap • Long Range Dependence • Resampling Methods for Spatial Data • Special Topics

2003/336 PP., 25 ILLUS. HARDCOVER/\$79.95 ISBN 0-387-00928-0 SPRINGER SERIES STATISTICS

ANALYZING CATEGORICAL DATA

J. S. SIMONOFF, New York University, NY

This book provides an introduction to the analysis of categorical data. The coverage is broad, using the loglinear Poisson regression model and logistic binomial regression models as the primary engines for methodology. All methods are illustrated with analyses of real data examples, many from recent subject area journal articles. These analyses are highlighted in the text, and are more detailed than is typical, providing discussion of the context and background of the problem, model checking, and scientific implications. Almost 200 exercises are provided, many also based on recent subject area literature.

2003/504 PP., 65 ILLUS. HARDCOVER/\$84.95 ISBN 0-387-00749-0 SPRINGER TEXT IN STATISTICS

WEIGHTED EMPIRICAL PROCESSES IN DYNAMIC LINEAR MODELS

SECOND EDITION

H. L. KOUL, Michigan State University, East Lansing, MI

This book presents a unified approach for obtaining the limiting distributions of minimum distance, M and R estimators corresponding to non-smooth underlying scores in a large class of dynamic non-linear models including ARCH models.

2002/448 PP./SOFTCOVER/\$69.95 ISBN 0-387-95476-7 LECTURE NOTES IN STATISTICS, VOLUME 166

EASY WAYS TO ORDER:

CALL: 1-800-SPRINGER • WEB: www.springer-ny.com
 E-MAIL: orders@springer-ny.com • WRITE: Springer-Verlag New York, Inc., Dept. \$5621, P.O. Box 2485, Secaucus, NJ 07096-2485 • VISIT: Your local scientific bookstore or urge your librarian to order for your department.

Prices subject to change without notice.



3 PROMOTION #: S5621

Meet the Members

...well, three of them, anyway. Some long-standing and new members tell us some interesting things:

Yvonne H.S. Ho



PhD student, The University of Hong Kong Member of the IMS for 3 months

If you could have dinner with someone famous, living or deceased, who would it be? Dr. Sun Yat-Sen: he organized many revolutionary activities and was the "Father of Modern China".

What is the last movie you saw? Chicago

What did you do last Saturday?

I attended a faculty conference held at the university, which gave me a great opportunity to interact with many research students from different departments.

You have unlimited funds for a one week dream vacation: where would you go?

Tokyo in Japan... young girls like shopping a lot, I must grasp this valuable chance if I really have unlimited funds!

Tell us something that others might find surprising about you.

To be one of the recipients of the Laha Award, it still surprises me very much even though I received the announcement quite a few days ago.

Alicia Carriquiry



Professor of Statistics and Associate Provost, Iowa State University Member of the IMS for 10 years

If you could have dinner with someone famous, living or deceased, who would it be? I could not pick only one. Fidel Castro and Ruth Bader Ginsburg (one of the US Supreme Court Justices). Castro because he is a visionary (even if we do not all buy into the same vision) and Bader Ginsburg because she is so smart and sits in such an important position.

What is the last movie you saw? Harry Potter

What did you do last Saturday?

My husband and I took our one year old
Golden Retriever (Piet) to a lake and he
had great fun swimming and getting filthy.

In the evening we had dinner with a group
of friends. Not a bad Saturday at all.

You have unlimited funds for a one week dream vacation: where would you go?

Madagascar! Or the Seychelles! After a long US winter I am ready for some sunshine.

Tell us something that others might find surprising about you.

I am a New York Times crossword puzzle addict (almost as bad as Steve Fienberg).

Richard Levine



Assistant Professor, San Diego State University Member of IMS for 10 years.

If you could have dinner with someone famous, living or deceased, who would it be? I would choose my sister [a famous pianist]: she's very busy performing around the world—in the past couple of years we have not had a chance to sit down for a relaxing dinner!

What is the last movie you saw? Good Advice

What did you do last Saturday?

We tried out a dim sum place north of San Diego, then to the zoo to check out the spring flora and visit the new panda from China, Gao-Gao. In the evening, I played clarinet with "Woodworks" (a clarinet quartet) at a fundraising event for the San Diego State Music Department. Then crashed in front of the TV and watched the Padres lose again.

You have unlimited funds for a one week dream vacation: where would you go? Cathedral/castle hopping and food sampling through Europe. I find history and architecture fascinating. One can learn a lot about a culture through architecture and food!

Tell us something that others might find surprising about you.

I am a serious clarinetist, playing recently in wind and chamber ensembles, and delving into klezmer music. I'm also a Lindyhopper (swing dance of the early 20th century) and a social dancer: latin, some ballroom, and of course swing



IMS Elections: Candidate Information

PRESIDENTIAL CANDIDATE Louis H.Y. CHEN, Prof, Institute for Mathematical Sciences, Dept of Statistics and Applied Probability, Dept of Mathematics, National U of Singapore Education: B.Sc. (1964), U of Singapore; M.S. (1969), Ph.D. (1971), Stanford U Research interests: Applied probability; Stein's method of probability approximations; Biomolecular sequence analysis Previous Service to IMS: Member, IMS Nominating Cttee (1996-97, 2000-01) Brief Statement: I view the IMS as a platform for interactions and strengthening of links between probabilists and statisticians for the advancement of probability and statistics and for the development of science through their applications. Meetings of the IMS should have sessions on scientific problems which require advanced ideas and techniques from both fields (and for that matter from mathematics and computer science as well) for their solutions. Through its publications the IMS should continue to be a major force, and perhaps play a greater role, in promoting and facilitating the advances of these fields. I would also like to see the IMS play a greater international role through wider involvement of people from different countries and through cooperation with other scientific societies, and take an active interest in promoting probability and statistics in the less developed countries.

COUNCIL CANDIDATES
Naomi S. ALTMAN, Associate

Professor, Dept of Statistics, Pennsylvania State U

Education: B.S. (1974) and MS (1979) U of Toronto; Ph.D. (1988), Stanford U Research interests: nonparametric smoothing; longitudinal data; functional data; microarray experiment design and analysis; functional genomics

Previous Service to IMS: Chair, New Researcher's Cttee; Member, Nominating Cttee; Member, Ad Hoc Cttee for Outreach; Associate Editor, Journal of Computational and Graphical Statistics

Brief Statement: As a member of IMS since the late 1980's I have been particularly struck by the responsiveness of the IMS to the needs of the statistical community, including the sponsorship of new journals (some far from "mathematical statistics"), meetings and mini-meetings, monograph series, and support for new researchers. Particularly important is the role of IMS as an independent voice functioning alongside but independent of societies based solidly within either disciplinary or national boundaries. I see my role as a Council member to keep abreast of the needs of our constituency and to creatively address those needs through on-going and new IMS activities.

Jianqing FAN, Professor of Statistics and Chair, Dept of Statistics, Chinese U of Hong Kong

Education: Ph.D. (1989) U of California, Berkeley.

Research Interests: Semi- and Non-parametric modeling; Functional data analysis; Nonlinear time series; Survival analysis; Wavelets; Financial econometrics; Errors-invariables

Service to IMS: Member, Comm on Special Invited Papers (2000-2003); Member, Comm on Nomination (2002); Associate Editor, The Annals of Statistics (1998); Various conference session organizers. Brief Statement: Fan has actively served the professional in many capacities by participating in editorial boards for various journals and by organizing sessions in various conferences and workshops. He has been chairman of a department of statistics for three years. He has been been a member of IMS since 1987 and understands well the IMS mission and culture. If he gets elected, he will work on improving services to the members of IMS, attracting more international members and collaborating more with other international statistical societies.

Richard GILL, Professor, Dept of Mathematics, U of Utrecht Education: B.S. (1973) and Dip.S. (1974) Cambridge U; Ph.D. (1979) Free U, Amsterdam Research interests: Statistics and probability in quantum physics, quantum information; Causality; Semiparametric models; Missing

data, censoring Previous Service to IMS: Member, IMS Council; IMS Bernoulli Society Liaison Brief Statement: I think the IMS is a GOOD THING and I am enthusiastic to help out. Some points of detail: the last half dozen years I got involved in quantum physics and worked with physicists. I became aware how separated statistics is from physics, where statistics should be playing a much more significant role than it is (as usual, the computer scientists got involved in a big way). Any opportunities which the IMS can take to change this need to be explored and supported. Also I discovered the enormous impact of the eprint service http://arXiv.org on communication and publication practice. Statistics and the IMS needs to be in there too. For more about

Susan HOLMES, Associate Professor, Dept of Statistics, Stanford U Education: BSc, MS and PhD Montpellier, France

me see http://www.math.uu.nl/people/gil

Research interests: Computational Statistics, multivariate and bootstrapping in particular; Applications of statistics to biology, phylogenetic trees, clustering and microarrays; Statistics in biological networks; Educational tools for teaching probability and statistics over the web. Service to IMS: IMS Web Editor (2000-2002); Nominating Cttee (2001); IMS nominee for the for the Women in Mathematics Associations Cttee (2003-2004). Brief statement: I am very sensitive to the issues surrounding the IMS function in the publication of high quality journals, especially the electronic side of these problems, in which I am experienced. I am also a strong believer in the IMS's function in the organisation of high quality conferences and workshops and hope this will continue as it has been very successful in the past.

Chao Agnes HSIUNG, Director, Division of Biostatistics and Bioinformatics, National Health Research Inst, Taiwan Education: BS (1972) National Tsing-Hua U, Taiwan; MS (1973) & PhD (1975) Columbia U

Research interests: Survival analysis, Genetic statistics, Biostatistics

Service to IMS: Invited session organizer (2003) Brief Statement: Chao Agnes Hsiung is currently the Director of the Division of Biostatistics and Bioinformatics, National Health Research Institutes in Taiwan. The division works closely with scientists and clinicians to carry out research on statistics in genomic medicine. The division also provides statistical experties on design and analysis of clinical research. She is an elected member of International Statistical Institutes since 1985 and an elected fellow of IMS since 1994. She served as the president of the International Chinese Statistical Association in 2001. She is willing to help in bridging IMS to Asian statisticians.

Hans R. Künsch, Professor,

Department of Mathematics, Seminar für Statistik. ETH Zurich, Switzerland Education: Dip. Math (1975) and Ph.D. (1980) ETH Zurich, Switzerland Research interests: State space and hidden Markov models; Sequential Monte Carlo methods; Spatial statistics; Bootstrap methods for dependent observations; Robust statistics

Service to IMS: Co-editor, Annals of Statistics (1998-2000); Associate editor, Annals of Statistics, (1987-1991 and 1995-1997) Brief Statement: I am familiar with the work of the council from the time when I was an ex-officio member during my term as editor. If elected, I will participate actively in the discussions, both by email and at the annual meetings. Two areas where I have special interest are the future of the IMS journals and the activities of IMS on an international level.

Victor PÉREZ-ABREU, Researcher, Probability and Statistics, Research Center for Mathematics (CIMAT), Guanajuato, Mexico

Education: BS (1976) National Polytechnic Institute, Mexico; MS (1984) and PhD (1985) U of North Carolina.

Research interests: Stochastic Processes, Probability

Service to IMS: Chairman Local Organizing Cttee, 2000 World Congress BernoulliIMS, Guanajuato, Mexico; Member IMS Fellows Cttee IMS (2001-2003) Brief Statement: If elected, I will continue promoting more applications of probability and statistics in the basic and applied sciences and other disciplines. I will continue stimulating the development of probability and statistics in the developing world by means of cooperative actions between the IMS and other societies, including local societies from different countries and the organization of joint meetings in these countries.

Christian P. ROBERT. Professeur de Statistique, CEREMADE, Université Paris Dauphine

Education: MS (1985) ENSAE, Paris and Université Paris 6; (1987) Université de Rouen: Hab (1991) Université Paris 6 Research interests: Bayesian inference (model choice, testing); Simulation methods (MC, MCMC, sequential MC); Bayesian econometrics

Service to IMS: Associate editor, Annals of Statistics (1998-); Associate editor, Statistical Science (2000-); Member, Nominating Cttee (1997)

Brief Statement: Facing a growing pressure towards fractioning, our discipline must remain as a whole or risk incorporation into neighbouring fields. I think the IMS, as an organisation, is the most able to resist to this fractioning, if we can preserve the duality between Probability and Statistics that makes the IMS unique. This can best be achieved by taking advantage of the diversity of approaches to this duality around the World, that is, by not losing sight of the international features of the Society. I hope I can contribute to this.

Sara VAN DE GEER, Full Professor, Mathematical Institute, U of Leiden, The Netherlands

Education: MS (1982) & PhD (1987), U of Leiden

Research interests: Empirical Processes; Adaptive Estimation; Model Selection; Classification Theory; Curve Estimation; Semiparametric Models; Statistical Methods for High-Dimensional Data Service to IMS: Member, IMS Nominations Cttee (2001-02), Member, Cttee on Fellows (2003-05); Member, IMS/BWC 2004 Scientific Program Cttee; Associate Editor, Annals of Statistics Brief Statement: The international activities of Institute of Mathematical Statistics have led to an open communication among people from all over the world, on the theory and applications of probability and mathematical statistics. The importance of regular and accessible international communication can hardly be overestimated, especially since probability and statistics are sciences which aim at modeling real life phenomena, and need input from all angles in its striving for objectivity and generality. The international IMS meetings, workshops and sessions, and the high standard IMS journals, are a precious treasure we should carefully and attentively cherish.

Ruth J. WILLIAMS, Professor, Mathematics, U of California, San Diego, **USA**

Education: BSc (1977) and MS (1979) U of Melbourne; PhD (1983) Stanford U Research interests: probability and analysis, stochastic processes and their applications, reflected diffusions, stochastic networks Service to IMS: Cttee on Named and Special Invited Lectures (1999-2002) (Chair in 2002); Search Cttee for new editor of Annals of Probability (1999); Cttee on Fellows, (1994-97) (Chair, 1997). Nominating Cttee (1994). Brief Statement: The IMS promotes the development and dissemination of probability and statistics through the publication of scholarly journals and holding of scientific meetings. If elected to the IMS Council, I will work to maintain the high quality and affordability of these activities, and to ensure diversified representation in the associated decision making processes. I will also work to make further progress in using electronic mechanisms to make IMS publications available in a timely and user-friendly

manner.

American Association for the Advancement of Science Report



Juliet Shaffer is the IMS representative to the Statistics Section of the American Association for the Advancement of Science (AAAS). She reports from the 2003

AAAS Annual Meeting, held in February: A number of the issues discussed at the meeting for affiliated organizations and at the Statistics Section Business Meeting should be of interest to IMS members. These are summarized below.

Direct Statistics Related Issues

The purpose of the Statistics Section is to publicize the contributions of statistics to scientific knowledge and to encourage better statistical methodology in scientific research. We have worked on trying to achieve more statistical reviews of articles in the magazine *Science*, and on organizing symposia and proposing speakers with statistical content at the AAAS annual meetings. The Section would welcome more participation of statisticians in AAAS activities.

A good way to become involved in the AAAS is to organize a symposium at an annual meeting. The AAAS website (www.aaas.org) gives information on how to go about this, and the complete program of the 2003 meeting. The Statistics Section website (http://anson.ucdavis.edu/~utts/aaas) gives further information.

I would be happy to answer any questions about the process. It is too late for proposals for 2004, but it's not too early to think about proposing symposia and/or speakers for the 2005 meeting.

The 2004 meeting will be in Seattle, Feb 12-17. Jessica Utts and Nancy Gordon submitted proposals entitled "Designing and Implementing Studies to Test Controversial Claims in Medicine" and "Bridging the Divide: Preserving Scientific Research and Protecting Individual Privacy", respectively.

Other symposia considered were:
"Quantitative Input into Bioterrorism Policy",
Mary Foulkes; "Generally Accepted Science
Is Not Necessarily Good Enough", John
Gardenier; "What to Do about HRT? The
Scientific Experience in the Women's Health
Initiative", Karen Bandeen-Roche; and "The
Mathematics of Marriage", Bob Fay.

Suggestions for plenary speakers for 2004 were also discussed.

National Security Related Issues

At the Affiliates meeting, Ron Atlas,
President of the American Society of
Microbiology, talked on "Scientific openness
and national security needs in the new age
of bioterrorism". There is a huge increase in
the NIH budget to deal with bioterrorism.
Project Bioshield gives unlimited authority
to the US President to control and limit
the transfer of agents considered dangerous
within the country and to require export
licenses for export of agents (bacteria, drugs,
etc). The project considers the export of
information as well. This is new to the life
sciences (though not physics or cryptology.)

Furthermore, the Patriot Act restricts aliens from some countries from possessing selected agents within the US. It is a criminal offense to provide them. For such selected agents, possession anywhere must be registered. Names of *any* visitors to labs containing such agents must be reported to the Department of Justice. Labs must be heavily guarded. Clearance and surveillance of everyone involved in the labs, everyone entering, is required. All packages entering and leaving must be inspected. There is a 220 page document from CDC and USDA describing these regulations and their implementation.

There is a fear that these requirements will negatively affect research, and that some microbiologists will leave this field rather than put up with such severe restrictions. The government is alarmed by this possibility. Yet it seems clear that some restrictions, on information as well as agents, will be necessary.

A statement arrived at after a daylong meeting sponsored by the National Academies and the Center for Security and International Studies (CSIS) can be found in the February 21 issue of Science, p. 1149 (see also the editorial by Donald Kennedy on the preceding page). A group of journal editors and authors have agreed to some restrictions of information. There is a feeling that if the scientists themselves don't agree to restrictions, the government will step in, and will be less able to formulate reasonable provisions. There is still a good deal of dissension on this issue. Information can be found on the AAAS web page (http://www.aaas.org) by searching on bioterrorism.

Dr. Atlas also discussed the problem of trying to restrict preprints, abstracts, posters at meetings, talks at meetings, etc. He noted furthermore that the government has begun to screen participants at bioterrorism conferences, and that participants often don't know about this screening.

Al Teich, Director of AAAS Science and Policy Programs talked on "Update on student and exchange visitor information service and the status of the Interagency Panel for Advanced Science and Security". There has been one major change related to foreign student visas since 9/11: Visa officers in Consulates can be held criminally responsible if they approve visas for



"students" who turn out to be terrorists. Needless to say, this makes these officers *very* cautious. Furthermore, an electronic database system is to be put into effect, and each foreign student is to be tracked in detail, for both personal and academic information (all those on F, J, or M visas). Universities must comply with the regulations, which require information on study, living arrangements, etc. There will be some requirements also for other (non-student) foreign visitors.

Statement on "Intelligent Design"

A statement on "Intelligent Design" has been endorsed by the AAAS. Affiliate organizations are requested to endorse this statement [see box]. Aparna Huzurbazar is going to bring it up at COPSS, with the possibility that all the statistical societies can make a joint decision.

AAAS Board Resolution on Intelligent Design Theory (from www.aaas.org/news/releases/2002/ 1106id2.shtml)

The contemporary theory of biological evolution is one of the most robust products of scientific inquiry. It is the foundation for research in many areas of biology as well as an essential element of science education. To become informed and responsible citizens in our contemporary technological world, students need to study the theories and empirical evidence central to current scientific understanding. Over the past several years proponents of so-called "intelligent design theory," also known as ID, have challenged the accepted scientific theory of biological evolution. As part of this effort they have sought to introduce the teaching of "intelligent design theory" into the science curricula of the public schools. The movement presents "intelligent design theory" to the public as a theoretical innovation, supported by scientific evidence, that offers a more adequate explanation for the origin of the diversity of living organisms than the current scientifically accepted theory of evolution. In response to this effort, individual scientists and philosophers of science have provided substantive critiques of "intelligent design," demonstrating significant conceptual flaws in its formulation, a lack of credible scientific evidence, and misrepresentations of scientific facts. Recognizing that the "intelligent design theory"

represents a challenge to the quality of science

education, the Board of Directors of the AAAS unanimously adopts the following resolution: Whereas, ID proponents claim that contemporary evolutionary theory is incapable of explaining the origin of the diversity of living organisms;

Whereas, to date, the ID movement has failed to offer credible scientific evidence to support their claim that ID undermines the current scientifically accepted theory of evolution:

Whereas, the ID movement has not proposed a scientific means of testing its claims;

Therefore Be It Resolved, that the lack of scientific warrant for so-called "intelligent design theory" makes it improper to include as a part of science education;

Therefore Be Further It Resolved, that AAAS urges citizens across the nation to oppose the establishment of policies that would permit the teaching of "intelligent design theory" as a part of the science curricula of the public schools; Therefore Be It Further Resolved, that AAAS calls upon its members to assist those engaged in overseeing science education policy to understand the nature of science, the content of contemporary evolutionary theory and the inappropriateness of "intelligent design theory" as subject matter for science education;

Therefore Be Further It Resolved, that AAAS encourages its affiliated societies to endorse this resolution and to communicate their support to appropriate parties at the federal, state and local levels of the government.

Approved by the AAAS Board of Directors on 10/18/02

The Future of Statistics



Bruce Lindsay reports: On May 6-8, 2002 a workshop entitled "Statistics: Challenges and Opportunities for the 21st Century" was convened at the National

Science Foundation in Washington DC, with support provided by NSF. The workshop was organized by a Scientific Committee consisting of James Berger, Peter Bickel, Mary Ellen Bock, Larry Brown, Sam Hedayat, David Siegmund, and Grace Wahba, with Bruce Lindsay as Chairperson. Approximately 50 statisticians from around the world participated in the workshop. International participants included D.R. Cox, Willem van Zwet, Nancy Reid, Peter Hall, Chris Heyde, Keith Worsley, and Augustine Kong. The IMS and ASA Presidents, Iain Johnstone and Miron Straf, were also present.

The purpose of the workshop was to

examine the current status of the Statistics profession in the United States and abroad, and to identify its future challenges and opportunities. Although the workshop was largely focused on scientific research, issues pertaining to the role of education and training in attaining the long-term goals of the profession were also discussed. A report based on the workshop proceedings has been prepared and edited by Jon Kettenring (jon@research.telcordia.com), Bruce Lindsay (bgl@psu.edu) and David Siegmund (dos@stat.stanford.edu). Still under revision at this writing, the current versions are posted on the web at http:// www.stat.psu.edu/~bgl/nsf_report.pdf

The report identifies the primary opportunities and needs that the statistics profession should address as a community in the coming years. It has been written to address an audience that extends beyond statistics professionals to such crucial

supporting players as department heads, college deans, and funding agencies. The workshop report identifies, for the profession and its key stakeholders, the following areas where future efforts are much needed:

- strengthening the core research areas,
- strengthening multidisciplinary research activities,
- developing new models for statistical education,
- accelerating the recruitment of the next generation of statisticians, and
- promoting the unique value of statistics to the scientific community.

The report's editors hope this becomes the first step in a concerted community effort to build a better future. They encourage all statisticians to read the report and submit their comments.

Seminar on Stochastic Processes

Chris Burdzy writes about the Seminar on Stochastic Processes which was held at the University of Washington, Seattle, from March 27-29, 2003.

The conference attracted about 100 participants, mainly from the United States, but also from countries as diverse as Algeria, Colombia, Germany and Hungary. About one half of the participants were 'junior' people: recent graduates and even advanced graduate students.

The conference followed the format



Balint Toth

of the previous conferences in the same series (see http://www. math.yorku.ca/ Probability/ ssparch.html for the history of the conference). Only five one-hour invited talks were

given by the top experts in probability theory. All other sessions were devoted to short informal talks. Every participant had a chance to present his or her most favorite recent result or an interesting open problem. Both senior mathematicians and junior researchers actively participated in the informal sessions.

Ample time was left for discussions in small groups

The main speakers and their lectures were:

- Ioannis Karatzas
 (Columbia University):
 "Some Stochastic
 Optimization Problems
 in Mathematical
 Finance";
- Wenbo Li (University of Delaware): "Large Deviations for Intersection Local Times";
- Russ Lyons (Indiana Main Speaker Ioannis M University and Georgia Institute of Technology): "Stationary Determinantal Processes (Fermionic Lattice Gases)";
- Carl Mueller (University of Rochester): "Some Wave Equations with Noise";
- Balint Toth (Budapest University of Technology and Economics): "Between Equilibrium Fluctuations and Eulerian Scaling".

Some more information related to the event, including a few photographs, can be found at http://www.math.washington.edu/



Main Speaker loannis Karatzas (right) with Erhan Cinlar, one of the three original organizers of the first conference, twenty years ago

~burdzy/SSP2003/index.shtml.

The conference was sponsored by the Institute of Mathematical Statistics and was financially supported by the Pacific Institute for the Mathematical Sciences, the Milliman Fund at the Department of Mathematics, University of Washington, a VIGRE grant at the University of

Washington, the National Science Foundation, University of Washington, College of Arts and Sciences at the University of Washington and the Graduate School at the University of Washington. A



Wenbo Li

big portion of the conference budget was spent on travel grants for junior researchers, women, minorities, and participants with no grants.



Carl Mueller (left) and Russ Lyons

Letters to the Editor

Letters on any issue of interest to IMS members are welcome. Email your letters to the Editor at bulletin@imstat.org. The Editor's decision about whether to publish letters is final. Letters are submitted on the understanding that they may be edited before publication.

Dear Editor

It is nice to see IMS broadening its base. It used to be that in order to be placed on the IMS ballot you had to be associated with either Stanford or an Ivy League school (graduate or employee). Now I see that you have expanded this to include non-Americans.

Congratulations.

Ronald Christensen

Editor's note: I am not sure whether I agree with Ronald's comments about the slate of candidates in previous years, and I myself have been a non-American Council Member and indeed President! Nevertheless, I am sure that the nominating committee will be pleased to hear this positive feedback. Of course, in the end, it is up to members who they vote for, so please make sure you cast your ballots (preferably electronically!)

Correction:

The distinguished political scientist Professor Steven Brams of New York University has pointed out an error in Bernard Silverman's article [*IMS Bulletin*, March/April 2003, page 3] about the Single Transferable Vote (STV) system.

He writes: "Your statement about STV, "There is no disadvantage to your originally preferred candidates in expressing a full list of preferences," is incorrect". He also points out that STV is 'nonmonotonic' in the sense that, "If some voters raise a candidate in their preference rankings from last to first place, without changing their rankings of the other candidates, they can cause this candidate to lose—just the opposite of what they'd like to happen." Professor Brams has published relevant counterexamples in his paper "The AMS Nomination Procedure is Vulnerable to 'Truncation of Preferences'", Notices of the American Mathematical Society,

Vol. 29, no. 2 (February 1982): 136-138. See also his editorial with Dudley Herschbach, "The Science of Elections" in the June 10, 2001 issue of *Science*; Brams and Peter C. Fishburn, "Voting Procedures," in *Handbook of Social Choice and Welfare*, vol. 1, edited by K.J. Arrow, A.K. Sen, and K. Suzumura (Amsterdam: Elsevier Science, 2002), pp. 175-236; and Richard F. Potthoff and Brams, "Proportional Representation: Broadening the Options," *Journal of Theoretical Politics* 10, no. 2 (April 1998): 147-178.]

I am very grateful to him for pointing this error out; it does not invalidate our main reason for introducing proportional voting, that of ensuring that any particular group or "party" only has to obtain a proportion of support in order to elect a council member. The form of STV that we are currently using is in wide use internationally and is based on a published algorithm on our website at www.imstat.org/elections/stv.html.

Bayesian Workshop at the Indian Statistical Institute

Dipak Dey writes: The Mathematics and Statistics Division of the Indian Statistical Institute, Kolkata hosted a Bayesian workshop during January 6 to 8, 2003. This workshop was cosponsored by the Institute of Mathematical Statistics. The special topics included in the program were: Methods for high or infinite dimensional data, Environmental and Spatial statistics, Survival analysis, Epidemiology, Model selection, Objective Bayesian methods, Nonparametrics, Reliability and Econometrics.

It was attended by several international Bayesian statisticians and statisticians within India including members of the local chapter of the International Society of Bayesian Analysis.

Invited speakers included Professors Sudipto Banerjee, Sanjib Basu, Jose Bernardo, Dipak Dey. Alan Gelfand, Jayanta Ghosh, Wes Johnson, Lynn Kuo, Kajal Lahiri, Bani Mallick, Peter Mueller, Sumitra Purkayastha and Nozer Singpurwalla.

There was a contributed paper session presented by young researchers from USA. Their partial travel expenses were covered by IMS.

Past IMS Bulletin Editors

Leo Katz (1972-74)

Dorian Feldman (1975-80)

William C Guenther (1981-86)

George P H Styan (1987-92)

Susan R Wilson (1992-97)

Dipak K Dey (1998-2001)

LECTURE NOTES -MONOGRAPH



SERIES

Volume 40:

Science and Statistics: A Festschrift for Terry Speed

Darlene R. Goldstein, Editor

This special volume has been compiled to honor Terry Speed. It contains contributions offered by his colleagues and students on such diverse topics as probability, algebraic experimental design, generalized linear models, statistical education, and assorted applications, including the US census, fire risk assessment, and genetics.



Terry Speed being presented with his LNMS volumes

View a PDF of the contents at http://www.imstat.org/publications/lnms40.pdf

Price US\$66

IMS Member Price **US\$39**

Order online at: http://www.imstat.org/

Or send payment (Mastercard, Visa, American Express, Discover or Check, payable on a US bank in US funds) to:

Institute of Mathematical Statistics, Dues and Subscriptions Office 9650 Rockville Pike, Suite L2310, Bethesda MD 20814-3998, USA Tel: (301) 530-7029 Fax: (301) 571-5728 Email: staff@imstat.org

2002 Annual Survey of the Mathematical **Sciences (First Report)**

Report on the 2001–2002 New Doctoral Recipients Faculty Salary Survey Don O. Loftsgaarden, James W. Maxwell, and Kinda Remick Priestley

An annual survey is taken of departments of mathematical sciences in America, sopnsored by IMS, the American Mathematical Society, the Mathematical Association of America, and the American Statistical Association. First announced in the January/February issue of the IMS Bulletin, we now publish some of the highlighte from the report.

Highlights

- There were 948 new doctoral recipients reported for 2001-02 by departments responding in time for the 2002 First Report. This is the fourth consecutive drop in the number of new doctoral recipients. The counts for the preceding four years starting in 1997-98 were 1,163, 1,133, 1,119, and 1,008.
- The number of new doctoral recipients from Groups I (Pu), I (Pr), and II combined has dropped from 744 in 1997-98 to 521 this year, a decrease of 223 (30%).
- Only 418 (44%) of the new doctoral recipients for 2001-02 are U.S. citizens, a drop of 76 (15%) from 2000-01 and down 168 (29%) from 586 in 1997-98.
- The numbers of various types of graduate students in U.S. doctoral departments in the mathematical sciences were dropping from 1992 to 1997 or 1998 and have been increasing since then. This is true for first-year full-time and first-year U.S. citizen full-time graduate students. Based on these numbers and the recent numbers of new doctoral recipients, it appears likely that the downward trends in new doctoral recipients mentioned above will continue for another two years or so,

- probably at a slower rate. By then the increasing number of first-year full-time graduate students since 1997 should result in a gradually increasing number of new doctoral recipients.
- Based on responses from departments alone, the fall 2002 unemployment rate for the 756 new doctoral recipients
 - whose employment status is known is 4.3%, down from 5.6% for fall 2001 and the lowest fall unemployment rate in the past thirteen years.
- Sixty-one new doctoral recipients hold positions at the institution that granted their degree, although not necessarily in the same department. This is 8.1% of the new doctoral recipients
 - who are currently known to have jobs and 12% of those who have academic positions in the U.S. Nine new doctoral recipients have part-time positions.
- Of the 664 new doctoral recipients taking positions in the U.S., 123 (19%) have jobs in business and industry, down from 168 in fall 2001 and 206 in fall 2000.
- The number of new doctoral recipients taking U.S. academic positions was 503 in fall 2002, down 7 from fall 2001 and down 48 from fall 2000.
- Among the 266 new doctoral recipients hired by U.S. doctoral-granting departments, 44% are U.S. citizens.

- Among the 237 having other academic positions in the U.S., 58% are U.S. citizens.
- Of the 948 new doctoral recipients, 290 (31%) are females, down just 2 from fall 2001. Of the 418 U.S. citizen new doctoral recipients, 127 (30%) are females, down 24 from fall 2001. The

all-time high was 187 in

fall 1998.

- Among the 418 U.S. citizen new doctoral recipients, 18 are Asians, 12 are Blacks or African Americans, 8 are Hispanics or Latinos, 370 are Whites, and 10 are other.
- Group IV produced 222 new doctorates, of which 92 (41%) are females, compared to all other combined, where 198

groups

2002

Annual Survey

of the Mathematical Sciences

(AMS-ASA-IMS-MAA)

First Report

Report on the 2001-2002 New Doctoral Recipients Faculty Salary Survey

Don O. Loftsgaarden James W. Maxwell Kinda Remick Priestley

(27%) are females.

Two hundred eighty-eight new doctorates had a dissertation in statistics/biostatistics (253) and probability (35). The next highest number was in algebra and number theory with 126. Those with dissertations in statistics/biostatistics and probability accounted for 30.4% of the new doctorates in 2001-02.

More information on the group definitions, and other reports, are available to download at www.ams.org/employment/ surveyreports.html

IMS Meetings around the world

IMS Sponsored Meeting

IMS Annual Meeting & 6th Bernoulli World Congress July 26–30, 2004. Barcelona, Spain

Joint Program Chair: Wilfrid S. Kendall (wsk@stats.warwick.ac.uk) University of Warwick, UK. Local Chair: David Nualart, (nualart@mat.ub.es) Universitat de Barcelona, Spain www.imub.ub.es/events/wc2004/

IMS Sponsored Mini-Meeting

CURRENT TRENDS IN SAMPLE SURVEYS AND OFFICIAL STATISTICS

January 2-3, 2004, Calcutta, India

Organizers: Tathagata Banerjee, Partha Lahiri IMS Invited Paper Session at the International Statistical Institute, 54th Biennial Session:

The Analysis of Gene Expression Data August 13–20, 2003, Berlin, Germany

IMS Organizer: Mike West, Duke U, mw@stat.duke.edu (speakers are Rainer Spang, Sandrine Dudoit and Mike West). ISI website: www.isi-2003.de

IMS Co-sponsored Meeting:

2004 ENAR Spring Meeting March 28–31, 2004 Hilton Pittsburgh, PA

Website: http://www.enar.org/meetings.htm

IMS Sponsored Mini-meeting

Workshop on Statistical Inference, Computing and Visualization for Graphs August 1–2, 2003 at Stanford University Funded in part by a mini-meeting grant from the IMS.

Graphs (data represented as nodes and edges) pose challenges for data analysis that can only be addressed through interdisciplinary collaboration. This workshop will bring together researchers from statistics, computer science, sociology and computational biology to explore these challenges. The data we discuss will come from fields as diverse as telecommunications, bioinformatics and social networks.

The program will be designed to allow lots of time for discussion, demonstration and collaboration.

The workshop's goals and program are more fully described here: http://www.research.att.com/~volinsky/Graphs/Workshop.html

If you're interested in participating, or you'd like to learn more, send an email to dfs@research.att.com.

For local organisational details, (housing reservations etc.) contact Susan Holmes, susan@stat.stanford.edu.

IMS Co-sponsored Meeting:

First IMS-ISBA Joint Meeting: 24–27 July 2003, Puerto Rico, USA REGISTRATION FORMS NOW AVAILABLE

The first joint statistical meeting of IMS and

ISBA (the International Society for Bayesian Analysis) will be held in Isla Verde (San Juan, Puerto Rico, USA) on **July 24–27**, **2003**. The meeting will evolve around three main topics of interest to both IMS and ISBA members: Causal-Graphical Modeling; Spatial Statistics and Analysis of Extremes. The format of the meeting includes overview lectures in the topics, invited talks, and poster sessions.

The program Committee is: M.J. Bayarri (Chair, Universidad de Valencia), Jim Berger (Duke U), Alicia Carriquiry (Iowa State U), Susan Murphy (U of Michigan), Luis Pericchi (Universidad de Puerto Rico), Larry Wasserman (Carnegie Mellon U).

The Overview Plenary Speakers are: Stephen Lauritzen (Causal-Graphical Modeling), Peter Green (Spatial Statistics) and Richard Smith (Analysis of Extremes).

For more details, and registration form, please visitthe website www.cnnet.clu.edu/math/ims-isba-pr2003

Satellite Meetings:

There are two satellite meetings associated with the IMS-ISBA Joint Meeting: **Model Selection Workshop** on Tuesday July 22 (3–7.3opm) and Wednesday July 23 (9.3oam–1pm), just before the IMS/ISBA meeting, and

Bioinformatics and Biostatistics: Current Problems and Solutions on Sunday, July 27 (9am–4:30pm), just after the IMS/ISBA meeting.

More details about the satellite meetings are on page 20.



IMS Sponsored Mini-meeting

Mini-conference on Non/semi-parametric Models and Sequential Analysis June 28, 2003 Gallery, W.T. Young Library Lexington, Kentucky

http://www.ms.uky.edu/~statinfo/ nonparconf/

Organizers: Mai Zhou and Arne Bathke

IMS Co-sponsored Meeting:

2003 Joint Summer Research Conferences June 8-July 24, 2003, Snowbird, Utah



http://www.ams.org/meetings/src03.html IMS, together with the American Mathematical Society (AMS) and the Society for Industrial and Applied Mathematics (SIAM), have jointly sponsored Summer Research Conferences for twenty years. This year's SRC is in the breathtaking mountain setting, of Snowbird Resort in Utah, 30 minutes from the University of Utah, and easily accessible from Salt Lake City International Airport. For more information about Snowbird Resort, see www.snowbird.com.

The atmosphere at SRC is comparable to the collegial gatherings at Oberwolfach and other conferences that combine peaceful natural ambience with stimulating meetings.

Summer Research Conferences participants have access to a range of activities such as a tram ride to the top of the mountain, guided hikes, swimming, mountain bike tours, rock climbing, plus heated outdoor pools. More than a dozen walking and hiking trails head deep in the surrounding mountains. Participants also enjoy the simpler pleasures of convening on the patios at the resort to read, work, and socialize. In the evenings colleagues enjoy informal gatherings to network and

continue discussion of the day's sessions over refreshments.



Summer in Snowbird, Utah

JSM 2003

MS Presidential Address

Monday August 4 8:00pm

Location: Parc 3, Renaissance

Parc 55 Hotel



S.R.S. Varadhan Estimating Small Probabilities: The Science and Art of Large Deviations

Join us for the following presentations and announcements:

- · Announcement of Special Invited Papers
- · Presentation of Harry C. Carver Award
- Presentation of New IMS Fellows
- Announcement of Laha Award Recipients

Reception immediately following. Everyone is welcome.



ISM 2003

IMS Welcome Reception



Tuesday August 5 5:15-6:45pm

Location: CityScape Restaurant, Hilton

San Francisco Hotel

New Members, New Graduates and Students

All members who have joined the IMS during the past two years, all IMS New Graduate members and all IMS student members are encouraged to attend. Appetizers and an open bar will be available.



If you wish to join the IMS, but haven't, please come by the reception and we will have applications available, or you can join on-line at www.imstat.org

IMS Co-sponsored Meeting:

2003 Spring Research Conference on Statistics in Industry and Technology June 4-6, 2003, Dayton, Ohio

http://www.stat.uiowa.edu/SRC2003/

The SRC is the premier research conference for statistics in industry and technology. The program for the 2003 conference will feature a keynote address by Friedrich W. Scholz, Technical Fellow at Boeing Company; and plenary talks, invited sessions, and contributed sessions on key and emerging areas. Suggestions on topics and speakers are welcome. Sponsors: The SRC is a joint venture of the Institute of Mathematical Statistics and the Section on Physical and Engineering Sciences of the American Statistical Association.

Contacts: src2003@stat.uiowa.edu

Invited Program: Russell V. Lenth, The University of Iowa, 319/335-0814, russelllenth@uiowa.edu; Contributed Program: William A. Brenneman, Procter and Gamble, 513/ 622-3195, brenneman.wa@pg.com; Local Arrangements: Peter W. Hovey, The University of Dayton, 937/229/2964, peter.hovey@notes.udayton.edu



June 22-25, 2003: Colorado School of Mines, Golden, CO.

WNAR/IMS Western Regional (Sponsored/Numbered meeting 281).

Program Chair: Naisyin Wang, Texas A&M **e** nwang@stat.tamu.edu; Local

Arrangements Chairs: Jan Breidt **e** jbreidt@stat.colostate.edu and Jan Hannig **e** hanni g@stat.colostate.edu **w** http://biosweb.njc.org/vc/biom/WNAR2003/WelcomePage.cfm

Featuring:

Regional Advisory Board Panel: Funding Opportunities for Biostatisticians and Statisticians Coorganized by IMS

Organizers: Snehalata Huzurbazar, Naisyin Wang, Anna Barón, Mike Leblanc; Panel Members: Dennis Dixon, NIH/NIAID; Ann Hardy, NIH/CSR; Marianthi Markatou, NSF; Ram Tiwari, NIH/NCI; Scott Urqhart, EPA/EMAP

Joint WNAR/IMS Invited Sessions

1 · Handling High Dimensional Nuisance Parameters in Longitudinal Data

Organizer: Annie Qu, Dept Statistics, Oregon State Univ

2 · Bayesian Statistics in Scientific Research

Organizers: Shane Reese, Brigham Young Univ; Snehalata Huzurbazar, Univ Wyoming

WNAR Invited Sessions

1 · Statistics in the Identification of Bioterrorism Attacks

Organizer: Mark Fitzgerald, Univ Colorado at Denver

2 · Inference and Estimation in the Presence of Competing Risks

Organizer: Ted Gooley, Fred Hutchinson Cancer Research Center, Univ Washington

3 · So Many Opportunities, So Few of Us: What Can We Do as a Profession to Address the Impending Shortfall in the Supply of Biostatisticians?

Organizer: Anna Barón, Univ Colorado

4 · Topics in Spatial Modeling of Disease

Organizer: Brad Biggerstaff, Centers for Disease Control, Fort Collins, CO

5 · Methodology and Applications in Spatial Statistics

Organizer: Wendy Meiring, Dept Statistics Applied Prob, Univ California at Santa Barbara

6 · Exact Inference for Independent and Correlated Data

Organizer: Joan Hilton, Division of Biostatistics, Univ California at San Francisco

IMS Invited Sessions

1 · Analysis of Microarray Data

Organizer: Charles Kooperberg, Fred Hutchinson Cancer Center

2 · Observational Data Analysis: Causal Inference and Bias Modeling

Organizer: Babette Brumback, Dept Biostatistics, Univ Washington at Seattle and UCLA

3 · Advances in Functional and Longitudinal Data Analysis

Organizer: Jane-Ling Wang, Dept Statistics,

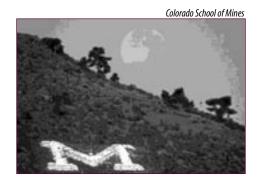
Univ California at Davis

4 · Applications of Statistics to Molecular and Cellular Biology

Organizer: Jeffrey S. Morris, MD Anderson Cancer Center, Univ Texas

5 · Sensitivity Analysis with Nonignorable Missing Data

Organizer: Andrea Rotnitzky, Dept Biostatistics, Harvard Univ



WNAR Presidential Address: Graphics: An Ace in the Sleeve of a Statistician

Heike Hofmann, PhD, Iowa State U
Statistical Graphics have a long tradition,
dating back to the late 1700s when William
Playfair primped up his Commercial and
Political Atlas with plots. Success stories
attest to the fact that lives have literally been
saved by statistical graphics. For example,
when cholera struck London the source was
found using graphics.

Graphical displays give the data analyst a unique framework for exploration, especially as we understand more about the possibilities and limits of human visual perception. A statistical framework underlying graphics helps determine whether what we see is actually there probabilistically.

Technically, the capabilities of computing systems are very much improved from twenty years ago. The approaches are very different too, but the demands grow at the same rate at least, if not faster. Challenges for modern visualization are ever increasing data sets of growing complexity. New sources of data emerge such as in the developing genomics and proteomics communities. Graphical displays provide a vehicle for matching experts' knowledge with statistical tools, and communicating to a wider audience.

Producing good graphics is an art—as a good magician's trick. Unlike the magician a good statistician does not want to produce an illusion but reveal the hidden qualities of the data. We will show numerous famous statistical graphics examples—from the early beginnings of statistical graphics up to modern visualization techniques.



LECTURE NOTES – MONOGRAPH SERIES

Volume 41:

Probability, Statistics and their Applications: Papers in Honor of Rabi Bhattacharya

Editors: Krishna Athreya, Mukul Majumdar, Madan Puri, Edward Waymire

This volume honoring Professor Rabi Bhattacharya contains research contributions to a broad range of topics from a distinguished group of probabilists and statisticians. The areas covered include time series, stochastic differential equations, fractional Brownian motion, Levy Processes, iterated random maps and statistical inference. Several of the articles concern applications of these areas to economics, mathematical finance, population ecology, and mathematical physics.

Apart from being a useful reference on contemporary research, the present volume could also be used in graduate seminars to expose students to current research on some exciting topics in probabilty, statistics and their applications.

Price US\$40

IMS Member Price US\$24 Order online at:
Or send payment

http://www.imstat.org/

nt (Mastercard, Visa, American Express, Discover or Check, payable on a US bank in US funds) to: Institute of Mathematical Statistics, Dues and Subscriptions Office

9650 Rockville Pike, Suite L2310, Bethesda MD 20814-3998, USA Tel: (301) 530-7029 Fax: (301) 571-5728 Email: staff@imstat.org

Other Meetings Around the World: Announcements and Calls for Papers

IMS-ISBA SATELLITE WORKSHOP CALL FOR PARTICIPANTS: Model Selection Workshop July 22–23, 2003, San Juan, Puerto Rico

This workshop will be held on Tuesday July 22 (3–7.30pm) and Wednesday July 23 (9.30 am–1pm), just before the joint IMS/ ISBA meeting (see p16).

The Schedule of the Workshop is as follows: Tuesday, July 22: 3:00-5:00 I. Foundations of Model Selection; 5:00-5:30 Break; 5:30-7:30 II. Priors for Model Selection, and Their Evaluation

Wednesday, July 23: 9:30-11:30 III. Search and Computation Strategies in Model Selection; 11:30 -12:00 Break 12:00-1:00 Concluding Discussion
This is a WORKshop, meaning that
presentations will be informal (and short!),
and discussions will be serious (and long!).
To initiate discussion, some participants will
give short presentations at the beginning
of a session; each person's talking time
will be limited, so those giving initiating
presentations will have less discussion time.
If you want to participate in the Workshop,
please send the following information to
Susie Bayarri by e-mail bayarri@uv.es by
June 12, 2003 at noon Spanish time (Hard
Deadline):

Name and email; CV or website (if the latter contains research information); desired

mode of participation [Sessions (I, II or III) in which active role is desired, Proposed (short) presentation(s) (with abstract(s)), Discussion leader or Discussion participant] Based on responses, the organizing committee will set a schedule for each session, and let you know your role(s) by the first week of July. Registration for the Workshop will be on-site. The registration fee will be \$30 to cover breaks and incidentals. Accommodations are to be arranged with the main conference hotel see http://www.cnnet.clu.edu/math/ims-isbapr2003/ for information and instructions. Note that the model selection workshop does not have specific travel funding.

IMS-ISBA SATELLITE WORKSHOP: Bioinformatics and Biostatistics: Current Problems and Solutions

A Satellite Workshop on Bioinformatics and Biostatistcs will be held on Sunday, July 27 (9am–4:30pm) just after the joint IMS/ISBA meeting in San Juan, Puerto Rico (July 24-26, 2003) (see above and p16).

There will be 5 (to be announced) invited speakers, and a session for posters.

If you want to participate in the Workshop poster session, please send a one page abstract including author's name, email and postal address to imsisba@orion.cnnet.clu.edu. In any case if you are interested in participating please send an e-mail saying so. Registration for the Workshop will be on-site. The registration fee will be \$30 to cover breaks and incidentals. Accommodations are to be arranged with the main conference hotel C: see http://www.cnnet.clu.edu/math/ims-isba-pr2003/AboutHotel.html for information and instructions. Note that the bioinformatics and biostatistics workshop does not have specific travel funding.

International Workshop on Bayesian Data Analysis

7-10 August 2003: Santa Cruz, CA

http://www.ams.ucsc.edu/bayes03/
The focus of the workshop will be Bayesian data analysis: starting with a real problem in science or decision-making, formulating the problem in statistical terms, using Bayesian methods to solve the original problem, and discussing the strengths and weaknesses of the solution both statistically and substantively, with plenty of attention to the interplay between the real-world context and the Bayesian model-building, checking,

The workshop is intended for statisticians, scientists, and engineers

and reformulating.

involved in applications requiring statistical inference, prediction, and decision-making and using Bayesian methods. The meeting will be held on the campus of the University of California, Santa Cruz (UCSC). The goal is to bring together about 100 people interested in Bayesian applications in a variety of disciplines, including (but not limited to) bioinformatics, biostatistics, econometrics, engineering, epidemiology, computer science, machine learning, and statistics. Limited financial support is available and should be requested at time of registration. The registration deadline is 9 June 2003. As

long as places are still available, registration will continue after this date up to and including the first day of the meeting, but after 9 June it may be more difficult for you to (a) have your contributed paper listed in the program and (b) receive full consideration for funding support. Participation in the workshop will be limited, and consideration will be given to program balance. Special consideration will be given to young investigators and Ph.D. students, and students and members of under-represented groups are especially encouraged to apply.

STOP PRESS:

MEETING POSTPONED

Statistical Methods in Microarray Analysis June 1–30, 2003

The Institute for Mathematical Sciences at the National University of Singapore has been organising a program on "Statistical Methods in Microarray Analysis" from June 1–30, 2003 (see http://www.imstat.org/meetings.htm#June). However, due to the recent SARS outbreak in Singapore and around Asia, the organisers have decided to postpone the program till further notice.

32nd Annual Meeting of the Statistical Society of Canada May 30–June 2, 2004, Montréal, Québec

The Universtité de Montréal and the Centre de recherches mathématiques, Montréal (Québec) will be hosting the 2004 meeting of the Statistical Society of Canada. Christian Léger (leger@dms.umontreal.ca)



is the Local Arrangements Chair. Christian Genest (genest@mat.ulaval.ca) is the Program Committee Chair. For more information, contact Christian Léger by email or at Département de mathématiques et de statistique, Université de Montréal, C.P. 6128, Succursale centre-ville, Montréal, Québec, Canada H3c 3HJ7.

MCMC: Innovation and Applications in Statistics, Physics and Bioinformatics March 1–26, 2004, Singapore

Organizing Cttee: Chair: Wilfrid Kendall (U of Warwick, UK); Co-Chairs: Faming Liang (National Uof Singapore and Texas A&M U, USA) and Jian-Sheng Wang (National U of Singapore). www.ims.nus.edu.sg/Programs/mcmc/index.htm



SASA 50th ANNIVERSARY 5–7 November, 2003

The South African Statistical Association (SASA)

celebrates its 50th anniversary

during 2003. The SASA Executive Committee is planning a special conference to commemorate this event.

The conference will be held from 5–7 November 2003, at the Caesar's Palace Conference Centre in Kempton Park, Gauteng, South Africa.

Conference organiser: Dr. Amanda Lourens at amanda@techpta.ac.za, phone numbers 012-318-4223 or 082-458-0238.

Website www.sastat.org.za

California

PHYSTAT2003: Statistical Problems in Particle Physics, Astrophysics, and Cosmology September 8–11, 2003 Stanford Linear Accelerator Center, Stanford,

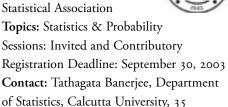
This conference is an interdisciplinary gathering of statisticians and physicists to discuss advanced statistical techniques as used in experimental analyses of data in Particle Physics, Astrophysics and Cosmology.

Abstracts due by June 30th, 2003 Website: http://www-conf.slac.stanford.edu/ phystat2003

Fifth International Triennial Calcutta Symposium on Probability and Statistics December 28–31, 2003, Calcutta, India

http://www.calcuttastatisticalassociation.org

Organizers: Department of Statistics, University of Calcutta & Calcutta Statistical Association



of Statistics, Calcutta University, 35 Ballygunge Circular Road, Kolkata-700019, India

E-mail: tricalsy@rediffmail.com or btathaga@yahoo.com

Workshop on Adaptive Designs September 25–27, 2003 Toronto, Canada

A Workshop on Adaptive Designs will be held at the Fields Institute in Toronto, Canada on September 25-27, 2003. The conference aims to bring senior researchers in the dynamic field together with interested students and young researchers. For more information, see http://www.fields.utoronto.ca/programs/scientific/03-04/adaptive/ or contact Nancy Flournoy at flournoyn@missouri.edu.

International Workshop StatGIS 2003 September 29–October 1, 2003. Poertschach, Austria

http://www-stat.uni-klu.ac.at/

Organizing Committee: A.Gebhardt, R.-G. Koboltschnig, J. Pilz, P. Pluch

Main Sections:

Geostatistics: Theory and New Methods (Conveners: W.G. Müller, J. Pilz)
Combining Statistics and GIS (Conveners: R. Bivand, G. Dubois)
Geostatistical Applications (Conveners: H. Glass, M. Kanevsky)
Spatial Data Bases and Mapping (Conveners: V. Gomez, B. Rowlingson))
Geostatistical Software Developments (Conveners: E. Pebesma, P. Ribeiro)

Deadline: August 1, 2003

Employment Opportunities around the world

Canada: Québec

PROFESSEUR, PROFESSEURE AU DÉPARTEMENT DE MÉDECINE SOCIALE ET PRÉVENTIVE

Le Département de médecine sociale et préventive de la Faculté de médecine est autorisé à combler un poste régulier de professeur en biostatistique

La candidate ou le candidat devra détenir un diplôme de doctorat en statistique. Une excellente connaissance de l'épidémiologie et des exigences de la recherche en santé des populations est requise de même qu'au moins trois années d'expérience de l'enseignement de la biostatistique, d'encadrement d'étudiants de niveau gradué et de support méthodologique à des équipes et projets de recherche. Le candidat devra aussi démontrer une aptitude pour le travail en équipe puisqu' il devra s'intégrer à une des équipes de recherche en épidémiologie et en santé des populations associées au département de médecine sociale et préventive.

Les fonctions universitaires exigées de la personne choisie comprendront des activités d'enseignement (charges de cours et encadrement d'étudiants de deuxième et de troisième cycle), le support méthodologique à des projets et à des équipes de recherche en épidémiologie et santé des populations, la réalisation d'un programme de recherche original dans le domaine de la statistique, ainsi que la participation à des comités internes et externes. L'enseignement sera considéré comme l'activité prioritaire. Les personnes intéressées à soumettre leur candidature sont priées de faire parvenir une lettre confirmant leur intérêt de même qu'un récent curriculum vitæ au plus tard le 30 mai 2003 à:

Philippe De Wals, directeur Médecine sociale et préventive Pavillon de l'Est 2180, chemin Ste-Foy Université Laval, Québec (Québec) G1K 7P4 Canada

En vertu de son Programme d'accès à l'égalité, l'Université Laval entend consacrer la moitié de ses postes vacants à l'engagement de femmes.

En accord avec les exigences du ministère de l'Immigration du Canada, cette offre est destinée en priorité aux citoyennes et citoyens canadiens et aux résidentes et résidents permanents du Canada.

www.ulaval.ca



UK: Bristol

The University of Bristol, one of the leading research universities in the UK, is seeking a Professor to enhance its international position at the forefront of research in Statistics. We seek a researcher with an outstanding reputation and substantial publication record in Statistics, broadly interpreted. The appointee would be expected to develop a significant research programme, to be open to collaboration with other disciplines, to contribute to teaching, and to provide academic leadership within the School. Informal enquiries can be made to Peter Green, e-mail: P.J.Green@bristol.ac.uk For instructions on application and further details see http://www.stats.bris.ac.uk. The closing date is 4 June 2003.

Singapore

NATIONAL UNIVERSITY OF SINGAPORE

Department of Statistics and Applied Probability: Application for Position of Department Head

The Department of Statistics and Applied Probability, National University of Singapore (NUS), invites applications for the position of Department Head. Interested applicants should have a high international reputation with a strong research record and evidence of excellent leadership. They should send an application letter, curriculum vitae and names of six references to:

HEAD SEARCH COMMITTEE,
DEPARTMENT OF STATISTICS AND
APPLIED PROBABILITY,
NATIONAL UNIVERSITY OF
SINGAPORE,
6 SCIENCE DRIVE 2,
SINGAPORE 117546.

Fax: 65-68723919, Email: stans@nus.edu.sg

One of the strengths of this relatively young department is a faculty comprising about 30 energetic members graduated from leading Statistics departments in the world. Their research interests include clinical trial methodology, computational biology, computer experiments, data mining, finance modeling, functional data analysis and functional modeling, statistical genetics, limit theory, market research, Monte Carlo method, probability approximation, random matrices, stochastic processes, survey designs and survival analysis. NUS offers competitive remuneration and provides relocation assistance to help international faculty take up their appointments in Singapore. It also subsidizes very attractive university housing

and education for their children. There are ample opportunities for research funding and interactions with the local institutes. Singapore is a safe and clean country with many excellent schools for children. It is a vibrant city where the best of the East meets the best of the West.

For more information about the University, Faculty of Science, Department and terms of service, please visit our websites:
University: http://www.nus.edu.sg
Faculty of Science: http://

www.science.nus.edu.sg

Department: http://www.stat.nus.edu.sg Terms of Service: http://www.nus.edu.sg/ohr The deadline for submission of applications is 31 July 2003. Only shortlisted candidates will be notified.

UK: Oxford

Professorship of Statistics

The University seeks to appoint a world-class statistician with proven leadership skills to take up this new professorship from 1st October 2003 or as soon as possible thereafter.

The professorship will be held in the Department of Statistics, which has recently experienced an exciting period of growth and development, and is now one of the leading UK departments. The successful candidate will be expected to establish a substantial research group in the modern mainstream of the subject, to contribute to its teaching, and to further the academic planning and strategic development of statistics in the University as a whole.

The person appointed will be elected to a professorial fellowship at Jesus College.

Further particulars, including details of how to apply, are available from http://www.admin.ox.ac.uk/fp/ or from the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, tel. (01865) 270200. The closing date for applications is 2nd June 2003.

The University is an Equal Opportunities Employer.

If you have a position to advertise, the deadline for next issue (July/August 2003) is June 23.
See the panel 'Information for Advertisers', inside the back cover.

USA: Florida

Department of Statistics, University of Florida.

Tenure-track Assistant/Associate Professor, College of Liberal Arts and Sciences.

Includes teaching, collaborative and methodological research.

Preference given to applicants with experience in bioinformatics, genetics or genomics. PhD in statistics or related field required, with good communication skills. Vita, transcript, and three reference letters to Search Committee, Dept. of Statistics, Gainesville, FL 32611-8545. Application deadline: 7/11/2003. EOE/AA.

USA: Massachusetts

Radcliffe Institute, Harvard University

The Radcliffe Institute for Advanced Study at Harvard University awards approximately 30 fully funded residential fellowships each year designed to support postdoctoral scholars and scientists, as well as writers and artists of exceptional promise and demonstrated accomplishment. The stipend amount is \$50,000. Fellows receive office space and access to libraries and other resources of Harvard University. During the fellowship year, which extends from September 13, 2004 through June 30, 2005, residence in the Boston area is required, as is participation in the Institute community.

Radcliffe Application Office • 34 Concord Avenue • Cambridge, MA 02138 617-496-1324 • fellowships@radcliffe.edu • www.radcliffe.edu



NSF.

B M

S

NSF · CBMS

Regional Conference Series in Probability and Statistics

Volume 7

Generalized Linear Mixed Models

by Charles E. McCulloch University of California, San Francisco

Generalized Linear Mixed Models explores the basic idea of statistical models that incorporate random factors into generalized linear models. This allows the accommodation of correlation via random effects as well as nonlinear models and models for non-normally distributed responses. The monograph illustrates the richness of inferential goals accommodated by these models, and computational details in fitting these models and performing statistical inference. The ideas and computations are illustrated for a variety of data sets.

The monograph begins with an extended example that introduces all the main topics. Chapters 2 and 3 briefly review linear mixed models and generalized linear models. Chapters 4 and 5 introduce generalized linear mixed models (GLMMs) and illustrate the breadth of inferences possible. Finally, Chapters 6 through 9 cover the difficult aspects of fitting these models to data; which is where much of the current research interest lies.

Price US\$30

IMS Member Price US\$18 Order online at: http://www.imstat.org/

Or send payment (Mastercard, Visa, American Express, Discover or Check, payable on a US bank in US funds) to:

Institute of Mathematical Statistics, Dues and Subscriptions Office 9650 Rockville Pike, Suite L2310, Bethesda MD 20814-3998, USA Tel: (301) 634-7029 Fax: (301) 634-7099 Email: staff@imstat.org

International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the logo and new or updated entries have the symbol. t means telephone, fax, e email and w website. Please send additions and corrections to Tati Howell at bulletin@imstat.org

June 2003

1–30: National U of Singapore, Inst for Mathematical Sciences. **Program on Statistical Methods in Microarray Analysis** w http://www.ims.nus.edu.sg/Programs/ microarray/index.htm

2–6: Dimacs Center, Rutgers U, NJ. DIMACS Workshop on Complexity and Inference. Organizers: Mark Hansen (Bell Labs), Paul Vitanyi (CWI & U Amsterdam), and Bin Yu (UC Berkeley). w http://stat.bell-labs.com/complexity

4–6: University of Dayton, Ohio.

Spring Research Conference on Statistics in Industry and Technology: Sponsored by IMS and SPES section of ASA. Program chair: Russell V. Lenth, U of Iowa, e russell-lenth@uiowa.edu, Local arrangements: Peter W. Hovey, U of Dayton, e peter.hovey@notes.udayton.edu w www.stat.uiowa.edu/SRC2003/

5–8: Sheraton Waikiki, Honolulu, Hawaii, USA. 2003 Hawaii International Conference on Statistics and Related Fields. Key Speaker: Professor Bradley Efron, Stanford U. w http:// www.hicstatistics.org

8–11: Halifax, Nova Scotia, Canada.

Annual Meeting of the Statistical Society of Canada. Local Arrangements Chair:
Chris Field e field@mathstat.dal; Progam Chair: Doug Wiens e doug.wiens@ualberta. ca; w www.ssc.ca. Includes two IMS Invited Paper Sessions: 'Machine Learning Methods from a Statistical Perspective', contact Yi Lin e yilin@cs.wisc.edu and 'Shape-Restricted Inference', contact Mary Meyer e mmeyer@stat.uqa.edu

8–July 24: Snowbird, Utah. 2003 Joint Summer Research Conferences. Jointly sponsored by IMS, AMS & SIAM.

Conferences typically run for one week with forty-five to sixty participants. Conferences of longer duration are possible. Funding for the conferences is provided by a grant from the National Science Foundation. **w** http://www.ams.org/meetings/src03.html

9–12: KIMEP, Almaty, Kazakhstan.
ASIM 2003, International Conference on Advances in Statistical Inferential Methods. (theory and applications) **w** www.kimep.kz/research/asim **e** voinov@kimep.kimep.kz

15–18: Merida, Mexico. 23rd International Symposium on Forecasting. Principal organizer: Victor M. Guerrero (ITAM), e guerrero@itam.mx. w http://www.isf2003.org

15–19: Lund, Sweden. SPRUCE VI Conference on Statistics for the Analysis of Risks and Benefits from the Environment. Contact: Ulla Holst ulla@maths.lth.se w: www.maths.lth.se/conferences/spruceVI/

15–20: Centre Paul Langevin, Aussois, France. Fourth International Workshop on Objective Prior Methodology w http://www.ceremade.dauphine.fr/~xian/OBayes03

19–24: West Lafayette, Indiana. 7th Purdue International Symposium on Statistics.

Conference (Statistical Decision Theory and Related Topics) and 3 workshops (A: Bioinformatics and Microarrays; B: Multiple Comparisons and Mixture Models for Large Data Sets; C: Statistical Consultancy).

Abstract submission, registration etc info w http://www.stat.purdue.edu/Symp7/

Golden, CO. WNAR/IMS Western
Regional (Sponsored/Numbered meeting 281). Program Chair: Naisyin Wang,
Texas A&M e nwang@stat.tamu.edu
Local Arrangements Chairs: Jan Breidt e
jbreidt@stat.colostate.edu and Jan Hannig
e hannig@stat.colostate.edu

24–27: Technical U of Gdansk, Poland.
1st World Congress on Information
Technology in Environmental Engineering
(ITEE2003) w www.icsc-naiso.org/
conferences/ itee2003

28: Lexington, KY. Minimeeting: Non/Semi-parametric models and Sequential Analysis. **w** www.ms.uky.edu/~statinfo/nonparconf

29–July 2: Barcelona, Spain. International Conference on Correspondence Analysis and Related Methods (CARME2003). Michael Greenacre e michael@upf.es. www.econ.upf.es/carme/

July 2003

2–4: Palmerston, New Zealand. NZ Statistical Association Annual Conference. www-ist.massey.ac.nz/stats/nzsa2003

7–11: Diepenbeek, Belgium. 18th International Workshop on Statistical Modelling. w www.luc.ac.be/censtat/IWSM 2003 e jeannine.rongy@med.kuleuven.ac.be

10–12: Hong Kong. Bernoulli Society
East Asian and Pacific Regional (EAPR)
Conference 2003. Keynote speakers are
David Aldous, Friedrich Gotze, Zhi-ming
Ma, Wing Hung Wong and C. F. Jeff Wu.
w www.bm.ust.hk/~eapr2003

14–17: Leuven, Belgium. RSS2003: Theme Conference of the Royal Statistical Society: Statistical Genetics and Bioinformatics. w www.luc.ac.be/censtat/RSS2003 e martine.m achiels@luc.ac.be

14–17: U of Lugano, Switzerland. 3rd International Symposium on Imprecise Probabilities and Their Applications (ISIPTA '03) w http:// www.sipta.org/~isipta03/ e Marco Zaffalon zaffalon@idsia.ch

International Calendar continued

July 2003 continued

14–18: University of Antwerp, Belgium. International Conference on Robust Statistics 2003 (ICORS2003) e statis@uia.ua.ac.be w win-www.uia.ac.be/u/icors03.htm

16–18: Universidad de Santiago de Compostela, Spain. International Conference on Environmental Statistics and Health. Scientific Committee Chair: Montserrat Fuentes (N Carolina State U); Local Arrangements Committee Chair: Wenceslao Gonzalez Manteiga (ISI-Spain). Program, registration, committees, sponsors and student travel grants: w http://isi-eh.usc.es

20–24: London, UK. Joint International Society For Clinical Biostatistics/Society For Clinical Trials Meeting. Program Co-Chairs: Deborah Ashby, University of London, Mary Foulkes, FDA **w** http://www.iscb-homepage.org, or http://www.sctweb.org

22–23: San Juan, Puerto Rico.

Model Selection Workshop. w www.cnnet.
clu.edu/math/ims-isba-pr2003

Campus. First Joint ISBA-IMS Meeting (Sponsored/Numbered 282). Joint Program Chair: M J Bayarri, U de Valencia e susie.bayarri@uv.es Local Arrangements Chair Luis Pericchi, U of Puerto Rico e perricchi@goliath.cnnet.clu.edu w www.cnnet.clu.edu/math/ims-isba-pr2003

27: San Juan, Puerto Rico. Bioinformatics and Biostatistics: Current Problems and Solutions. w www.cnnet.clu.edu/math/ims-isba-pr2003

28-August 31: Institute for Mathematical Sciences, National University of Singapore. **Program on Stein's Method** and Applications: A program in honor

of Charles Stein. w www.ims.nus.edu.sg/ Programs/stein/index.htm

Davis. IMS New Researchers Conference (Sponsored/Numbered meeting 283).

Program Chair: Richard Levine, San Diego State U e ralevine@sciences.sdsu.edu

IMS Local Chair: Juanjuan Fan, U of California, Davis e jjfan@ucdavis.edu

w http://rohan.sdsu.edu/~ralevine/NRC (Note new web address)

NB CORRECTED DATE: 31—August 1: Corvallis, OR. Justus Seely Memorial Conference on Linear Models. w www.oregonstate.edu/dept.statistics/ seelyconf

August 2003

Mini-meeting: Workshop on
Statistical Inference, Computing and
Visualisation for Graphs. Contact
dfs@research.att.com; local details from
Susan Holmes susan@stat.stanford.edu
wwww.research.att.com/~volinsky/
Graphs/Workshop.htm

2–3: San Francisco, CA. Workshop:
Pathways to the Future. For young
women researchers within about 5 years of
completing PhD. NSF Funding available.
Lynne Billard e lynne@stat.uga.edu

3–7: San Francisco, CA. Joint
Statistical Meetings (ASA/IMS/ENAR/
WNAR) including IMS Annual Meeting.
Sponsored/Numbered 284. IMS Program
Chair: Jane-Ling Wang, U of California,
Davis e wang@wald.ucdavis.edu
Contributed Papers Chair: Lutz Duembgen
e lutz.duembgen@stat.unibe.ch

3–9: Rio de Janeiro, Brazil. 29th Conference on Stochastic Processes and their Applications. w http://www.impa.br/ Conferencias/Spa/ 5–8: U of Dortmund, Germany. 12th International Workshop on Matrices and Statistics (IWMS-2003) w http://www.statistik.uni-dortmund.de/IWMS/main.html. Immediately before 54th Biennial Session of the ISI in Berlin.

7–10: Santa Cruz, CA. International Workshop on Bayesian Data Analysis. w www.ams.ucsc.edu/bayes03/

10–20: Berlin, Germany: International Statistical Institute, 54th Biennial Session. Includes meetings of the Bernoulli Society, The International Association for Statistical Computing, The International Association of Survey Statisticians, The International Association for Official Statistics and The International Association for Statistical Education. w www.isi-2003.de Including IMS Invited Paper Session, 'The Analysis of Gene Expression Data': contact Mike West e mw@stat.duke.edu

September 2003

4–7: Villard de Lans, Grenoble, France. International Workshop on Wavelets and Statistics: Watering the Seed w www-lmc.imag.fr/grenoblet2003

8–11: Stanford Linear Accelerator Center, CA. PHYSTAT2003: Statistical Problems in Particle Physics, Astrophysics and Cosmology w www-conf.slac. stanford.edu/phystat2003

25–27: Toronto, Canada. Workshop on Adaptive Designs w www.fields.utoronto .ca/programs/scientific/03-04/adaptive/

29–October 1: Poertschach, Austria. StatGIS 2003 w www-stat.uni-klu.ac.at/

November 2003

5-7: Gauteng, South Africa. SASA (South African Statistical Association) 50th Anniversary Conference.

w www.sastat.org.za

December 2003

28–31: Calcutta, India. 5th
International Triennial Calcutta
Symposium on Probability and Statistics.
w www.calcuttastatisticalassociation.org

January 2004

Trends in Sample Surveys and Official Statistics. Organizers: Tathagata Banerjee & Partha Lahiri

Networks Conference w http://www.stanford.edu/group/stochnetconf/

Annual Meeting & 6th Bernoulli World Congress. Joint Program Chair: Wilfrid Kendall (wsk@stats.warwick.ac.uk) Local Chair: David Nualart (nualart@mat.ub.es) w www.imub.ub.es/events/wc2004/

August 2004

8–12: Toronto, Canada. Joint Statistical Meetings (ASA/IMS/ENAR/ WNAR). Sponsored/Numbered. IMS Program Chair: Michael Evans, U of Toronto e mevans@utstat.utoronto.ca

March 2004

21–26: Singapore. MCMC:
Innovations and Applications in
Statistics, Physics and Bioinformatics.
w www.ims.nus.edu.sg/Programs/mcmc/index.htm

ENAR Spring Meeting. w www.enar.org/meetings.htm

May 2004

30-June 2: Montréal, Québec. 32nd Annual Meeting of the Statistical Society of Canada. Local Arrangements Chair: Christian Léger leger@dms.umontreal.ca, Program Committee Chair: Christian Genest genest@mat.ulaval.ca

June 2004

16–18: Santander, Spain. Distribution Theory, Order Statistics and Inference - A Conference in Honor of Barry C. Arnold. Organizers: Prof. N. Balakrishnan bala@mc mail.cis.mcmaster.ca, Prof. Enrique Castillo castie@unican.es, Prof. Jose-Maria Sarabia sarabiaj@unican.es

July 2004

4–11: Copenhagen, Denmark. 10th International Congress on Mathematical Education. www.icme-10.dk

Information for Advertisers in IMS Bulletin & IMS webpages

	IMS Bulletin	IMS website		
Frequency	Bimonthly	Updated daily		
Established	1972	1996		
Affiliation	Official news organ and website of the Institute of Mathematical Statistics			
Circulation	3,825 (Nov 2002)	8,821 (page visits - April 2002)		
Subscription to the IMS Bulletin Volume 32 (6 issues in 2003) costs \$55. To subscribe, call (301) 530 7029. For the IMS website, public access is free: www.imstat.org				

	Rates	Size
Single Paragraph	\$70	100 words
1/3 Page	\$175	4.93" (125.2mm) wide x 4" (102mm) high, or 200 words
1/2 Page	\$225	7.5" (190mm) wide x 4" (102mm) high, or 300 words
2/3 Page	\$275	4.93" (125.2mm) wide x 8" (203mm) high, or 400 words
Full Page	\$325	7.5" (190mm) wide x 8" (203mm) high, or 600 words

Ad dimensions are width x height. Dimensions provided for camera ready ads, word count for lineage ads. Ad rates include copy in IMS Bulletin and on IMS web page. If an advertiser wishes to place an ad in one medium only, the pricing is the same. Ads will be posted on the web site within 7-10 days of receipt.

ADVERTISERS' DEADLINES AND MAIL DATES FOR IMS BULLETIN

Issue	Scheduled Mail Date	Deadline for Advertisement
Jan/Feb	February 1	December 23
Mar/Apr	April 1	February 23
May/Jun	June 1	April 23
Jul/Aug	August 1	June 23
Sep/Oct	October 1	August 23
Nov/Dec	December 1	October 23

We require electronic files sent via email (text, PostScript, PDF [grayscale **with all fonts embedded**] or MS Word) to erg@imstat.org, or Camera Ready copy sent via mail to Elyse Gustafson, IMS Executive Director, address on page 2. This information can also be found at www.imstat.org/advertising.htm

19-24: Montreal, Canada. Stochastic

In the next issue (July/August 2003)

Profile of the second
Carver Medal recipient,
JSM News, as well as
news from members
around the world,
meeting announcements
and job opportunities.
Send in your articles,
feedback, letters...

Deadline for submissions: July 1

(Submissions in MS Word or plain text, please: see panel on page 2 for the *NEW* Bulletin contact details)



The purpose of the Institute is to foster the development and dissemination of the theory and applications of statistics and probability

Organized September 12, 1935

The small print:

Journals: The scientific journals of the Institute of Mathematical Statistics are Statistical Science, The Annals of Statistics, The Annals of Probability and The Annals of Applied Probability. The IMS Bulletin is the news organ of the Institute.

Individual and Organizational Memberships: Each individual member receives the *IMS Bulletin* and must elect to receive at least one of the four scientific journals. Members pay annual dues of \$75. An additional amount is added to the dues of members depending on the scientific journal selected as follows: *Statistical Science* (\$15), *The Annals of Statistics* (\$30), *The Annals of Probability* (\$25), and *The Annals of Applied Probability* (\$20). Of the total dues paid, \$29 is allocated to the *Bulletin* and the remaining amount is allocated among the scientific journals received. Reduced membership dues are available to full-time students, permanent residents of countries designated by the IMS Council, and retired members. Retired members may elect to receive the Bulletin only for \$26. Organizational memberships are available to institutions at \$545 per year and to corporations at \$850 per year. Organizational memberships include two multiple-readership copies of all IMS journals in addition to other benefits specified for each category (details available from the IMS Business Office).

Individual and General Subscriptions: Subscriptions are available on a calendar-year basis. Individual subscriptions are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2003 are available to *The Annals of Applied Probability* (\$100), *The Annals of Probability* (\$105), *The Annals of Statistics* (\$110), *IMS Bulletin* (\$60), and *Statistical Science* (\$90). General subscriptions are for libraries, institutions, and any multiple-readership use. General subscriptions for 2003 are available to *The Annals of Applied Probability* (\$120), *The Annals of Probability* (\$175), *The Annals of Statistics* (\$200), *IMS Bulletin* (\$55), and *Statistical Science* (\$100). Airmail rates for delivery outside North America are \$80 per title (excluding *IMS Bulletin*).

The *IMS Bulletin* publishes the complete programs of all IMS meetings, abstracts of all invited and contributed papers, an international calendar of statistical events, as well as articles and news of interest to IMS members and to statisticians and probabilists in general. Views and opinions in editorials and articles are not to be understood as official expressions of the Institute's policy unless so stated; publication does not necessarily imply endorsement in any way of the opinions expressed therein, and the *IMS Bulletin* and its publisher do not accept any responsibility for them. The *IMS Bulletin* is copyrighted and authors of individual articles may be asked to sign a copyright transfer to the IMS before publication.

The *IMS Bulletin* (ISSN 1544-1881) is published bimonthly by the Institute of Mathematical Statistics, PO Box 22718, Beachwood, OH 44122-0718, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to IMS, 9650 Rockville Pike, Suite L2310, Bethesda, MD 20814-3998.

Copyright © 2003 by the Institute of Mathematical Statistics. Printed by Sheridan Press, 450 Fame Avenue, Hanover, PA 17331, USA.