

October 2008

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Welcome message from IMS President 2008–2009

Nanny Wermuth, Professor of Biostatistics at Chalmers and University of Gothenburg, Sweden, is the IMS President for 2008–2009. She writes:

One month of my one year presidency has passed, and a few things have been achieved during this time. I have thanked the outgoing committee members, read and discussed with them their suggestions for improvements, and filled more than 30 IMS committee positions with volunteer members from all over the globe who are now ready to become active for the society.



Nanny Wermuth

During two mixers for new IMS members at last year's and this year's Joint Statistical Meetings, the two questions I was most frequently asked were, What is your background? and What are the tasks of an IMS president? I will give a few selective answers to these questions also here.

I was lucky to get an education. When I was a child, my mother was still doing laundry by hand in a wash-tub for a family of seven, and a spin-dryer was greeted as a considerable lightening of the work load. We ate fruits and vegetables from her garden. She used a non-electric sewing machine to make and mend clothes and curtains. But it was her and my female high school head-teacher who convinced my father that I should get a university education. The compensation, paid by a crazy car driver after an accident that hospitalized me for nine months, permitted me to study away from home.

It was not easy for me to get to and from school. To get to high school, I walked half an hour to the train station in the nearby village, sat on the train for half an hour and walked for another half hour to reach school. Nowadays, it takes me the same time to fly from Frankfurt, Germany, near my main home, to my workplace in Gothenburg, Sweden, and there, it takes me five minutes to walk between home and office in a beautiful environment: what a privilege.

There may be too many walls! In high school, I recall being impressed that mathematicians in the nineteenth century from all over Europe were tied to proofs of particular mathematical results and that many of them communicated in letters about problems and proofs, while later, during the time of the Cold War, it was essentially impossible to have ongoing contact between scientists separated by the "iron curtain". Nowadays, this particular barrier has disappeared, but we can see the effects of other walls, created worldwide, by biased reporting, by censoring of TV or Internet presence, and by access limitations to research results, technological progress or medical treatment. Statisticians can often contribute to the removal of such walls.

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In Memoriam

Oded Schramm, a Microsoft researcher in probability, has died in a hiking accident on Guye Peak, WA, on September 1, 2008. He was 49. David Aldous writes that Oded was

“an extraordinary mathematician, who transformed our understanding of critical processes in two dimensions through his introduction of the Stochastic Loewner evolution, tying probability theory to complex analysis in a completely novel way. He also made fundamental contributions to circle packings,

random spanning trees, percolation, noise sensitivity of Boolean functions, random permutations and metric geometry.”

IMS Fellow **Bhaskar Kumar Ghosh**, Emeritus Professor of Mathematics at Lehigh University, died August 3, 2008 at the age of 72.

Gilbert Hunt, professor emeritus of mathematics at Princeton University and one of the world's recognized authorities in the fields of probability theory and analysis, died May 30, 2008. He was 92.

IMS Fellow **Walter Federer** died April 14, 2008, aged 92. Federer was Professor Emeritus of Biological Statistics and Computational Biology at Cornell University. He founded Cornell's Biometrics Unit (now the Department of Biological Statistics and Computational Biology) in 1948, and served as its director for 33 years.

Daniel Horvitz died June 1, 2008, in Boca Raton, FL, at 87. He was co-author of the Horvitz-Thompson Estimator (1952), a statistical tool that advanced survey research. Alan Karr (NISS), notes that Dan “served in the US Army on the Manhattan Project at Los Alamos, New Mexico, during WWII. He spent two years in Burma for the Ford Foundation and joined the Research Triangle Institute in 1962, rising to executive vice president in 1983. Dan taught at North Carolina State University and UNC-Chapel Hill. His work helped federal policymakers better understand issues of health care expenditures, drug abuse, and educational progress. Dan was a former vice president of the American Statistical Association and received the NISS Distinguished Service Award.”

Leonid Hurwicz, American economist, mathematician and Nobel laureate, died June 24, 2008. Hurwicz originated incentive compatibility and mechanism design, which show how desired outcomes are achieved in economics, social science and political science. Hurwicz was Regents' Professor of Economics (Emeritus) at the University of Minnesota.

Look out for obituaries in forthcoming issues.



Oded Schramm (right, with Jim Pitman), who has died aged 49, presented a BS-IMS Special Lecture at the World Congress in Singapore on July 15.

IMS Members' News

Pitman medal for John Robinson

Katynna Gill, University of Sydney, Australia, writes: Professor John Robinson from the School of Mathematics and Statistics at the University of Sydney has been awarded the 2008 Pitman Medal. The prestigious statistics medal is awarded by the Statistical Society of Australia and recognizes outstanding achievement in and contribution to the discipline of statistics.

Professor Robinson was presented his medal by Professor William Dunsmuir, President of the Statistical Society of Australia, at the Australian Statistical Conference on 3 July 2008, held in Melbourne. Robinson is only the 17th recipient of the award since the first Pitman Medal in 1978—the medal is awarded at most once annually and often only every several years.

“Professor John Robinson has enhanced the international standing of Australia in the area of theoretical statistics. He has sustained research of the highest level for over 40 years and is acknowledged by his colleagues as a world expert on saddlepoint methods and asymptotic approximations,” said Professor Dunsmuir at the medal presentation. “His work has had considerable impact in helping to understand the behaviour of permutation tests, the bootstrap, and the performance of the chi-squared and likelihood ratio tests.”



Professor John Robinson (left) receives his Pitman Medal from Professor William Dunsmuir, President of the Statistical Society of Australia.

Photo courtesy of University of Sydney

Heping Zhang chosen as Myrto Lefkopoulou Distinguished Lecturer

The Department of Biostatistics, Harvard School of Public Health, has selected Heping Zhang, Professor in Yale University's School of Medicine, to be the 2008 Myrto Lefkopoulou Distinguished Lecturer. Professor Zhang presented a lecture on September 4, 2008, at the Harvard School of Public Health, titled *Statistical Challenges in Genetic Studies of Mental Disorders*.

The lectureship was established in perpetuity in memory of Myrto Lefkopoulou, a faculty member and graduate of Harvard School of Public Health. Dr Lefkopoulou tragically died of cancer in 1992 at the age of 34 after a courageous two-year battle. She was

Heping Zhang, below right, with Marvin Zelen, on the occasion of the Lefkopoulou lecture

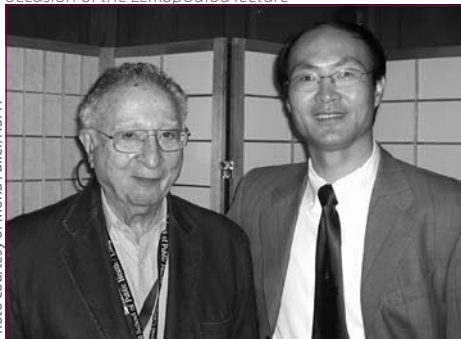


Photo courtesy of Mona Fuller/HSPH

deeply beloved by friends, students, and faculty. Each year the Myrto Lefkopoulou Lectureship is awarded to a promising statistician who has made contributions to either collaborative or methodologic research in the applications of statistical methods to biology or medicine and/or has shown excellence in the teaching of biostatistics. Ordinarily, the lectureship is given to a statistician within 15 years of receiving an earned doctorate.

IMS Editors

IMS Journals and Publications

Annals of Statistics: Susan Murphy & Bernard Silverman

<http://imstat.org/aos/>

Annals of Applied Statistics: Bradley Efron, Stephen Fienberg, Michael Newton & Michael Stein

<http://imstat.org/aoas/>

Annals of Probability: Gregory Lawler

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IMS Lecture Notes – Monograph Series: Anirban DasGupta

<http://imstat.org/publications/lecnotes.htm>

IMS Collections: Anirban DasGupta

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NSF-CBMS Regional Conference Series in Probability and Statistics:

<http://imstat.org/publications/nsf.htm>

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: Larry Wasserman

<http://imstat.org/ejs/>

Electronic Journal of Probability: Andreas Greven

<http://www.math.washington.edu/~ejpecp/>

Electronic Communications in Probability: David Nualart

<http://www.math.washington.edu/~ejpecp/ECP/index.php>

Current Index to Statistics: George Styan

<http://www.statindex.org>

Journal of Computational and Graphical Statistics:

David van Dyk

<http://www.amstat.org/publications/jcgs/>

Statistics Surveys: Jon Wellner

<http://imstat.org/ss/>

Probability Surveys: David Aldous

<http://imstat.org/ps/>

IMS Supported Journals

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<http://imstat.org/aihp/>

Bayesian Analysis: Brad Carlin

<http://ba.stat.cmu.edu/>

Bernoulli: Holger Rootzén

<http://isi.cbs.nl/bernoulli/>

Brazilian Journal of Probability and Statistics: Silvia Ferrari

<http://www.redeabe.org.br/bjps.htm>

IMS Affiliated Journals

ALEA: Latin American Journal of Probability and Statistics:

Claudio Landim

<http://alea.impa.br/english/>

Probability and Mathematical Statistics: W. Szczotka,

A. Weron & W.A. Woyczyński

<http://www.math.uni.wroc.pl/~pms/>

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President's message: *continued*

Continued from **Cover**

We want IMS to continue to be a forerunner in this respect. The importance of open access to scientific results was stressed by our former president, Jim Pitman; IMS China was created by the persistence of our past president, Jianqing Fan. The last conference, held jointly with Bernoulli in Singapore, the 7th World Congress in Probability and Statistics, had more than 500 participants and was a big success due to the program, compiled under its chair, Ruth Williams, and due also to the outstanding work of the local organizing committee, chaired by Louis Chen. The next IMS annual meeting will take place during the Joint Statistical Meeting in Washington DC in August 2009; the next stand-alone IMS meeting will be in Gothenburg in August 2010; and the next IMS meeting held jointly with Bernoulli will be in İstanbul, Turkey, in 2012.

We have started a number of IMS projects and hope to complete many of them by next summer. Some of the projects are organizational. One is the redesign of our databases and website. This requires first a good survey of the present status, then decisions on what to keep and what to change, and finally finding the right agent to contract. Another is a revision of the IMS handbook.

Other projects concern member relations. Two of the broad questions to be answered are: Should we have new IMS awards?

And which types of service should we, and which can we, offer to members only?

Still other projects relate more directly to the IMS core tasks of fostering the development and dissemination of the theory and applications of statistics and probability. We are, for instance, negotiating with a publisher about a new series of IMS textbooks and of IMS monographs, directed towards graduate students and experienced researchers in other fields. We are exploring whether and how IMS could get involved in an online Encyclopedia of Statistics and whether we could define a program of IMS-supported courses for graduate students and researchers in need of special continuing education.

These are just some examples, which make it obvious that such tasks can only be solved with the dedicated work of many, especially the IMS staff, headed by Executive Director Elyse Gustafson, and the work of reliable IMS agents. Most essential, however, is the volunteer work that I have not yet mentioned: by the editors of our journals and the referees. Their work will be exciting and our society will continue to flourish with the ongoing and future efforts by all of us to obtain, discuss and make use of important new research results in statistics and probability.

Nanny Wermuth • president@imstat.org

IMS Special Invited Lecturers

The 2008 Special Lectures Committee has selected the Wald Lecturer and Le Cam Lecturer (for 2009) and eight Medallion Lecturers (for 2010).

The 2009 Wald Lecturer is **Jerome Friedman** (Stanford University)

The 2009 Le Cam Lecturer is **Aad van der Vaart** (Vrije Universiteit, The Netherlands)

The 2010 Medallion Lecturers, in their different areas, are:

STATISTICS: **Ed George**, University of Pennsylvania; **Xiao-Li Meng**, Harvard University;

Marie Davidian, North Carolina State University

PROBABILITY: **Marek Biskup**, University of California, Los Angeles; **Terence Lyons**,

University of Oxford, UK; **Jonathan Taylor**, Stanford University

INTERDISCIPLINARY: **Hans Föllmer**, Humboldt Universität zu Berlin, Germany; and

Laurens de Haan, Erasmus University, Rotterdam, The Netherlands

The Wald and Le Cam lectures will be delivered at the next IMS annual meeting, at JSM in Washington DC, August 2–6, 2009. The provisional allocation of the 2010 Medallion lectures among five IMS-sponsored/co-sponsored meetings is as follows: IMS 2010 Annual Meeting (August 9–13, 2010, in Gothenburg, Sweden): Laurens de Haan, Hans Föllmer, and Marek Biskup; JSM 2010 (August 1–5, 2010, Vancouver, Canada): Ed George and Xiao-Li Meng; WNAR 2010 (exact date and location TBA, end of June 2010): Jonathan Taylor; ENAR 2010 (March 21–24, 2010, New Orleans, LA): Marie Davidian; SPA 2010 (Osaka, Japan, September 2010): Terence Lyons.



▲ Jerome Friedman

▼ Aad van der Vaart



NISS News

National Institute of Statistical Sciences presents 2008 Sacks Award to John Rice

John Rice, University of California at Berkeley, has been selected to receive the 2008 Jerome Sacks Award for Cross-Disciplinary Research. The award was announced by Jim Landwehr, the new chair of the NISS Board of Trustees (see below), at the NISS/SAMSI JSM reception on August 4 in Denver. The award citation reads: *For outstanding, diverse cross-disciplinary contributions to ion channel receptors, energy demand, transportation, astronomy and functional data analysis*. Receiving the award, John Rice remarked, “I am very surprised and honored to receive this award. Jerry Sacks is a pioneer in cross-disciplinary research, and I think that it is wonderful that NISS has an award named for him. Interestingly, my work in transportation, which deals with measuring traffic flow on freeways, began with my involvement in the NISS transportation project in the 1990s.”



Alan Karr, NISS director; John Rice, Sacks Award recipient; and Jim Landwehr, chair of NISS Board of Trustees.

NISS appoints new Board of Trustees

The National Institute of Statistical Sciences announced its Board of Trustees members for the fiscal year 2008–2009. Joining the Board are **Mary Ellen Bock**, Purdue University; **Keith Soper**, Merck; **Clifford Spiegelman**, Texas A&M University; **Michael Kosorok**, University of North Carolina at Chapel Hill; and **James Rosenberger**, Pennsylvania State University. Chairing the Board is **James Landwehr**, director of data analysis research at Avaya Labs Research. Jim’s area of expertise includes applied problem area content, and statistical methodology content. He is currently working on analysis and visualization of data from network testing and operations, and also of data from complicated workflow processes.

Alan Karr, director of NISS, said, “We expect to grow as an organization this year. With the new addition to our facility under way [see construction photo below], new staff members and more programs, we expect that NISS will be more well-known than it has been in the past. Our Board of Trustees will do an excellent job helping us to move in these new directions.”

The new NISS executive committee comprises:

- **James Landwehr**, Avaya Labs Research, who will chair the committee (see left)
- **Jessica M. Utts**, University of California Davis, who will serve as vice chair
- **Mary Ellen Bock**, Purdue University
- **John Rolph**, University of Southern California
- **Keith Soper**, Merck
- **Leland Wilkinson**, Systat
- **Linda J. Young**, University of Florida

Jim Landwehr and Jessica Utts replace Vijay Nair and Leland Wilkinson, who served as chair and vice chair, respectively, of the Board from 2004–2008.

For more information about NISS, visit the website at <http://www.niss.org>

NISS Hires Cui as NAEP-ESSI Research Analyst

NISS has hired **Weiwei Cui** as NAEP-ESSI (Education Statistics Services Institute) Research Analyst. In her new role, Cui will provide the technical and substantive review of publications associated with the National Assessment of Educational Progress (NAEP), including the NAEP Report Card. The position involves challenging issues in both statistics and educational assessment. Cui received her PhD in the area of Measurement, Statistics and Evaluation from University of Maryland at College Park, and her MS in psychology from Beijing Normal University, China.



Nearly finished: NISS expects to have the 11,782 square foot (1,094 m²) addition to its building completed in October 2008.

World Congress in Probability and Statistics

Louis Chen chaired, and Anthony Kuk co-chaired, the Local Organizing Committee for the recent meeting in Singapore:

The joint Seventh World Congress of the Bernoulli Society and 71st Annual Meeting of the IMS took place at the National University of Singapore (NUS) in Singapore from July 14 to 19, 2008. It was jointly organized by the Department of Statistics and Applied Probability, Department of Mathematics, and Institute for Mathematical Sciences, of the National University of Singapore. The joint meeting was for the first time called the World Congress in Probability and Statistics, jointly sponsored by the Bernoulli Society and the Institute of Mathematical Statistics, a new name which will be used for all future such joint meetings of the two societies.

The World Congress is a major international event in probability and statistics and is held every four years. It features the latest scientific developments in the fields of probability and statistics and their applications, and is one of the most prestigious meetings in these fields.

Singapore is the first city in the Asia-Pacific region to have hosted the World Congress. The six previous World Congresses were held in Tashkent (Soviet Union, 1986), Uppsala (Sweden, 1990), Chapel Hill (North Carolina, USA, 1994), Vienna (Austria, 1996), Guanajuato (Mexico, 2000) and Barcelona (Spain, 2004). The fourth World Congress in Vienna was brought forward by two years to avoid a clash with the International Congress of Mathematicians (ICM), also held every four years, and also to allow the fifth World Congress to be held in the auspicious year of 2000.

The Chair of the Scientific Program Committee for the seventh World Congress was Ruth Williams. There were 13 keynote

speakers, 34 invited sessions, 82 contributed sessions and 3 poster sessions, covering a wide spectrum of topics and a myriad of applications. The keynote speakers were: Richard Durrett (IMS Wald Lectures) [see page 7], Jianqing Fan (Laplace Lecture), Alice Guionnet (Lévy Lecture), Peter McCullagh (IMS Neyman Lecture), Oded Schramm (BS-IMS Special Lecture), David Spiegelhalter (Bernoulli Lecture), Alain-Sol Sznitman (Kolmogorov Lecture), Elizabeth Thompson (Tukey Lecture), Wendelin Werner (BS-IMS Special Lecture), Martin Barlow (IMS Medallion Lecture), Zhi-Ming Ma (IMS Medallion Lecture), Mark Low (IMS Medallion Lecture), Douglas Nychka (Public Lecture). There were also two panel discussions on challenges and opportunities in probability and in statistics, and an 'In Memoriam' session commemorating the passing of David Kendall (1918–2007) and Chris Heyde (1939–2008), past Presidents of the Bernoulli Society, and of Samuel Karlin (1924–2007), past President of IMS.

More than 570 participants from 55 countries attended the Seventh World Congress, which opened on Monday, July 14 with speeches delivered by Louis Chen (Chair of the Local Organizing Committee), Ruth Williams (Chair of the Scientific Program Committee), Jean Jacod (President of the Bernoulli Society), Jianqing Fan (President of IMS) and guest of honor Choon Fong Shih (President of NUS) [see photo, right]. A Welcome Reception followed the IMS Presidential Address [see page 8] on Monday evening. There was also a Special Reception on Tuesday, July 15 to honor Wendelin Werner for being the first probabilist-trained mathematician to have been awarded the Fields Medal. Werner won the Fields Medal for his revolutionary work on stochastic Loewner evolution and the geometry of two-dimensional Brownian motion, part of

which was done in collaboration with Oded Schramm and Gregory Lawler. This reception was graced by the Provost of NUS, Eng Chye Tan, who spoke on how the 2006 ICM was a watershed for probability theory and probabilists [see his speech on page 12].

A half-day city tour was held on Thursday, July 19, followed by the Congress Banquet at The Pines, a town and country club. The banquet was attended by about 310 people, who were enthralled by a musical performance featuring tenor John Chen, academic-turned-politician-turned-entrepreneur, pianist Bernard Lanskey, Director of the NUS Yong Siew Toh Conservatory of Music, and clarinetist Dai Le and cellist Zhou Mi, who were graduates of the Conservatory, with music by Bernard Tan, composer, physicist and former Dean of Science at NUS.

Apart from the Bernoulli Society and IMS, which were the sponsoring societies, other sponsors of the seventh World Congress were NUS, Singapore Tourism Board, Saw Swee Hock, Lee Foundation, World Scientific, Singapore Management University and Elsevier.

The Congress ended successfully on Saturday, July 19, 2008.

There are photos on the Congress website at <http://www.ims.nus.edu.sg/Programs/wc2008/gallery.htm>

The Opening Ceremony



2008 Wald Lectures: Rick Durrett

Rick Durrett writes: The first thing to be said about giving the Wald lectures is that it is a great honor to add one's name to the list of distinguished probabilists who have given these in the previous 30 years: Srinivasa Varadhan (2005), Charles Newman (1999), Tom Liggett (1996), David Aldous (1993), E.B. Dynkin (1991), P. Diaconis (1987), H. Kesten (1986), F. Spitzer (1979), and M. Kac (1978).

Given three hours to give the highlights of 30 years of research, I decided to have fun in the first talk, discuss genetics problems I have worked on in the second, and stochastic spatial models in the third. The overall title for all three lectures was *Probability Problems from Genetics and Ecology*. In the first, subtitled *Philosophy and Anecdotes*, I returned to the subject of my first column in the *IMS Bulletin*: what is good applied probability? My main point was that, in my experience, papers in applied probability journals are judged primarily on the difficulty of the probability involved, and, in my opinion, that this is not the right way of doing things. One should give equal weight to what the work has to say about the application.

To illustrate my point, I discussed joint work with Lea Popovic on gene duplication and with Deena Schmidt on regulatory sequence evolution. Both of these papers were eventually accepted by *Annals of Applied Probability* but were criticized by referees for using only standard techniques (which means they are understood by 10 people in the world) to solve the problems. Chung in his Markov Chains book quipped, "Mathematicians are more likely to build fire stations than to put out fires." One joke that I wrote but forgot to deliver in my talk is that the current approach to judging applied probability papers is equivalent to the notion that once the fire station is built there is no point in actually putting out any fires.

The last part of my first talk concerned waiting for k mutations, a problem in population genetics that arises in the study of regulatory sequence evolution, cancer progression, and in the analysis of some



Rick Durrett delivering the third Wald lecture, 'Coexistence in Stochastic Spatial Models'

claims by Michael Behe on the limits of Darwinian evolution. This material was a lead-in to the second lecture: *My Work in Genetics with Jason Schweinsberg*. The theme was not only a way for me to select a coherent subset of my work in that area, but also served to advertise the work of a young probabilist who I think is under-appreciated. After stating the mathematical result on waiting times, the remainder of the lecture was devoted to Λ coalescents, a generalization of Kingman's coalescent, which arises in the approximation of selective sweeps or in situations where individuals have large family sizes.

The third talk, *Coexistence in Stochastic Spatial Models*, surveyed work I have done since I met Simon Levin in 1987. It concentrated primarily on results from the 1990s, in order to highlight eight challenging and important open problems. Stealing an idea from Paul Erdős (and adding a zero), I offered a \$1000 honorarium and an all-expenses-paid trip to Ithaca for anyone who solves one of these before the next World Congress in 2012. The PDFs of this talk and the other two, as well as related papers, can be found on my web page www.math.cornell.edu/~durrett. An article is planned on the contents of the third lecture for the *Annals of Applied Probability*.

The Wald Lectures were the culmination of a year of preparations that ended with many hours of writing and rewriting in the month before the conference. However, my labors were nothing compared to those of the Chair of the Scientific Program Committee, Ruth Williams, who worked very hard to produce a meeting with an outstanding program, and of Local Organizer Louis Chen (and friends), who managed the hundreds of details needed to make things run smoothly for the 550 participants.



[Left] Ruth Williams, Scientific Program Chair, presents Rick's plaque

Presidential Address: Jianqing Fan

Opportunities and Challenges of Statistics in the Twenty-first Century

Jianqing Fan, who is now the IMS Past-President, is Frederick L. Moore Professor of Finance and Director of Committee of Statistical Studies at Princeton University. He delivered this Presidential Address, one of the final responsibilities of each IMS President, on July 14, 2008, at the IMS Annual Meeting at the World Congress in Singapore.

Introduction

Technological innovation, the information revolution, and trade globalization have forever changed the world we live in. It is coincident that the twenty-first century implies simultaneously the future of human endeavors, the age of information and technology, the changing environment that we are living in, and the exciting developments of science and technology, particularly in life sciences. They have a profound impact on the future of the discipline of statistics and probability. These include more diversified research opportunities, broader appreciations of intellectual values, more demands on broader education, more diversified demographics in our society, and more forums of publications. Let me parse the opportunities and challenges in these five aspects, with emphasis on the first three.

Diversified research

The first eight years of the twenty-first century have witnessed an explosion in data collection, with relatively low costs. Observations with curves, images and movies are frequently seen in molecular biology, health science, engineering, geology, climatology, economics, finance, and humanities. For example, in biomedical research, MRI, fMRI, microarray, and proteomics data are frequently collected for each subject, involving perhaps hundreds of subjects; in natural resource discovery and agriculture, thousands of high-resolution images are collected; in business and finance, millions of transactions are recorded every day. Let me elaborate somewhat in the areas where I have published papers.

Computational biology: Bioinformatic tools have been applied widely to genomics, proteomics, gene networks, structure prediction, disease diagnostics, and drug design. Bioimaging technologies have widely been used to monitor large amounts of diverse information on genetic variation, protein functions, interactions in regulatory processes, and biochemical pathways, and to study neuron activities and networks. For example, genomic sequence analysis permits us to understand the homologies among different species and infer their biological structures and functionalities; analysis of the network structure of protein can predict the biological function and help drug design and gene therapy. They allow us to probe how cells and brains ‘think’ and ‘work’, creating a new era of bioinformatics. These quantitative biological problems raise many new and challenging statistical and computational problems. They also call for probabilistic and mathematical understanding of hybridization processes and statistical tools in use.

Finance: Ever since the first options exchange opened in Chicago in 1973, many new and innovative financial products have been introduced to meet consumers’ demands, to improve the liquidity and efficiency of capital markets, to control and manage market risk, and to reduce the volatility of wealth. Statistical and probabilistic tools are nowadays



routinely applied to asset pricing, portfolio management, securities regulation, risk management, financial consulting, and proprietary trading. Innovative financial products include options, futures, options on futures, options on volatilities, credit derivatives, credit default swaps (CDS), collateralized debt obligations (CDO), and fixed income securities, among others. Despite the subprime crisis that now engulfs the global economy, mortgage securitization enables many of us to buy a home. There is no way to un-invent these financial products, but better quantitative assessment of potential risks and hedging strategies is required.

Probability and statistics play vital roles in modern finance, financial engineering, and risk management. Probabilistic models have been introduced to capture the salient features of stochastic phenomena in financial markets, to value financial derivatives, and to hedge financial risks. Tons of high-frequency data are widely available for better understanding of market microstructures and extreme risks, estimating correlations and volatility of markets. Statistical tools have been widely used for market calibrations, simulations, risk assessment, and portfolio selection.

In short, as summarized in Fan and Li (*Proceedings of the International Congress of Mathematicians*, Vol 3, Madrid, Spain, 2006), the frontiers of science, engineering and humanities differ in the detail but share

a common theme: massive or complex data have been collected and new knowledge needs to be discovered. Massive data collections and new scientific research have a strong impact on statistical thinking, methodological development, and theoretical studies. They have also challenged traditional statistical theory, methods, and computation. Many new insights and phenomena need to be discovered and new probabilistic tools need to be developed.

Looking forward, the exciting developments in frontiers of science and technology clearly represent golden opportunities for quantitative sciences such as probability and statistics. They inspire many probabilistic and statistical problems of high social impact that require new methodological developments and theoretical studies; they forge interdisciplinary collaborations; they provide more job opportunities for statistical scientists. It is a good time for statistics, but not necessarily for statisticians. It depends whether we can pass through the window of opportunities before it closes.

The opportunities do not come without risks and challenges. Diversified research interest poses challenges for our statistical communities to hold together. We are in danger of breaking into more specialized fields, which will weaken our discipline as a whole. Other disciplines will learn statistical techniques and use or abuse them. A weakened statistical science will hamper scientific developments and intellectual activities: New wheels will be reinvented in many other disciplines; scientists working in different fields but nevertheless sharing the same statistical problems will barely communicate without the mediation of statisticians; suboptimal procedures will be used; expensively-collected data will not be fully processed and understood. For example, it is hard for me to imagine that biologists working on gene selection for disease classification will communicate with financiers on portfolio selection for risk-return optimization, or computer scientists working on feature selection for text classification, even though they share the same statistical problems.

A further challenge due to diversified research is our readiness to respond to rapid scientific development and technological inventions. Do we respond fast enough to capitalize the opportunities and take up the challenges? We are not the only business in town. Quantitative scientists in other disciplines will respond to the call for statistics in their fields, if we do not react quickly enough. Looking forward, our continued success is not guaranteed, without nurturing our opportunities.

We have an image problem. As Jon Kettenring described in his 1997 ASA presidential address, “As scientists, we tend to concentrate on our technical work without much regard for how other people see us. The stereotype of statistics, as a dull and impenetrable subject, haunts and harms us. ... No other science is so seriously misunderstood and narrowly pigeon-holed” (*JASA*, 92, 12). The true challenge is then how to construct our image as a diversified and united intellectual discipline of data science, not just a service or a mathematics department?

Broader appreciation of intellectual values

Diversified research necessarily brings up the issues of theory-versus applications that sometimes divide us. Is there any boundary? Does labeling help? Aren't we a diversified but united discipline, speaking multiple languages? What is the core of our discipline that unites us? It is our broader appreciations of probabilistic and statistical thinking in solving problems of high social impacts such as energy, the environment, health and economy. It is our intellectual curiosity in providing fundamental understanding of random phenomena via publications of highest qualities reflecting many facets of contemporary statistics and probability.

What is intellectual value, then? It is knowledge and insights that are beyond what is known or trivial extensions. In valuation of intellectual values, we may ask, among other questions, Are the problems of high societal impact? Does the work provide new knowledge discovery / new insights or solutions to existing problems? Is the work intellectually challenging? Are the techniques (including technical proofs) innovative? All theory, methods, and applications can constitute highly intellectual work. Broader appreciations and understanding of intellectual values are vital to our future success.

Nowadays, government agencies and university administrations tend to use citation-based statistics or journal ranking as a measure of the intellectual value of our research publications. As the saying goes, water can carry boats, but can also sink boats. Statistics can be properly used but can also be abused. Citation statistics often inaccurately measure the value of intellectual work. It is like assessing health without doctors. I am very pleased that IMS joins IMU and ICIAM in endorsing the joint committee report *Citation Statistics* by Adler, Ewing and Taylor, which identifies a number of problems with such a quantitative research assessment. I urge all members to

*It is a good time
for statistics,
but not necessarily
for statisticians*



New IMS Fellows presented in Singapore: Lancelot James, Bani Mallick, Ingrid Van Keilegom, Andrew Nobel, and Zhenyang Lin, with Jianqing Fan



Food, glorious food...



IMS Carver Award winner Richard Johnson, with his wife



Lecture audience



IMS members socializing



Jean Jacod with BS-IMS lecturer Wendelin Werner



Discussions over drinks



IMS Editors' luncheon



Mark Low, IMS Medallion Lecturer



Elizabeth Thompson, Tukey Lecturer



Zhi-Ming Ma, IMS Medallion Lecturer, with Siva Athreya



NUS scenery



Panelists Ker-Chau Li, Peter Hall, Nanny Wermuth, Peter Green and Jim Berger

Presidential Address *continued*

take a look [see <http://imstat.org/publications/citationstatistics.pdf>]. The quality of research and its intellectual value is multi-metric and requires rigorous assessment. Unfortunately, citation statistics can have unintended impacts on the way research is conducted and on the refereeing processes.

How do we protect intellectual value from naïve digitization? Is it possible to design a multi-metric system that reasonably reflects the quality of research? These are also challenges to our profession.

More diversified education

Diversified research poses significant challenges for graduate education. In addition to traditional mathematics, we need to teach statistical and probabilistic thinking, and computing/programming skills. How do we strike a balance among these three competing demands within the time limit of education? Shall we train more generic statisticians or more specialized statisticians? How do we inculcate our students with a broader appreciation of intellectual value? And, crucially, how can we attract more talented students to our discipline? These issues are critically important for our discipline to thrive. Subject-oriented statistical education tends to have a better sale point in attracting talented students.

We are not the only business in town! If we do not address these issues, quantitative scientists in other disciplines will, and this will put further pressure on our future success.

Changing demographics

The demography of IMS has clearly changed over the last 15 years, and so have the graduate bodies, particularly in the United States where most IMS members reside. It is pleasing to see more talented women majoring in statistics, more efficient use of human capital, but worrisome that fewer Americans are majoring in statistics.

Stronger economies in Asia and South America will add more professional statisticians, which will add more Asian and Latin American statisticians and probabilists to our society. Are we prepared for the changing demographics in our society? How do we embrace these changes to fulfill IMS's mission on development, dissemination, and application of statistics as an international, professional, and scholarly society? How do we help each country, United States in particular, to attract talented domestic students to our disciplines?

On this subject, I am very glad to see the establishment of IMS China this year. I am also very pleased that preparations for the inaugural IMS Asia Pacific Rim Meeting, to be held in Seoul in 2009, has made significant progress. Discussion on IMS regional meetings in South America is also underway. These examples show

that IMS is determined to serve a broader constituency, and willing to play a stronger global leadership role in the changing demographics of our society.

More Publication Forums

The internet revolution allows scientists to communicate efficiently and expeditiously via web publication and to obtain useful data for further scientific studies or verification of scientific claims. Last year, Jim Pitman devoted his presidential address to electronic publishing, so let me be brief here.

Good things do not come without any costs. Academic societies like IMS experience depleting revenues from publications and declining membership. How do we compete with commercial publishers or search engines on IT development and cost reductions? The strategies that we employ now have huge implications on our financial health and our institution's future. We must act thoughtfully and cautiously.

Internet publishing also raises the issue of assessment of the quality of research work. It makes it hard to differentiate independent work from plagiarism.

Fast publication and options to replace older versions make it easier to publish half-baked ideas, without careful scrutiny.

On this subject, I am very pleased to see that IMS has cosponsored five electronic publications in probability and statistics, thanks in particular to the efforts of Jim Pitman.

Concluding Remarks

The future of probability and statistics is brighter than ever, but the paths to get there are by no means straightforward. We need to grasp the opportunities in front of us. In particular, we in our profession need to diversify our research portfolios and respond to rapidly changing societal needs; our discipline needs to improve its image and attract talented students; our field requires a broader understanding and appreciation of intellectual values; and we need to broaden our education curriculums, including undergraduate education. I truly believe that the discipline of statistical science will grow stronger when it confronts problems of high social impact while providing fundamental understanding to those problems and their associated methods that push forward theory, methods, computation, and applications.

Together, we can capture the opportunities. Together, we can take up the challenges. Together, our discipline will thrive, and we can make it! ■

World Congress: *Provost honors probabilists*

This speech was given by the Provost of the National University of Singapore, Professor Eng Chye Tan, at the Special Reception at University Hall on July 15, 2008.

It is a great pleasure for me to be here to participate in this special reception to honor Professor Wendelin Werner for being the first probabilist-trained mathematician to be awarded the Fields Medal at the International Congress of Mathematicians (ICM) 2006 held in Madrid. My heartiest congratulations to Professor Werner. If I may generalize, this is also an occasion to celebrate the achievements of probabilists

I understand from the experts that ICM 2006 was a watershed for probability theory and probabilists. Of course, probability theory has always been featured in past ICMs, but before 2006 it would have been unimaginable to award a Fields Medal to someone who is primarily a probabilist. As you all know, one of the other three Fields Medalists, Andrei Okounkov, is known for bridging probability, representation theory and algebraic geometry. The Nevanlinna Prize this time around was awarded to Jon Kleinberg who also uses probability in his work.

Not only that, at ICM 2006, a newly created award called the Carl Friedrich Gauss Prize for applications of mathematics was awarded to a probabilist, Professor Kiyosi Itô, the founding father of stochastic analysis, whom the NUS Institute for Mathematical Sciences honored last week in a special symposium. Then the 2007 Abel Prize was awarded to another probabilist, S. R. S. Varadhan.

When Kolmogorov axiomatized probability theory in 1933, it was considered part of analysis—measure theory, in particular. Even after the powerful analytical apparatus of probability was subsequently brought to bear to solve problems in science and other areas of mathematics, it was generally regarded as an application of analysis.

If I may say so, people in mainstream mathematics used to think of probabilists as running errands for others, either in mathematics itself or in other applied areas. But ICM 2006 seems to have shown that the mind-set of mathematicians in general has changed. Never before had mathematicians seen so many probability-related ideas and methods being propounded in other areas of mathematics, ranging from number theory to logic. It appears that many mathematicians are embracing the ideas of probability in much the same way that they

use methods from well-established fields like algebra, analysis and geometry.

Although I'm a Lie representation theorist, I'm aware that probabilists have been using and continue to use group representations in their work. In the other direction, I understand that probabilistic ideas have become more frequently applied in solving big problems in pure mathematics.

In 1974, Norman Levinson published a highly nontrivial result that lent a probabilistic flavor to the Riemann Hypothesis, and since then, some people have been trying to crack this problem, probably the greatest prize problem of our century, using probabilistic methods like random matrices and even quantum systems. The purists will, of course, view this as a sign of "desperation". However, there are also people who believe that even if the problem is not cracked by such methods, these probabilistic approaches will open up a treasure chest of new mathematical insights.

Professor Werner said in an interview that the division and classification of mathematics into sub-fields should not be taken too seriously. This is certainly borne out by mathematical and scientific developments throughout the ages.

For example, the well-known algebraic geometer Oscar Zariski said something to the effect that the classical Italian geometers knew all about the geometry of curves and surfaces in two dimensions but could not prove them. And it took Zariski, André Weil and B. L. van der Waerden to prove them and lay the rigorous foundations of algebraic geometry by using ideas from commutative algebra.

More recently, everybody knew that the physicists knew all about conformal field theory but were unable to prove anything rigorously. It took Professor Werner and his fellow researchers Gregory Lawler and Oded Schramm to rigorously prove their predictions.

The history of mathematics is full of instances of the fruitful cross-fertilization of ideas in advancing old and new areas of knowledge. Probability theory has indeed contributed to this process.

I am very happy to be able to share the camaraderie of such a distinguished gathering of scholars and thinkers on this occasion. I hope this World Congress will also turn out to be a joyous and festive occasion for you, to bring back good memories of this place and this event. ■

Wendelin Werner spoke at the Special Reception, which was held in his honor and in celebration of the achievements of probabilists in the past few years



Korean Statistical Society: a profile

Jongwoo Jeon is President of the Korean Statistical Society and Professor of Statistics, Seoul National University; Byeong U. Park is Professor of Statistics, Seoul National University. They write:

The Korean Statistical Society was founded on December 17, 1971, with Joon Bo Kim at Korea University as President and 42 other founding members. A proud tradition of promoting research and education for Korean statisticians and probabilists has thus been established over the past 37 years. During this period, its membership has been growing significantly. At the time of writing, it has 683 individual regular members from academia and industry covering various fields of statistical science, 163 student members, 57 departmental and 69 library members. It also has 24 institutional members to establish strong links between academia and industry.

The society's flagship journal, *Journal of the Korean Statistical Society (JKSS)*, was launched in March 1973. This journal has been devoted to the dissemination of innovative research work in the theory and application of statistics from all countries. Recent years have seen great progress of the journal toward internationalization. The society has embarked on collaboration in publication of the journal with Elsevier, commencing with the first issue of 2008, in an attempt to make the journal visible from everywhere in the world. The journal was reshaped with an internationalized editorial board, and its authorship was expanded to all parts of the world. In particular, the journal was included in the Thomson Scientific Database, *Science Citation Index Expanded*, in April this year. There are two more official journals of the society. *The Korean Journal of Applied Statistics*, started in 1987, publishes research articles on statistical applications. Until 2007, it published only articles written in Korean, but now is

bilingual. The last comer, *Communications of the Korean Statistical Society*, was established in 1994 to accommodate research papers that need rapid publication.

The society holds meetings twice a year, one in late May and the other in early November. The number of participants has grown significantly in the past three years. At this year's spring conference, approximately 500 people registered, and more than 120 invited/contributed talks were given.

In 2002, when Woonchul Kim at Seoul National University was the President of the society, an honorable lecture series, named the Ilsong Lecture and sponsored by Sam Chun Dang Pharm. Co., Ltd, was established. The aim of the lecture series is to expose Korean statisticians to cutting-edge research achievements made by world-renowned statisticians. Among the recent Ilsong Lecturers are Jianqing Fan (Princeton), Bernard Silverman (Oxford), Peter Hall (University of Melbourne), Jerome Friedman (Stanford), and Raymond Carroll (Texas A&M); in the November meeting of this year Grace Wahba (University of Wisconsin–Madison) will deliver the plenary lecture. Others who have participated in the semiannual meetings of the society as a special invited lecturer include Douglas Nychka (NCAR), Luke Tierney (University of Iowa), Wolfgang Haerdle (Humboldt Universität zu Berlin), and Chris Jones (Open University, UK).

The society is making efforts to further the development that it has already evidenced in recent years for a greater awareness and standing in the worldwide statistics community. The Korean Statistical Society will host the inaugural meeting of a new IMS meeting series, IMS-APRM (IMS Asia Pacific Rim Meetings), which will take place in Seoul National University in 2009. This will be a historic landmark for the society since it will be an international meeting held in Korea that assembles the largest number of world-class statisticians and probabilists.

Statistics in Korea has been flourishing, with increasing research activities by Korean statisticians, most significantly in the recent two decades. The number of Korean-authored publications in the 1990s and 2000s in the *Annals of Statistics*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Society—Series B*, and *Biometrika* is estimated at 80, and that is a ten-fold increase from the 1970s and 1980s. These achievements were made to a large extent by those in their 40s and early 50s, recognized as 'the second generation' who came back to Korea after PhD education abroad in the late 1980s and early 1990s. Korea has even brighter future with 'the third generation'. Statistical researchers in the first two generations have been producing a significant number of outstanding students. A great number of young Koreans are studying and working in US, and they are in close contact with people in their homeland for collaborative research. The current number of undergraduate and graduate students in the 71 statistics departments in Korea exceeds 12,000.

With this strength and vigor of the Korean statistical community, Korea hopes to take the lead in the worldwide statistics community in the not-too-distant future.

Seoul, Korea: the Han River at night.



Photo: Flickr/d'n'c

***Annals of Applied Statistics*: new issue out**

The *Annals of Applied Statistics*, the newest journal from the IMS, is now in its second year of publication. Issue 3 for 2008, published both electronically and in the classic *Annals* format (in pink cover!) spans a wide arc across the world of applied statistics: from horseshoe shaped curves in data analysis (Diaconis et al), the logic of observational studies (Rubin), current issues in particle physics (Lyons), the lasso (Witten and Tibshirani), to x-ray diffractograms (Davies et al), and substance abuse treatment (Griffen et al.) A complete table of contents appears below. You can preview all the articles at the *AOAS* website, http://www.imstat.org/aoas/next_issue.html. You can also look ahead to future issues, including our special section on atmospheric sciences, scheduled to appear in December.

AOAS publishes papers on all topics in applied statistics. The editorial board is directed by:

Bradley Efron, Editor-In-Chief;

Stephen E. Fienberg, Editor for social science, government, sample surveys, and economics;

Michael Newton, Editor for biology, medicine, and genetics; and

Michael Stein, Editor for physical science, computation, engineering, and the environment.

To submit a paper see the discussion at <http://www.imstat.org/aoas/mansub.html>.

To the right is the full list of papers for the September issue (Volume 2, number 3).

For Objective Causal Inference, Design Trumps Analysis

Donald Rubin

Horseshoes in Multidimensional Scaling and Local Kernel Methods

Persi Diaconis, Sharad Goel, and Susan Holmes

Predictive Learning via Rule Ensembles

Jerome H. Friedman and Bogdan E. Popescu

Open Statistical Issues in Particle Physics

Louis Lyons

Random Survival Forests

Hemant Ishwaran, Udaya B. Kogalur, Eugene H. Blackstone, and Michael S. Lauer

A General Formulation for Standardization of Rates as a Method to Control Confounding by Measured and Unmeasured Disease Risk Factors

Steven D. Mark

Testing Significance of Features by Lassoed Principal Components

Daniela M. Witten and Robert Tibshirani

A Sharper Discrepancy Measure for Post-Election Audits

Philip B. Stark

Residual Based Localization and Quantification of Peaks in X-Ray Diffractograms

P. L. Davies, U. Gather, M. Meise, D. Mergel, and T. Mildenerger

Distance-Based Clustering of Sparsely Observed Stochastic Processes, with Applications to Online Auctions

Jie Peng and Hans-Georg Müller

Analysis of Comparative Data with Hierarchical Autocorrelation

Cécile Ané

Sequential Category Aggregation and Partitioning Approaches for Multi-Way Contingency Tables Based on Survey and Census Data

L. Fraser Jackson, Alistair G. Gray, and Stephen E. Fienberg

An Application of Principal Stratification to Control for Institutionalization at Follow-Up in Studies of Substance Abuse Treatment Programs

Beth Ann Griffin, Daniel F. McCaffrey, and Andrew R. Morral

Inference Using Shape-Restricted Regression Splines

Mary C. Meyer

Estimating a Difference of Kullback–Leibler Risks Using a Normalized Difference of AIC

D. Commenges, A. Sayyareh, L. Letenneur, J. Guedj, and A. Bar-Hen

For information on submitting papers and subscribing, please visit
www.imstat.org/aoas

COPSS Awards: 2008 winners, 2009 nominations

We are pleased to announce the 2008 COPSS Award winners, presented at JSM in Denver on August 6. The winner of the Presidents' Award is **Tony Cai**, University of Pennsylvania, *"For fundamental and wide-ranging contributions to the mathematics, theory and methods of statistics, including the theory and application of wavelets, block thresholding in wavelet regression, optimality theory, adaptation in nonparametric function estimation, confidence intervals in small samples, and methods for false discovery rate control; for applications to chemical identification, medical imaging and microarray data analysis; and for outstanding contributions to the statistical profession through extensive editorial work and mentorship of students."* We have an interview with Tony on page 17.

The Elizabeth L. Scott Award winner is **Lynne Billard**, University of Georgia, *"For encouraging women statisticians as they embarked on their careers and mentoring women as they advanced; for excellent leadership to the profession and serving as a role model to the next generation of women and men in Statistics; and for conducting*



Above: the COPSS Chair Jessica Utts presenting the Presidents' Award to Tony Cai.

Below: Lynne Billard receiving the Scott Award. [Photos courtesy Eric Sampson/ASA]



and publishing studies to understand and end gender-based inequities in Statistics."

As previously announced, the 2008 Fisher Lecturer was **Ross L. Prentice**, Fred Hutchinson Cancer Research Center and Professor of Biostatistics at the University of Washington. He was chosen *"For fundamental contributions to the theory and practice of statistical science; for his influential and innovative research in the areas of survival analysis, life history processes, case-control and cohort studies; and for his influential role in the conception, design, and implementation of the Women's Health Initiative."* His lecture was titled, "The Population Science Research Agenda: Multivariate Failure Time Data Analysis Methods".

2009 COPSS Awards: nominations

Please see <http://www.niss.org/copss> for details of eligibility and nomination requirements for all these awards

The **Presidents' Award** is presented annually to a young member of one of the participating societies of COPSS. The award is presented in recognition of outstanding contributions to the statistics profession. It is typically granted to an individual who has not yet reached his or her 41st birthday during the calendar year of the award (but see the details on the website). Nominations should be sent by **January 15, 2009** to:

Mark van der Laan Chair, Presidents Award Committee Biostatistics & Statistics University of California, Berkeley 108 Haviland Hall Berkeley, CA 94720-7360 **t** 510-643-9866 **f** 510-643-5163 **e** laan@berkeley.edu

The **Florence Nightingale David Award** recognizes a female statistician who exemplifies the contributions of Florence Nightingale David, an accomplished statistician in combinatorial probability theory, author

or editor of numerous books, first Chair of Department of Statistics at University of California, Riverside, and the first recipient of the Elizabeth L. Scott Award. The criteria for the award are excellence as a role model to women and in: statistical research; leadership of multidisciplinary collaborative groups; statistics education; and service to the profession. Nominations should be sent by **January 15, 2009** to: *Juliet Shaffer, Chair, FN David Award Committee, Department of Statistics, 325 Evans Hall, University of California, Berkeley, CA 94720-7360* **t** (510) 549-3596 **f** (510) 642-7892 **e** shaffer@stat.berkeley.edu

The **George W. Snedecor Award** honors namesake, a pioneer who had worldwide impact in improving the quality of scientific methods concerning the use of statistical methodology. The award recognizes an individual who has been instrumental in the development of statistical theory in biometry and a noteworthy publication in biometry by that individual within three years of the date of the award. Nominations

of an individual and associated publication(s) should be sent by **January 15, 2009** to: *Marianthi Markatou, Chair, Snedecor Award Committee, Department of Biostatistics 722 West 168th Street, Room 632 Columbia University New York, N.Y. 10032* **t** 212-342-0506 **f** 212-305-9408 **e** mm168@columbia.edu

The **Fisher Lectureship and Award** was established to honor the outstanding contributions of the late Sir Ronald Aylmer Fisher, and those of a current statistician, on aspects of statistics and probability that closely relate to the scientific collection and interpretation of data. The award exists to recognize the importance of statistical methods for scientific investigations. Nominations should be sent by **December 15, 2008** to: *Jeremy Taylor, Chair, Fisher Lecturer Committee Department of Biostatistics University of Michigan 1420 Washington Heights Ann Arbor, MI, 48109* **t** 734 936 3287 **f** 734-763-2215 **e** jmgt@umich.edu

Gertrude Cox Scholarship Race

Each year at JSM, a group of statisticians get out of bed *very early* and make their way to the start line of a running race. Why? To raise money for the Gertrude M. Cox scholarship, which provides funds for women in graduate statistics programs. This year it was the 19th Annual Gertrude Cox Scholarship Race, a 5km running race and 2.5km fun run/walk at the JSM in Denver, in the early hours of Tuesday, August 5th, 2008. The race is organized by the Caucus for Women in Statistics, whose president, Marcia A. Ciol, said there were 83 runners and 23 walkers registered in this year's Cox Race, which is about average—but, she added, “We do want more in DC next year!” This year's race raised about \$3250.

The next scholarship application deadline will be in March 2009. Details will be posted nearer the time at <http://www.amstat.org/awards/index.cfm?fuseaction=cox-scholarship>



Michelle Quinlan, who herself received an honorable mention in the Gertrude Cox Scholarship this year, was the fastest woman runner and eighth overall. We caught up with her (pew) to ask a few questions:

Why did you enter the race? Because I enjoy running and have been a long distance runner for 12 years.

How much running do you usually do? I usually run 50 to 55 miles per week.

Did you notice a difference because of the altitude? Not really: I was born and raised in the Denver metro area, so I am used to the altitude.

Do you have any other comments? I'm glad I had the opportunity to race for a great cause and race with fellow statisticians.

Clockwise from above right: Christine Franklin; Geert Molenberghs; all the winners in the various age categories—ages ranged from 10 (Jasper Molenberghs) to 71 (Jesse Meneses); at the start line; one race participant had an easy ride!



COPSS Presidents' Award: Tony Cai

The Committee of Presidents of Statistical Societies (COPSS) Awards are jointly sponsored by the American Statistical Association, the Institute of Mathematical Statistics, the International Biometric Society ENAR and WNAR, and the Statistical Society of Canada. This year, the COPSS Presidents' Award goes to Professor Tony Cai, an IMS Fellow. The award is presented in recognition of outstanding contributions to the statistics profession. The *Bulletin* asked Tony to share some of his personal and professional stories.



Q: Congratulations, Tony! Your COPSS award came as no surprise to many of us. How did you react when you were first notified of the award?

I felt tremendously honored and humbled, for the list of the past award winners includes many people of truly exceptional genius. I am grateful to the COPSS Award Committee for judging me worthy to be associated in this way with the other distinguished statisticians who have won the award in years past.

Q: Your research has been on the mathematical and theoretical half of statistics. What has kept you busy in recent years? What is the current focus of your research?

I have been working on a number of problems including nonparametric function estimation, high-dimensional inference, large-scale multiple testing, functional data analysis, inference for discrete distributions, and statistical decision theory. By and large, I have been interested in the optimality questions: For a given statistical problem, what is the best possible performance? How to measure optimality? How to construct optimal procedures? Answering these questions often requires the use of some mathematical and statistical theory. I have also been interested in applications to chemical identification, medical imaging and microarray data analysis. At the moment I am working on multiple testing under dependency and the so-called “large p , small n ” problems including optimal estimation of large covariance matrices and functional linear regression.

Q: You studied mathematics in college. How did you become interested in a career in statistics?

The short answer is “by chance”. I was not sure exactly what to study before going to Cornell as a PhD student in mathematics in 1992. But then by chance, or perhaps by destiny, I met and talked to Larry Brown in White Hall on my first day at Cornell. At the end of the conversation Larry said, “Maybe you can try these three courses to see if you really like statistics”. At the time I did not know much more than mean and standard deviation. And the rest is history. I remember that day very well because it was such a pivotal day in my life.

Q: You have a very productive career, but you have also been active in professional service through editorial work and committee work. Are you happy with such a busy lifestyle?

That’s a very good question. Actually I am not sure myself if I am happy with such a busy lifestyle. I wish I could do more with less time. It’s an honor as well as obligation to support our profession through voluntary services such as editorial and committee work. Unfortunately these “additional” professional services together with teaching and research make many of us extremely busy.

Q: If you could make a wish for your professional career, what would it be?

I am actually writing this on a beach in the Bahamas, after a day of playing with my kids on the water slides. I am happy that I have not checked my email for a week. If I could have a wish, I’d wish for no emails to worry about at all!

Q: Who has influenced your life the most?

My parents have had tremendous influence on shaping my view of the world. They have always believed in me—more than me, sometimes. Their love, encouragement and determination made all the difference. Most importantly, my father convinced me very early on that being a professor was the best job one could have. It was hard to resist the idea of having a job with only a few hours of teaching per week and more than three months of vacation every year. Of course, what he forgot to mention was that such a job required a long time of hard preparation and the vacation did not seem to last as long as it sounded. The person who has had the greatest influence on my professional life is my mentor and one-time advisor, Larry Brown, from whom I learned much more than statistics. Larry has been a constant source of inspiration and support.

Q: You are in a business school. If you were offered double your salary to work in an investment bank, would you do it?

One advantage of being in a business school is that I get to know many people working on Wall Street, and know how they work. In fact I *have* been approached by investment banks before, but I have never seriously thought about it so far. I love what I do. People say that the best job is the one that you are willing to work for free, but get paid. I think I have such a dream job. Perhaps one should never say never, but it would definitely take a lot more than doubling my salary in order for me to work for an investment bank.

Terence's Stuff: *Optimizing*

Terry Speed's childhood lesson on self-improvement would seem to apply to many of today's statisticians...



Good, better, best / Never let it rest / 'Till your good is better / And your better best.

I've had this jingle in my head since early childhood, and it seems I'm not the only one. We statisticians are great improvers, great optimizers. How many papers have you read about statistical methods, whose sole aim is to improve upon existing ones, often producing something (asymptotically) optimal? And, we usually *start* at good, not satisfactory, or quick and dirty. When did you last read a paper entitled "A somewhat reasonable estimator for ..."? This might be the only estimator published so far, for that problem, and so it is *best* in a sense, but that won't impress editors. Good procedures have to optimize something. A visitor from another field could be forgiven from concluding that our collective aim is to produce procedures that are "best" in every possible respect, not knowing that *we* know these never exist.

I don't remember when it first dawned on me that statistical life is a trade-off—variance *vs* bias, false positive *vs* false negative rate, sparse *vs* non-sparse—and that in general it is unreasonable for us to want it all, or even more than one good thing. Certainly not in my first couple of courses, where the focus was on BLUEs and MLEs, the Neyman-Pearson lemma, and the like. In my third course I met the minimax estimator of a binomial p : biased, but doing rather well on mean-squared error. It was introduced as an oddity, not

a way of thinking. Who wanted to be biased in the early '60s, apart from Charles Stein? (Okay, several people, but you get the point.) When it did sink in, I began to regard trade-off thinking as one of the key insights possessed by statisticians.

Around that time I encountered a procedure, which was "best" by virtue of being the *only* procedure satisfying the side conditions, the winner in a race with one horse. Maybe at that time my faith in aiming for the best might have been shaken a little, but as with so much in my life, I had to find out the hard way. Eventually I got it: *best* in statistical theory means a focus on *just one* aspect of a problem, with goodness measured in *just one* way, and it has to *exist*. Our little trick for guaranteeing existence is to require the procedures we consider to satisfy certain side conditions, in effect reducing the number of horses in the race. This laid the foundation for my instant scepticism these days whenever I hear the word best. I think to myself, What a surprise! Here's a context in which there is just one item of interest (very unusual), where we measure goodness in just one way (without arguments), *and* the optimization problem has a solution. I wonder what side conditions were imposed to ensure this? Or, how natural really are the item of interest and the measure of goodness?

When she was good / She was very good indeed, / But when she was bad she was horrid. Longfellow's poem, another from my childhood, reminds me about the fragility (dare I say non-robustness?) of many optimal statistical procedures. Think optimal design in linear regression experiment on a bounded interval, where you set half your x -values at

the lower and half at the upper extreme. Or sufficiency, where, with no loss of information, you can throw away your sample values, keeping only the sample size, sum, and sum of squares. Or, the sample mean as a location estimator. All excellent things to do if you are 100% sure of your assumptions, but... It's almost as though there were a meta-theorem saying that if a procedure optimizes some criterion, under certain conditions, it is *guaranteed* to perform very non-optimally under small perturbations of those conditions.

Tukey was the most eloquent, persistent and insightful analyst of our 'optimania'. Section 1.6 in his *The Future of Data Analysis*, entitled "Why optimization?" summarizes his views, and he spent much of his professional life teaching us how to be good, non-optimal statisticians. So, why fill a column re-iterating half-century-old points? First, not everyone has met these ideas of Tukey; some learn them slowly: I'm trying to speed things up. Secondly, I went to the JSM in Denver, and learned, if there were ever any doubt, that optimization in statistics is thriving. Thirdly, I participated in a stimulating workshop on experimental design this summer, where optimal design was seen to be flourishing. Lastly, it's the one hundredth anniversary of the birth of the founder of this sub-area of statistics, the Finnish statistician, probabilist and mathematician, Gustav Elfving. He was truly one of our greats; read and enjoy Kenneth Nordström's "Life and work" in *Statistical Science*, **14** (2): 1999.

It's not the optimizing, it's the taking part that counts



IMS meetings around the world

IMS co-sponsored meeting

JSM2008 Proceedings

August 3–7, 2008

Denver, Colorado

www.amstat.org/meetings/jsm/2008/

The ASA is producing an online *Proceedings*.

You are eligible to submit if you orally presented your paper or poster at JSM 2008 or one of the following conferences: QPRC 2008, June 3–6, 2008, Madison, Wisconsin; 2008 ENAR Spring Meeting, March 16–19, 2008, Arlington, Virginia; 2008 FTC, October 9–10, 2008, Mesa, Arizona; 2008 SRC, May 19–21, 2008, Atlanta, Georgia; AAPOR 63rd Annual Conference, May 15–18, 2008, New Orleans, Louisiana; or FDA/Industry Statistics Workshop, September 15–17, 2008, Arlington, Virginia.

Please read the information at <http://www.amstat.org/meetings/jsm/2008/index.cfm?fuseaction=proceedings>

Deadline: the website will close to all submissions on **October 27, 2008**.



IMS co-sponsored meeting

JSM2009

August 1–6, 2009

Washington DC

www.amstat.org/meetings/jsm/2009/

The next IMS Annual Meeting will take place as part of the 2009 Joint Statistical Meetings, which will be held in Washington DC. The theme of the JSM is “Statistics: From Evidence to Policy”. The IMS Program Chairs are Michael Kosorok kosorok@unc.edu and Xiaotong Shen xshen@stat.umn.edu



Walter E. Washington Convention Center.



Photo: Destination DC

IMS co-sponsored meeting series

2008 NSF-CBMS Regional Research Conferences in the Mathematical Sciences

The US National Science Foundation has supported 9 NSF-CBMS Regional Research Conferences during 2008; the last meeting is listed below. These conferences are intended to stimulate interest and activity in mathematical research. Each five-day conference features a distinguished lecturer who delivers ten lectures on a topic of important current research in one sharply-focused area of the mathematical sciences. The lecturer subsequently prepares an expository monograph based upon these lectures, which is normally published as a part of a regional conference series.

Support for about 30 participants is provided and the conference organizer invites both established researchers and interested newcomers to attend. Contact the conference organizer for information about an individual conference. Questions should be directed to: CBMS, 1529 18th St. NW, Washington DC 20036-1385. **t** (202) 293-1170; **f** (202) 293-3412; **e** rosier@georgetown.edu or lkolbe@maa.org

NSF-CBMS Conference: Tropical Geometry and Mirror Symmetry

December 13–17, 2008

Kansas State University, Kansas, USA

www.math.ksu.edu/~rcastano/CBMS.html

Lecturer: **Mark Gross**

Ricardo Castano-Bernard, Yan Soibelman, and Ilia Zharkov, organizers: 785-532-0585, rcastano@math.ksu.edu; 785-532-0584, soibel@math.ksu.edu; 617-495-8797, zharkov@math.harvard.edu



*At a glance:
forthcoming
IMS Annual
Meeting and
JSM dates*

2009

IMS Annual Meeting

@ JSM: Washington DC, August 1–6, 2009

2010

JSM: Vancouver, Canada, July 31–August 5, 2010

IMS Annual Meeting:

Gothenburg, Sweden, August 9–13, 2010

2011

IMS Annual Meeting @

JSM: Miami Beach, FL, July 30–August 4, 2011

2012

JSM: San Diego, CA, July 28–August 2, 2012

IMS Annual Meeting

@ World Congress:
İstanbul, Turkey,
Date TBA



2013

IMS Annual Meeting

@ JSM: Montréal, Canada, August 3–8, 2013



More IMS meetings around the world

IMS co-sponsored meeting

Fall Conference on Statistics in Biology

October 13–15, 2008

Iowa State University, Ames, USA

www.stat.iastate.edu/Conference2008/

The Department of Statistics at Iowa State University is pleased to host an ASA and IMS co-sponsored conference on statistics in biology. The conference will feature a series of talks and posters on statistical theory, methods, and applications motivated by problems from the biological sciences. Contributed talks and posters: see website for submission details.

Special invited sessions will include talks by: **James Booth**, Cornell University; **Brad Efron**, Stanford University; **Xihong Lin**, Harvard University; **Charles McCulloch**, University of California, San Francisco; **Michael Newton**, University of Wisconsin–Madison; **Kathryn Roeder**, Carnegie Mellon University; and **Terry Speed**, University of California, Berkeley.

UPDATED

IMS co-sponsored meeting

International Workshop on Flexible Modelling: Smoothing and Robustness (FMSR 2008)

November 12–14, 2008

Leuven, Belgium

<http://wis.kuleuven.be/stat/fmsr2008.php>

The workshop takes place in Leuven, a beautiful historic city in the northern part of Belgium. The general theme of the workshop is semi- and nonparametric analysis and robust statistical methods. More specific themes are, among others, flexible smoothing and penalization, model selection, nonparametric functional estimation, modelling dependencies and inference for copulas, robust multivariate outlier detection, semi- and nonparametric methods in time-series analysis. There will be invited talks, contributed talks and poster sessions. The workshop will be followed by a short course for PhD-students. List of Invited Speakers: **Anestis Antoniadis**, Graciela Boente, Jianqing Fan, Peter Hall, Xuming He, Bruno Rémillard, Qiwei Yao, and Bernard Silverman.



Pictured right is Arenberg Castle in Leuven, Belgium

IMS co-sponsored meeting

ISNI2008: International Seminar on Nonparametric Inference

November 5–7, 2008

Vigo, Spain

www.isni2008.com [new URL]

ISNI2008 is a three-day international meeting devoted to nonparametric statistics. It will be held in Vigo, Galicia (in the north-west of Spain) on November 5–7, 2008. Its aim is to facilitate the exchange of research ideas and to promote collaboration among researchers in the field. The meeting is promoted by the three Galician research groups in nonparametric statistics (Vigo, Santiago de Compostela, and A Coruña), as well as by a number of close scientific collaborators coming from different countries in Europe and the USA.

ISNI2008 is organized by the SiDOR (Statistical Inference, Decision and Operations Research) group at the Faculty of Economics and Business, University of Vigo. It is co-sponsored or endorsed by the IAP Attraction Pole, the Institute of Mathematical Statistics, the Section on Nonparametric Statistics of the American Statistical Association, the Bernoulli Society for Mathematical Statistics and Probability, and the Galician and Spanish Societies for Statistics and Operations Research, among many other institutions.

The Scientific Programme includes seventeen invited talks given by leading researchers in several areas of nonparametric statistics: **Peter Hall** (Melbourne); **Hans Georg Müller** (UC Davis); **Jianqing Fan** (Princeton); **Jan Swanepoel** (Potchefstroom); **Anthony Davison** (Lausanne); **Lutz Duembgen** (Bern); **Natalie Neumeyer** (Hamburg); **Gerda Claeskens** (KU Leuven); **Anestis Antoniadis** (Grenoble); **Juan Carlos Pardo-Fernández** (Vigo); **Holger Dette** (Bochum); **Philippe Vieu** (Toulouse); **Gábor Lugosi** (Barcelona); **Jean Opsomer** (Colorado State); **Stefan Sperlich** (Göttingen); **Winfried Stute** (Giessen); and **Geert Molenberghs** (Hasselt).

The *Journal of Nonparametric Statistics* will devote a special issue with contributions to the meeting.

Please visit www.isni2008.com for further information. Pre-registration is now open.



IMS co-sponsored meeting:

IMS Asia Pacific Rim Meeting**NEW****June 28 – July 1, 2009, Seoul, Korea****w** <http://ims-aprm.org/>

The first IMS Asia Pacific Rim Meetings will take place in Seoul, Korea during the period June 28–July 1, 2009. The new meeting series will provide an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim. It will also promote communications and collaborations between researchers in this area and those from other parts of the world. The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications. For more information, visit <http://ims-aprm.org/> or contact the program chairs: Feifang Hu (fh6e@virginia.edu) or Runze Li (rli@stat.psu.edu)

IMS co-sponsored meeting.

2009 Spring Research Conference on Statistics in Industry and Technology**May 27–29, 2009****Vancouver, Canada****w** <http://www.stat.sfu.ca/~boxint/src2009/>
Please email questions to Boxin Tang, boxint@stat.sfu.ca.

The goal of the conference is to promote cross-disciplinary research in statistical methods in engineering, science and technology. This covers a wide range of application areas including environment, information and manufacturing sciences. The conference will provide a forum where participants can describe current research, identify important problems and areas of application, and formulate future research directions.

IMS co-sponsored meeting

International Symposium in Statistics (ISS) on Inferences in Generalized Linear Longitudinal Mixed Models (GLLMM)**July 20–22, 2009****Memorial University, St John's, Canada****w** www.iss-2009-stjohns.ca

The objective of this ISS is to bring together a set of speakers and discussants to describe the latest research such as parametric and non-parametric inferences in this emerging area with applications to Biostatistics, Econometrics, and Ecological and Environmental studies, among others.

IMS co-sponsored meeting

Seventh Workshop on Bayesian Nonparametrics**June 21–25, 2009****Collegio Carlo Alberto, Moncalieri, Italy****w** <http://bnpworkshop.carloalberto.org/>

The aim of the Workshop is to highlight the latest developments in Bayesian Nonparametrics covering a wide variety of both theoretical and applied topics. The meeting will be held at the Collegio Carlo Alberto, a research institution housed in an historical building located in Moncalieri on the outskirts of Turin, Italy.

Contact **e** bnp@carloalberto.org

IMS co-sponsored meeting

33rd Conference on Stochastic Processes and their Applications**July 27–31, 2009****Berlin, Germany****w** <http://www.math.tu-berlin.de/SPA2009/>
Featuring two IMS Medallion Lectures, from **Claudia Klüppelberg** and **Gordon Slade**, a Lévy Lecture from **Amir Dembo**, and a Doob Lecture from **Ed Perkins**.

Organizing committee chair: Jochen Blath; co-chair: Peter Imkeller.

IMS Reps to Program Committee: David Aldous, Martin Barlow, Gérard Ben Arous, Mu-Fa Chen, Anna de Masi, Hans Föllmer, Luis Gorostiza, Dmitry Kramkov, Russ Lyons, Claudia Neuhauser, Ed Waymire, and Ofer Zeitouni.

IMS co-sponsored meeting:

2009 ENAR/IMS Spring Meeting**March 15–18, 2009****Grand Hyatt San Antonio, San Antonio, TX****w** <http://www.enar.org/meetings.cfm>

IMS co-sponsored meeting:

2010 ENAR/IMS Spring Meeting**March 21–24, 2010****Hyatt Regency New Orleans, New Orleans, LA****w** <http://www.enar.org/meetings.cfm>

IMS co-sponsored meeting

Workshop for Women in Probability**October 5–7, 2008****Cornell University, Ithaca, New York****w** www.math.cornell.edu/~durrett/wwwp/

A conference for Women in Probability will be held October 5–7, 2008, at Cornell University. The conference begins Sunday morning and ends at noon Tuesday. The scientific program, which is being organized by Lea Popovic (Concordia) and Amber Puha (San Marcos), will feature talks by **Jennifer Chayes** (Microsoft), **Nina Gantert** (Muenster), **Masha Gordina** (U. Conn.), **Elena Kosygina** (Baruch), **Elizabeth Meckes** (Case Western), **Tai Melcher** (Virginia), **Kavita Ramanan** (CMU), **Deena Schmidt** (IMA), **Anja Sturm** (Delaware), and **Ruth Williams** (UCSD). Women probabilists, especially young researchers and advanced graduate students, are invited to participate. To register, and for information on how to apply for support for lodging and local expenses, go to the conference web page above. Funding for this conference comes from an NSF Research Training Grant to the probability group at Cornell, so preference will be given to supporting US citizens, nationals, and permanent residents. For questions about local arrangements, contact the conference secretary, Rick Durrett, rtd1@cornell.edu

Other Meetings Around the World: Announcements and Calls for Papers

CALL FOR NOMINATIONS

C.R. and Bhargavi Rao Prize for Outstanding Research in Statistics to be awarded by Penn State University Department of Statistics

The C.R. and Bhargavi Rao Prize was established to honor and recognize outstanding and influential innovations in the theory and practice of mathematical statistics, international leadership in directing statistical research, and pioneering contributions by a recognized leader in the field of statistics. The Rao Prize is awarded by the Department of Statistics at Penn State University to a nominee selected by the members of the Rao Prize Committee.

Former Rao Prize recipients were:

- 2003** Bradley Efron, the Max H. Stein Professor in the Department of Statistics at Stanford University
- 2005** Jayaram Sethuraman, former Robert O. Lawton Distinguished Professor and current Professor Emeritus and Adjunct Professor at Florida State University
- 2007** Lawrence D. Brown, Miers Busch Professor and Professor of Statistics at the Wharton School, University of Pennsylvania

For additional information see <http://www.stat.psu.edu/news/awards/raoprize.html>.

Nominations for the 2009 Rao Prize should be submitted by **December 1, 2008** to:

Chair, Rao Prize Selection Committee
326 Thomas Building
Penn State University
University Park, PA 16802-2111

The Rao prize is awarded every two years (odd numbered years) to an individual working in the United States. The award recipient will receive a medal, cash prize and an invitation to visit Penn State and give a talk.

Nominations should include a letter describing the nominee's outstanding contributions to leadership and research in statistics, a current curriculum vita, and two supporting letters.

C.R. Rao serves as Holder Emeritus of the Eberly Chair in Statistics at Penn State University. He was the founding Director of the Center for Multivariate Analysis. A National Medal of Science laureate, Dr Rao is recognized worldwide as one of the pioneers of modern statistical theory. His pioneering contributions to mathematics and statistical theory and applications have become part of undergraduate and graduate courses in statistics, econometrics, electrical engineering, and many other disciplines at most universities throughout the world.

NEW

Quintessential Contributions: Celebrating Major Birthdays of Statistical Ideas and Their Inventors

Saturday, September 27, 2008

Radcliffe Gym, 18 Mason Street, Cambridge, MA

w http://www.stat.harvard.edu/?mode=About&page=quintessential_contributions.html

Sponsored by the Department of Statistics, Harvard University

The program comprises four celebrations:

Celebrating the 65th birthday of Donald B. Rubin and the 30th birthday of his "Multiple Imputations in Sample Surveys: A Phenomenological Bayesian Approach to Nonresponse"

Invited Speaker: **Fritz Scheuren**

Celebrating the 70th birthday of Carl N. Morris and the 25th birthday of his "Parametric Empirical Bayes Inference: Theory and Applications"

Invited Speaker: **Andrew Gelman**

Celebrating the 85th birthday of Herman Chernoff and the 35th birthday of his "The Use of Faces to Represent Points in K-Dimensional Space Graphically"

Invited Speaker: **Steve Wang**

Celebrating the 100th birthday of W.S. "Student" Gosset's "The Probable Error of a Mean"

Invited Speaker: **Stephen Stigler**

NEW

Winemiller 2008 Conference on Survival Analysis and its Applications October 16–18, 2008

Columbia, Missouri, USA

w <http://faculty.missouri.edu/~Winemiller2008/>

This workshop is aimed to provide an opportunity to bring both senior and junior researchers together to discuss recent advancements and issues in survival analysis with the focus on its applications in various fields including biology, economics, finance, medical studies, psychology and public health.

Plenary speakers are **Jack D. Kalbfleisch** of the University of Michigan, **Stephen W. Lagakos** of Harvard University, and **Mei-Ling T. Lee** of Ohio State University. For more information, visit the website or contact (Tony) Jianguo Sun, Department of Statistics, University of Missouri **e** sunj@missouri.edu.

NEW

**16th Merck-Temple Conference:
Research topics in biopharmaceutical statistics
October 17, 2008
Philadelphia, PA**

w <http://www.sbm.temple.edu/biostat/merck16.html>

The one-day conference will feature talks from **Janet Wittes**, Statistics Collaborative, Inc; **Marvin Zelen**, Harvard University; **Betsy Becker**, Florida State University; and **Ingram Olkin**, Stanford University. Registration details on the website; payment deadline October 15.

NEW

**Conference on statistical regularization and qualitative constraints:
inference algorithms, asymptotics and applications
November 20–22, 2008
University of Göttingen, Germany**

NEW

w <http://www.stochastik.math.uni-goettingen.de/forscherguppe/index.php?id=317&language=en>

The scope of this conference is to bring in contact international researchers with interests in statistical regularization and the members of the newly founded German-Swiss (DFG-SNF) research group FOR916, in order to initiate scientific exchange between the group and the community.

Speakers: **Tony Cai** (University of Pennsylvania); **Rama Cont** (Columbia University/CMAP - École Polytechnique); **Jose Manuel Corcuera** (Universitat de Barcelona); **Jean-Pierre Florens** (Université Toulouse I); **Peter Gottschalk** (Boston College); **Janine Illian** (University of St Andrews); **Karl Kunisch** (University of Graz); **Gillaume Lecue** (Université Paris VI); **Oliver B. Linton** (London School of Economics and Political Science); **Nicolai Meinshausen** (University of Oxford); **Ya'acov Ritov** (The Hebrew University of Jerusalem); **Naftali Tishby** (The Hebrew University-Givat-Ram); and **Alexandre Tsybakov** (Université Paris VI)

Scientific Board: The members of the research group FOR916: Joachim Buhmann, Peter Bühlmann, Lutz Dümbgen, Sara von der Geer, Bernd Fitzenberger, Thorsten Hohage, Enno Mammen, Axel Munk, Martin Schlather, Stefan Sperlich, Jeanette Woerner.

Local Organization: Axel Munk, Klaus Frick.

Contact and Details: For details and registration please visit the website or contact for916@math.uni-goettingen.de

**Seventh Northeast Probability Seminar
November 20–21, 2008
The Courant Institute, New York University, New York**

w www.math.csi.cuny.edu/probability/NortheastProbabilitySeminar

The confirmed speakers are: **David Aldous** (University of California, Berkeley); **Marek Biskup** (University of California, Los Angeles); **Nina Gantert** (Universität Münster); and **Gordon Slade** (University of British Columbia).

NEW

**Sparsity and Inverse Problems in Statistical Theory and Econometrics
December 5–6, 2008
Berlin, Germany**

w <http://pluto.msc.huji.ac.il/~yaacov/SparsityWorkshop/>

The workshop will cover different aspects of sparse model and regulation in mathematical statistics, and, in particular, with respect to econometric theory.

NEW

**International Workshop on Business Data Mining
December 21–27, 2008
C.R. Rao Advanced Institute, Hyderabad, India**

For details, contact S.B. Rao **e** siddanib@yahoo.co.in or C.R. Rao **e** crr1@psu.edu

NEW

**International Conference on Business Data Mining
December 27–30, 2008
Indian School of Business, Hyderabad, India**

For details, contact S.B. Rao **e** siddanib@yahoo.co.in or C.R. Rao **e** crr1@psu.edu

NEW



You can download a poster and flyer from the conference website above

Other Meetings Around the World: Announcements and Calls for Papers

Association for Women in Mathematics Workshop at JMM 2009 for Women Graduate Students and Recent PhDs
January 5–8, 2009
Washington DC

NEW

The next AWM workshop to be held in conjunction with the annual Joint Mathematics Meetings will be in Washington DC, January 5–8, 2009. Funding support is from the Office of Naval Research, the Department of Energy and National Security Agency (pending).

Fifth International Conference on Statistical Sciences: Mathematics, Statistics and Applications
January 23–25, 2009

NEW

COMSATS Institute of Information Technology, Lahore, Pakistan

W <http://www.ciitlahore.edu.pk/E-NewsLetter/Math/conference290708.html>

ISOSS, the Islamic Society of Statistical Sciences (www.isoss.com.pk), in collaboration with the COMSATS Institute of Information Technology (www.ciit.edu.pk) is organizing this conference.

CALL FOR PAPERS:

We hope to collect papers on research issues including, in probability and statistics:

Current Topics in Probability

Multivariate Analysis and Methods

Order Statistics (Rank Set Sampling, Record Values, Scan Statistics)

Robust Inference and Model Building

Statistical Inference

Distribution Theories

Transforms

Numeracy: Public Awareness

Statistical information system and IT

For a complete list, and further information on abstract submission and registration, please download the full brochure at <http://www.isoss.com.pk/Brochure%205th%20Conf.pdf>

Statistical Advances in Genome-scale Data Analysis
May 3–8, 2009
Ascona, Switzerland

NEW

W http://stat.ethz.ch/talks/Ascona_09

The development of high throughput assay technologies has rapidly transformed the field of molecular biology. Sequencing of the human genome and improvements in measurement technologies for DNA, RNA, and proteins have revolutionized biological research, resulting in vast amounts of diverse types of quantitative data.

Our aim is to organize an interdisciplinary workshop to address the challenges posed by the enormous need for quantitative data integration and modeling in biology. Targeted areas for the workshop include: emerging technologies, analysis of DNA composition data, machine learning with genome-scale biomolecular data, pharmacogenomics, and systems approaches with heterogeneous data types. We expect that the interaction between statisticians, computer scientists and biologists will lead to further advances in the analysis of genome-scale data sets.

More details and pre-registration instructions are available at the website above. We strongly encourage pre-registration: in previous years the places have filled up quickly.



The view towards Ascona from the Centro Stefano Franscini, the international conference centre of ETH Zurich

These meetings are also listed on the 'Meetings' page of the IMS website, at <http://imstat.org/meetings>

Symposium on New Directions in Asymptotic Statistics**May 15–16, 2009****Athens, Georgia, USA****NEW****w** [No web site yet]

The objective of the symposium is to bring together both well-established and emerging young researchers from around the world who are actively pursuing research in asymptotic methods in likelihood inference, time series, inference for stochastic processes, estimating functions, robust inference, parametric, semi-parametric and nonparametric methods, and functional estimation. The conference aims to provide a forum for leading experts and young researchers to discuss recent progress in asymptotic theory, thereby providing new directions for asymptotic inference in various fields.

The organizers of the conference are Ishwar Basawa **e** ishwar@stat.uga.edu and T.N.Sriram **e** tn@stat.uga.edu

O-Bayes09: International Workshop on Objective Bayes Methodology**June 5–9, 2009****University of Pennsylvania, Philadelphia, USA****NEW**

w <http://stat.wharton.upenn.edu/statweb/Conference/OBayes09/OBayes.html>

Contact: Linda Zhao **e** lzhao@wharton.upenn.edu

O-Bayes09, the 2009 International Workshop on Objective Bayes Methodology will take place on June 5–9, 2009, at the Wharton School of the University of Pennsylvania. The principal objectives of O-Bayes09 are to facilitate the exchange of recent research developments in objective Bayes methodology, to provide opportunities for new researchers to establish new collaborations and partnerships that will channel efforts into pending problems and open new directions for further study. O-Bayes09 will also serve to further crystallize objective Bayes methodology as an established area for statistical research. The workshop will consist of a series of invited talks followed by discussion and one or more sessions dedicated to contributed posters. The first day of the workshop will include some longer “tutorial” sessions, with topics to be announced later.

14th International Conference on Gambling and Risk Taking**May 25–29, 2009****Harrah's Lake Tahoe, Nevada, USA****NEW****w** www.unr.edu/gaming

This ground-breaking conference was established in 1974 as a venue for the presentation of academic research on gambling issues. It is broad-based in topic matter and draws the best international academic researchers as well as government and industry representatives, and professional gamblers. Topics of interest may include mathematical and quantitative analysis of gambling, econometric modeling of gaming industries and gaming companies, and the economics of gambling.

Please visit our website for more information and to view the Call for Papers: www.unr.edu/gaming. The call for papers deadline is January 15, 2009.

This event is sponsored by the Institute for the Study of Gambling and Commercial Gaming, University of Nevada, Reno.

Danielle Crowther, Conference Coordinator

Institute for the Study of Gambling & Commercial Gaming

College of Business

University of Nevada, Reno M/S 0025

1664 N. Virginia St.

Reno, NV 89557-0025

t (775) 784-1442

f (775) 784-1057

IWMS'09: 18th International Workshop on Matrices and Statistics**June 23–27, 2009****Smolenice Castle, Slovakia****NEW**

w <http://www.um.sav.sk/en/iwms2009.html>

This is the next in a long-running series of workshops with the purpose of stimulating exchanges of ideas and research at the interfaces of matrix theory, statistics, and stochastic processes. The workshop includes invited and contributed talks and posters. For further information visit the website or contact Viktor Witkovsky at the *Institute of Measurement Science, Slovak Academy of Sciences, Dubravska cesta 9, 84104 Bratislava, Slovakia*, **t** +421 2 591045 30, or **e** witkovsky@savba.sk



CAMBRIDGE

New and Forthcoming Books from Cambridge!

Forthcoming...

Synthetic CDOs Modeling, Valuation and Risk Management

C. C. Mounfield

*Mathematics, Finance
and Risk*\$90.00: Hb: 978-0-521-89788-4;
408 pp.

Forthcoming...

Trends in Stochastic Analysis

Edited by Jochen Blath,
Peter Mörters, and
Michael Scheutzow*London Mathematical Society
Lecture Note Series*\$76.00: Pb: 978-0-521-71821-9;
384 pp.

Forthcoming...

Digital Image Processing for Medical Applications

Geoff Dougherty

\$89.00: Hb: 978-0-521-86085-7: 480 pp.



Price and Quantity Index Numbers Models for Measuring Aggregate Change and Difference

Bert M. Balk

\$85.00: Hb: 978-0-521-88907-0;
304 pp.

A World of Chance Betting on Religion, Games, Wall Street

Reuven Brenner,
Gabrielle A. Brenner, and
Aaron Brown\$90.00: Hb: 978-0-521-88466-2
\$29.99: Pb: 978-0-521-71157-9;
352 pp.

Partial Differential Equations for Probabilists

Daniel W. Stroock

*Cambridge Studies in
Advanced Mathematics*\$55.00: Hb: 978-0-521-88651-2;
230 pp.

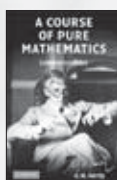
Forthcoming...

The Concepts and Practice of Mathematical Finance

Mark S. Joshi

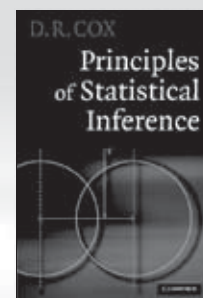
*Mathematics, Finance
and Risk*\$80.00: Hb: 978-0-521-51408-8;
525 pp.2nd
Edition

A Course of Pure Mathematics Centenary edition

G. H. Hardy
Foreword by T. W. Körner*Cambridge Mathematical Library*\$45.00: Pb: 978-0-521-72055-7;
530 pp.10th
Edition

Principles of Statistical Inference

D. R. Cox



"Cox's *Principles* aims to describe and discuss fundamental tenets of statistical inference without deriving or proving anything. The result, a no-math tour through all of the major results, clearly achieves this aim and does so without 'dumbing down' the subject in the least. There are equations, used when equations are naturally needed to explain something. The point is not to show the reader how to do mathematical statistics, but rather to explain to the reader what principles are involved in the process and why they are important. The focus is on the thinking rather than the mathematics."

—*Biometrics*\$80.00: Hb: 978-0-521-86673-6: 236 pp.
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10th European Conference on Image Analysis and Stereology (ECS10)

June 26–29, 2009

Universita' Degli Studi Di Milano, Italy

w <http://ecs10.mat.unimi.it/>

Opening lecture: **Daryl John Daley**, Australian National University; Special lecture: **Luis Cruz-Orive**, Santander, Spain. Invited speakers: **Arun Gokhale**, Georgia Tech, USA; **Kien Kieu**, INRA, France; **Ville Kolehmainen**, Kuopio, Finland; **Salvatore Lanzavecchia**, Uni-Milan, Italy; **Claudia Lautensack**, ITWM Kaiserslautern, Germany; **Terry Mayhew**, Nottingham, UK; **Evgeny Spodarev**, Ulm, Germany; **Jean-Philippe Thiran**, EPF Lausanne, Switzerland; **Alessandro Verri**, Uni-Genoa, Italy; **Rick Vitale**, Connecticut, USA.

The aim of ECS10 is to bring together leading scientists working in the areas of (but not limited to):

Methods: Stereology, Geometrical and Topological tools: 2D and 3D shape factors, norms, metrics, gauges, discrete geometry; Main mathematical and physical transforms: Fourier, Karhunen-Loève, Walsh-Hadamard, Wavelets, Time-Frequency; Stochastic geometry and related Statistical methods; Spatial processes; Pattern analysis; Texture evaluation; Fractals; Image enhancement; 3D reconstruction; Colour images

Applications: Micro- and nano-structures; Biology and Medicine; Biotechnology; Agriculture; Materials; Tomography, X-ray Scanner, PET-scan; High Resolution Imaging in Remote Sensing; Vision, industrial control, real time aspects, electronic architectures; Microelectronics; Secure Information Systems

Contact for further information

ECS10 c/o Department of Mathematics
Universita' degli Studi di Milano
Via Saldini, 50
20133 Milano (MI), Italy
e ecs10@mat.unimi.it

NEW

ICOTS08: Data and context in statistics education: towards an evidence-based society

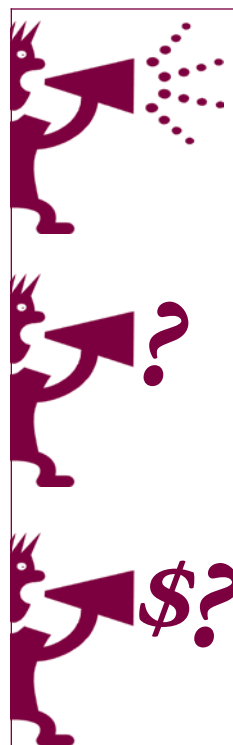
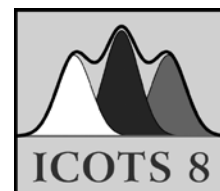
July 11–16, 2010, Ljubljana, Slovenia

w <http://icots8.org/>

The International Conference on Teaching Statistics (ICOTS) is held every four years in different parts of the world. This conference is organized by the IASE (International Association for Statistical Education), a section of the International Statistical Institute. The main purpose of ICOTS is to give statistics educators and professionals around the world the opportunity to exchange information, ideas and experiences, to present recent innovation and research in the field of statistics education, and to expand their range of collaborators.

The sum of three shifted distributions in the ICOTS8 logo (above right) forms the shape of the three headed mountain Triglav (tri=three, glav=head), the highest mountain in Slovenia. The solid colors correspond to the colors of the Slovenian flag, while the green background is the color of Ljubljana and its symbol: the green dragon. The three distributions represent students, teachers and researchers, demonstrating that learning, teaching and discovering overlap and progress in harmony.

NEW



What? You're organizing a meeting? Well, let us help you publicize it

Oh, it's easy. Send the details to erg@imstat.org. That's it.

No. IMS provides this as a free service to the prob/stat community

Employment Opportunities around the world

Our online job boards allow employers and job seekers to have the **most up-to-date information** at their fingertips. The service is free to job seekers. To search job openings online, log on to <http://jobs.imstat.org> and click on "View Jobs"

If you have a job to advertise, go to the same webpage and click on "Post a Job". A single 30-day online job posting costs just **\$175.00**, and we also include the basic information about your job ad here in the IMS Bulletin at no extra charge. The advertising service is open to all employers in the area of statistics and probability, both academic and non-academic.

USA: California

University of California, San Diego

Tenured/Tenure-Track Professorship – 7/1/2009: The Department of Mathematics at the University of California, San Diego, is seeking outstanding candidates to fill approximately 6 tenure track/tenured positions to start July 2009, pending funding approval. We encourage applications from any area of pure mathematics, applied mathematics, or statistics. The level for the large majority of these positions is at the Assistant Professor level, however, one or two positions are available for distinguished mathematicians with exceptional research records of the highest caliber.

Applicants for all positions must possess a Ph.D. and should have outstanding accomplishments in both research and teaching. Level of appointment will be based on qualifications with appropriate salary per UC pay scales. To receive full consideration, applications should be submitted online through <http://www.mathjobs.org/> by November 2, 2008. For further instructions and information, see <http://www.math.ucsd.edu/about/employment/faculty>.

In compliance with the Immigration Reform and Control Act of 1986, individuals offered employment by the University of California will be required to show documentation to prove identity and authorization to work in the United States before hiring can occur. UCSD is an equal opportunity/affirmative action employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

All applications should include the following items:

- * 3 Reference Letters (Writers should upload their reference letters to mathjobs.org or send them under separate cover; at least one letter should address teaching experience in some depth.)
- * 1 Cover Letter
- * 1 Curriculum Vitae
- * 1 Publications List
- * 1 Research Statement
- * 1 Teaching Statement, and optionally a statement about contributions to diversity.

USA: California

University of California, San Diego

Stefan E. Warschawski Assistant Professorship – 7/1/2009: The Department of Mathematics at the University of California, San Diego, is seeking two outstanding candidates for a special three year assistant professorship, the S. E. Warschawski Assistant Professorship, pending funding approval. We encourage applications in any area of pure mathematics, applied mathematics, or statistics. The nine-month salary is \$53,200. This is a three-year nonrenewable appointment.

Applicants should possess a recent Ph.D. degree (received no earlier than 2006) in Mathematics or expect to receive one prior to July 2009. Candidates should have excellent teaching skills and excellent research potential. Candidates with teaching and research interests compatible with current faculty are sought. To receive full consideration, applications should be submitted online through <http://www.mathjobs.org/> by December 1, 2008. For further instructions and information, see <http://math.ucsd.edu/about/employment/faculty>.

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- * 1 Curriculum Vitae
- * 1 Publications List
- * 1 Research Statement
- * 1 Teaching Statement, and optionally a statement about contributions to diversity.

Hong Kong: Kowloon

THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY

Department of Mathematics

The Department of Mathematics invites applications for tenure-track faculty positions at the rank of Assistant Professor in all areas of mathematics, with preference for areas consistent with the Department's strategic planning.

Strong experience in research and teaching is required. Applicants who have exceptionally strong qualifications and experience in research and teaching may be considered for positions above the Assistant Professor rank.

Starting rank and salary will depend on qualifications and experience. Fringe benefits include medical/dental benefits and annual leave; housing will also be provided where applicable. Initial appointment will be on a three-year contract. A gratuity will be payable upon successful completion of the contract.

Applications received on or before 31 December 2008 will be given full consideration for appointment in 2009. Applications received afterwards will be considered subject to availability of positions. Tenure-track applicants should send a curriculum vitae and have at least three research references and one teaching reference sent to the Human Resources Office, HKUST, Clear Water Bay, Kowloon, Hong Kong, Fax (852) 2358 0700. Applicants for positions above the Assistant Professor rank should send a curriculum vitae and the names of at least three research references to the Human Resources Office. Information provided by applicants will be used for recruitment and other employment-related purposes.

More information about the University is available on the University's homepage at <http://www.ust.hk>.

Hong Kong: Shatin

THE CHINESE UNIVERSITY OF HONG KONG

Applications are invited for:

Department of Statistics

Assistant Professor / Instructor (Ref. 07/199(060)/2)

Applicants should have (i) a PhD degree; and (ii) strong research and teaching records, or potential in statistics or closely related areas. Applicants with exceptionally strong credentials may be considered for appointment at a higher level as Professor or Associate Professor. The appointee will (a) teach undergraduate and postgraduate courses in statistics and risk management; (b) conduct high quality research; and (c) assist in the administration of the Department. Appointment will normally be made on contract basis for up to three years initially commencing as soon as possible, leading to longer-term appointment or substantiation later (for Assistant Professorship), or renewal (for Instructorship) subject to mutual agreement. Applications will be accepted until the post is filled.

Salary and Fringe Benefits

Salary will be highly competitive, commensurate with qualifications and experience. The University offers a comprehensive fringe benefit package, including medical care, plus a contract-end gratuity for an appointment of two years or longer; and for Assistant Professorship: housing benefits for eligible appointees.

Further information about the University and the general terms of service for teaching appointees is available at <http://www.cuhk.edu.hk/personnel>. The terms mentioned herein are for reference only and are subject to revision by the University.

Application Procedure

Please send full resume, copies of academic credentials, a publication list and/or abstracts of selected published papers [for Assistant Professorship only], together with names, addresses and fax numbers/e-mail addresses of three referees to whom applicants' consent has been given for their providing references (unless otherwise specified), to the Personnel Office, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong (Fax: (852) 2603 6852). The Personal Information Collection Statement will be provided upon request. Please quote the reference number and mark 'Application - Confidential' on cover.

USA: South Carolina

University of South Carolina

Department of Statistics

Open Rank Position



The Department of Statistics at the University of South Carolina invites applications for an open-rank faculty position. Applicants at the senior level should have an established and outstanding research and teaching record. Applicants for junior positions should show strong evidence of potential for excellence.

The department currently consists of ten tenure-track faculty and three full time instructors (see www.stat.sc.edu). We encourage applicants in any area of probability or statistics which will enhance or complement existing expertise. Current research interests include nonparametric and semiparametric inference, reliability and survival analysis, probability and stochastic processes, statistical shape analysis, image analysis, bioinformatics, educational testing / psychometrics, mixed models, computational statistics, functional data analysis, and Bayesian statistics.

Appointments will commence August 2009. Review of applications will begin Dec. 1, 2008. Resume, at least three letters of reference, and (for junior applicants) graduate transcripts are required. Inquiries may be directed to: *The Chair* (c/o ormenisan@stat.sc.edu), *Faculty Search Committee, Department of Statistics, University of South Carolina, Columbia, SC 29208*

The University of South Carolina is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation or veteran status.

Employment Opportunities around the world

Qatar: Doha

College of Arts and Sciences

Assistant/Associate Professor in Applied Statistics [Open Level Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4724137

Qatar: Doha

College of Arts and Sciences

Teaching Assistant/Instructor in Statistics [Lecturer]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4724125

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Assistant Research Fellow, Associate Research Fellow or Research Fellow [Researcher]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4722884

USA: Davis, CA

University of California, Davis

Tenure-Track Assistant or Tenured Associate or Full Professor [Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4723930

USA: La Jolla, CA

University of California, San Diego Department of Mathematics

Tenured/Tenure-Track Professor [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4710723

USA: La Jolla, CA

University of California, San Diego Department of Mathematics

SEW Assistant Professor [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4710205

USA: Santa Barbara, CA

University of California, Santa Barbara

Assistant Professor, Applied Statistics [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4720243

USA: Atlanta, GA

Georgia Tech, School of Mathematics

Georgia Institute of Technology [Open Level Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4687820

USA: Grinnell, IA

Grinnell College

Assistant Professor of Statistics [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4753315

USA: Grinnell, IA

Grinnell College

Assistant Professor of Mathematics [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4753311

USA: Cambridge, MA

MIT Mathematics Dept

Instructor: Faculty positions [Open Level Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4742456

USA: Minneapolis, MN

University of Minnesota

Assistant Professor [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4719159

USA: Minneapolis, MN

University of Minnesota

Associate/Full Professor [Open Level Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4719176

USA: Research Triangle Park, NC

Statistical and Applied Mathematics Sciences Institute

Director [Director]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4646344

USA: Philadelphia, PA

Temple University

Tenure-track [Open Level Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4708081

USA: Pittsburgh, PA

Carnegie Mellon University/Dept. of Statistics

Tenure-track, lecturer, and visiting faculty [Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4715152

USA: University Park, PA

Department of Statistics, The Pennsylvania State University

Faculty Position - Associate Professor of Full Professor Rank [Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4745187

USA: Providence, RI**Brown University**

Open rank, tenure-track or tenured faculty position with a preference for assistant professor in the Center for Computational Molecular Biology [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4704058

USA: Charleston, SC**College of Charleston**

Assistant Professor [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4694511

USA: Houston, TX**Rice University**

Multiple Tenure Track Faculty Positions in Biomedical Informatics (Open Rank): [Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4742696

USA: Houston, TX**Rice University**

Tenure Track Faculty Position (Open Rank) [Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4742694

USA: Richardson, TX**University of Texas at Dallas**

Department Head [Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4680498

USA: Salt Lake City, UT**Department of Mathematics**

Tenure/Tenure-Track [Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4702263

USA: Seattle, WA**Fred Hutchinson Cancer Research Center**

Biostatistician Faculty Position [Researcher]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4677934

USA: Madison, WI**Dept. of Statistics**

Assistant/Associate Professor

[Assistant Professor]

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4716341

USA: Wisconsin**Employment Opportunity – Clinical Trials Biostatistician**

The Department of Biostatistics & Medical Informatics of the University of Wisconsin–Madison has an opening for a biostatistician in the Statistical Data Analysis Center with an anticipated start date of January 2, 2009. The primary responsibilities are to work as part of a statistical analysis center supporting independent data monitoring committees for clinical trials and to oversee the development and maintenance of custom software for generating interim DMC reports. Minimum requirements include: Ph.D. in statistics, biostatistics, or biometry; two years experience (possibly as a graduate student) in an independent SAC for Phase 2/3 or 3 clinical trials; experience with SAS, R/S/S-PLUS, \LaTeX class/style and Perl programming in a Unix/Linux environment; excellent communication skills.

For detailed information on job responsibilities and requirements, visit www.ohr.wisc.edu/pv1/pv.060001.html or see following contact details. Please send resume, cover letter, and names and contact information for three professional references to: PVL #60001 Applications, c/o Gretchen Poulsen, Department of Biostatistics and Medical Informatics, 610 Walnut Street, Room 205, Madison, WI 53726-2397, poulsen@biostat.wisc.edu, +1 608 265 6702, Fax: +1 608 263 0415, TTY: +1 608 263 2473. *Applications must be received by: November 7, 2008.*


Unless confidentiality is requested in writing, information regarding the names of applicants must be released upon request. Finalists cannot be guaranteed confidentiality. UW–Madison is an equal opportunity / affirmative action employer. We promote excellence through diversity and encourage all qualified individuals to apply.




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, **f** fax, **e** email and **w** website. Please submit your meeting details and any corrections to Elyse Gustafson at erg@imstat.org

October 2008

 **October 5–7:** Cornell University, Ithaca, NY. **Workshop for Women in Probability.** Program organizers: Lea Popovic and Amber Puha. Local Arrangements: Rick Durrett **e** rtd1@cornell.edu **w** www.math.cornell.edu/~durrett/wwp/

  **October 13–15:** Iowa State University, Ames, USA. **Fall Conference on Statistics in Biology.** **w** www.stat.iastate.edu/Conference2008/


 **October 16–18:** Columbia, Missouri, USA. **Winemiller 2008 Conference on Survival Analysis and its Applications.** Contact (Tony) Jianguo Sun **e** sunj@missouri.edu **w** <http://faculty.missouri.edu/~Winemiller2008/>


 **October 17:** Philadelphia, PA. **16th Merck-Temple Conference: Research topics in biopharmaceutical statistics.** **w** <http://www.sbm.temple.edu/biostat/merck16.html>


October 24–25: Northwestern University, Evanston, IL. **30th Midwest Probability Colloquium.** **w** www.math.northwestern.edu/mwp (to be updated)

November 2008

November 3–5: Lodz, Poland. **27th Annual Conference on Multivariate Statistical Analysis (MSA'08).** Czeslaw Domanski **e** msa@uni.lodz.pl **w** <http://www.msa.uni.lodz.pl>

 **November 5–7:** Vigo, Spain. **ISNI2008: International Seminar on Non-parametric Inference.** **w** www.isni2008.com


 **November 12–14:** Leuven, Belgium. **International Workshop on Flexible Modelling: Smoothing and Robustness (FMSR 2008).** **w** <http://wis.kuleuven.be/stat/fmsr2008.php>

 **November 20–21:** The Courant Institute, New York University, New York. **Seventh Northeast Probability Seminar.** **w** www.math.csi.cuny.edu/probability/NortheastProbabilitySeminar

 **November 20–22:** University of Göttingen, Germany. **Conference on statistical regularization and qualitative constraints: inference algorithms, asymptotics and applications.** **e** for916@math.uni-goettingen.de **w** <http://www.stochastik.math.uni-goettingen.de/forschergruppe/index.php?id=317&language=en>


December 2008


December 1–3: Hanoi, Vietnam. **2008 International Conference on Applied Probability and Statistics (CAPS 2008).** **w** <http://www.action-m.com/CAPS2008/>


 **December 5–6:** Berlin, Germany. **Sparsity and Inverse Problems in Statistical Theory and Econometrics.** **w** <http://pluto.mscc.huji.ac.il/~yaacov/SparsityWorkshop/>

December 8–12: Tropicana Casino Resort, Atlantic City, NJ. **64th Annual Deming Conference on Applied Statistics.** Walter R. Young **e** demingchair@gmail.com **w** <http://www.demingconference.com/>

December 13–16: Rutgers University, NJ. **100th Statistical Mechanics Conference.** **e** Joel Lebowitz lebowitz@math.rutgers.edu


 **December 13–17:** Kansas State Univ. **Tropical Geometry and Mirror Symmetry [NSF-CBMS].** **w** www.math.ksu.edu/~rcastano/CBMS.html

 **December 21–27:** C.R. Rao Advanced Institute, Hyderabad, India. **International Workshop on Business Data Mining.** For details, contact S.B. Rao **e** siddanib@yahoo.co.in or C.R. Rao **e** crr1@psu.edu

 **December 27–30:** Indian School of Business, Hyderabad, India. **International Conference on Business Data Mining.** For details, contact S.B. Rao **e** siddanib@yahoo.co.in or C.R. Rao **e** crr1@psu.edu

January 2009


January 4–10: CRM, Montréal. **Random Functions, Random Surfaces and Interfaces [CRM program]** **w** http://www.crm.umontreal.ca/Mathphys2008/functions_e.shtml

 **January 5–8:** Washington DC. **AWM Workshop at JMM 2009 for Women Graduate Students and Recent PhDs**

NEW January 23–25: COMSATS Institute of Information Technology, Lahore, Pakistan. **Fifth International Conference on Statistical Sciences: Mathematics, Statistics and Applications.** **w** <http://www.ciitlahore.edu.pk/E-NewsLetter/Math/conference290708.html>

March 2009

March 14: Texas A&M University. **Statistical Methods for Complex Data: Conference in honor of Raymond J. Carroll's 60th birthday.** Xihong Lin, program committee chair **e** xlin@hsph.harvard.edu. Joyce Sutherland, conference coordinator, **t** 979-845-5528 **e** joyce@stat.tamu.edu **w** <http://www.stat.tamu.edu/carroll/>

 March 15–18: Grand Hyatt, San Antonio, Texas. **2009 ENAR/IMS Spring Meeting.** **w** www.enar.org/meetings.cfm

March 24–27: Tokyo, Japan. **Sixth International Conference on Multiple Comparison Procedures.** Co-chairs: Chihiro Hirotsu (Meisei University, Japan) and Martin Posch (Medical University of Vienna, Austria). **w** www.mcp-conference.org

May 2009


NEW May 3–8: Ascona, Switzerland. **Statistical Advances in Genome-scale Data Analysis.** **w** http://stat.ethz.ch/talks/Ascona_09

NEW May 15–16: Athens, Georgia, USA. **Symposium on New Directions in Asymptotic Statistics.** Organizers Ishwar Basawa **e** ishwar@stat.uga.edu and T.N. Sriram **e** tn@stat.uga.edu **w** [No web site yet]

May 18–23: CRM, Montréal. **Interacting Stochastic Particle Systems [CRM program]** **w** http://www.crm.umontreal.ca/Mathphys2008/stochastics_e.shtml

NEW May 25–29: Harrah's Lake Tahoe, Nevada, USA. **14th International Conference on Gambling and Risk Taking.** **w** www.unr.edu/gaming

May 25–29: Bordeaux, France. **41st Annual Conference of the French Statistical Society.** **w** <http://www.sm.u-bordeaux2.fr/JDS2009/index.html>


 May 27–29: Vancouver, Canada. **2009 Spring Research Conference on Statistics in Industry and Technology.** Boxin Tang **e** boxint@stat.sfu.ca **w** <http://www.stat.sfu.ca/~boxint/src2009/>

May 31 – June 3: Vancouver, Canada. **2009 SSC Annual Meeting.** Local Arrangements: Nancy Heckman (UBC). Program: Wendy Lou (Toronto) **w** http://www.ssc.ca/main/meetings_e.html

June 2009

NEW June 5–9: University of Pennsylvania, Philadelphia, USA. **O-Bayes09: International Workshop on Objective Bayes Methodology.** Contact Linda Zhao **e** lzhao@wharton.upenn.edu **w** <http://stat.wharton.upenn.edu/statweb/Conference/OBayes09/OBayes.html>

June 8–13: CRM, Montréal. **Disordered Systems: Spin Glasses [CRM program]** **w** http://www.crm.umontreal.ca/Mathphys2008/spin_e.shtml

 June 21–25: Collegio Carlo Alberto, Moncalieri, Italy. **Seventh Workshop on Bayesian Nonparametrics.** **w** <http://bnpworkshop.carloalberto.org/>

NEW June 23–27: Smolenice Castle, Slovakia. **IWMS'09: 18th International Workshop on Matrices and Statistics.** Contact Viktor Witkovsky **e** witkovsky@savba.sk **w** <http://www.um.sav.sk/en/iwms2009.html>


NEW June 26–29: Università Degli Studi Di Milano, Italy. **10th European Conference on Image Analysis and Stereology (ECS10).** **w** <http://ecs10.mat.unimi.it/>


NEW  June 28–July 1: Seoul, Korea. **First IMS Asia Pacific Rim Meeting.** Program chairs: Feifang Hu **e** fh6e@virginia.edu or Runze Li **e** rli@stat.psu.edu **w** <http://ims-aprm.org/>

International Calendar *continued*

July 2009

July 12–15: Cornell University, Ithaca, NY. 2009 Applied Probability Society Conference. Co-organizers: Shane Henderson and Mark Lewis.

 July 20–22: Memorial University, St John's, Canada. International Symposium in Statistics (ISS) on GLLMM. Brajendra Sutradhar [e bsutradh@math.mun.ca](mailto:bsutradh@math.mun.ca) [w www.iss-2009-stjohns.ca](http://www.iss-2009-stjohns.ca)

 July 27–31: Berlin, Germany. 33rd Conference on Stochastic Processes and their Applications. Organising committee chair: Jochen Blath; co-chair: Peter Imkeller. [w http://www.math.tu-berlin.de/SPA2009/](http://www.math.tu-berlin.de/SPA2009/)


August 2009

  August 2–6: Washington, DC. IMS Annual Meeting at JSM2009. IMS Program Chairs: Michael Kosorok kosorok@unc.edu and Xiaotong Shen xshen@stat.umn.edu [w www.amstat.org/meetings/jsm/2009/](http://www.amstat.org/meetings/jsm/2009/)

May 2010

May 23–26: Québec City, Canada. 2010 SSC Annual Meeting. Local Arrangements: Thierry Duchesne (Université Laval) [w http://www.ssc.ca/main/meetings_e.html](http://www.ssc.ca/main/meetings_e.html)

July 2010

 July 11–16: Ljubljana, Slovenia. ICOTSo8: Data and context in statistics education: towards an evidence-based society. [w http://icots8.org/](http://icots8.org/)

August 2010

 August 1–5: Vancouver, British Columbia, Canada. JSM2010.


 August 9–13: Gothenburg, Sweden. IMS Annual Meeting 2010.


August 19–27: Hyderabad, India. International Congress of Mathematicians 2010. Program Committee Chair: Prof. Hendrik W. Lenstra, Leiden University [e hwlicm@math.leidenuniv.nl](mailto:hwlicm@math.leidenuniv.nl)

July 2011

 July 31 – August 4: Miami Beach, Florida. IMS Annual Meeting at JSM2011.

July 2012

 July 29 – August 2: San Diego, California. JSM2012.

 July/August [dates TBA]: İstanbul, Turkey. IMS Annual Meeting 2012 in conjunction with 8th World Congress in Probability and Statistics.

August 2013

 August 3–8: Montréal, Canada. IMS Annual Meeting at JSM2013.

August 2014

 August 3–7: Boston, MA. JSM2014.

C O N F E R E N C E S
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<http://www.imstat.org/meetings>
<http://www.imstat.org/meetings>

Membership and Subscription Information

Journals:

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

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The *IMS Bulletin* (ISSN 1544-1881) is published ten times per year in January/February, March, April, May, June, July, August/September, October, November and December by the Institute of Mathematical Statistics, 3163 Somerset Dr, Cleveland, Ohio 44122, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to Institute of Mathematical Statistics, 9650 Rockville Pike, Suite L2407A, Bethesda, MD 20814-3998.

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Printed by The Sheridan Press, 450 Fame Avenue, Hanover, PA 17331, USA.

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5: June	May 1	May 15	June 1
6: July	June 1	June 15	July 1
7: August/September	July 1	July 15	August 1
8: October	September 1	September 15	October 1
9: November	October 1	October 15	November 1
10: December	November 1	November 15	December 1

the next issue is November 2008

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Kakuro corner

How to play: Place single digits (1 to 9 inclusive) in the white boxes in the grid. The row or column of digits which make up a sequence must add up to the black box to the left or at the top. Each digit in a sequence must be different. In the example below, the first row sequence is to make 8:



No repeated digits in
a sequence.



This row sequence
doesn't add up to 8.



...this one does! (So does
1,2,5 and 3,1,4 and so on)

Solution 27 from last issue

7	30	16			9	20	9
6	1		23	8	9	6	
9	4	11	3	1	5	2	
25	8	2	9	6	22	7	6
35	7	6	8	9	5	31	
33	3	7	8	6	9	12	
22	7	15	3	1	2	5	4
11	9	2	29	7	9	8	5
26	8	4	9	5	4	3	1
8	5	1	2		8	6	2

Puzzle 28

	11	45		7	23	45	10
4			29				
9			13				
21			7		17		
	6			20			9
	10				11		
40					17		
8			19				
			22				24
	13			10			
	8			12			
11					17		
30					12		

Puzzle by www.yoogi.com