

# IMS Bulletin



#### January/February 2011

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# Letter from the new editor

Dimitris Politis writes: I think I got the job as Editor of the IMS Bulletin because I can't keep my mouth shut! When I feel strongly about something, I am quick to write emails and letters to unsuspecting recipients. So after two or three letters to previous editors of the Bulletin, the IMS Selection Committee decided to act as in the old adage "beware of what you wish for..."!

Joking aside, I am excited and honored at succeeding Xuming He in running the Bulletin. As was the case with Xuming, I will rely on the invaluable support and expertise of Assistant Editor Tati Howell, as well as on our continuing team of



Dimitris Politis

Contributing Editors: Peter Bickel, Rick Durrett, Nicole Lazar, and Terry Speed. To this distinguished list, the name of Anirban DasGupta is now added; Anirban's inaugural piece is featured on page 4.

But in addition to our 'ramblings,' we would especially like to hear from you, the reader. So we invite you to contribute pieces on issues that may matter to IMS members, and this goes well beyond member news and announcements that the Bulletin has always welcomed. Ideally, members should be able to submit their points of view on current developments on a regular basis. To facilitate this kind of exchange of ideas, our team will attempt to create a blog-type area in the Bulletin's website that is accessible to all IMS members. We are preparing a proposal for the IMS Executive Committee and Council and hope to launch the blog early 2011.

To kick off our new forum, here are three points that will hopefully stimulate some discussion:

#### 1. Mathematical Statistics: where is the profession heading?

Statistics has undergone a remarkable transformation in the last two decades, adapting to a rapidly changing scientific environment. For example, under the leadership of pioneers such as the late Leo Breiman, our profession managed to prevail over challenges posed by machine learning by embracing it as the bona fide sub-field of statistics that it is. Similarly, recent advances in genomics have served as a catalyst for a host of new statistical research on multiple testing, high-dimensional data, and so on. This adaptivity shows that the profession is healthy and vibrant; on the other hand, there

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# Editor's letter continued

are colleagues who lament the reduction of mathematical aspects of our work as expressed in papers, PhD theses, and classroom curricula.

#### 2. Journals and research publications

Our journals are alive and well, and the new *Annals of Applied Statistics* has become an instant winner with authors and readers. As I mentioned in my letter to the *IMS Bulletin* (vol. 39, no. 2), the advent of manuscript-central has endowed journals with an unprecedented efficiency; the downside, however, is the temptation to impose unrealistically short reviewing deadlines that may result in superficial refereeing. Another point of debate has been whether to embrace (fully) electronic journals. We are now at a mid-point of sorts, in the sense that most of us routinely access journal papers in electronic form, and furthermore journals have started posting supplements only available electronically. Going electronic all the way seems to be inevitable, and—as a welcome side-effect—may help us get rid of current Procrustean tactics to artificially elongate short papers, cut long ones, and generally try to ensure uniformity/conformity.

#### 3. Academic statisticians and probabilists

Many IMS members are educators, and thus care about improving and evaluating teaching. In the last three decades, student evaluations of classroom teaching have played a prevalent role in the US, although opinions are mixed on whether the overall effect has been positive. It goes without saying that such feedback can be very important. But sometimes university administrators interpret student evaluations as if they were customer responses; that can be problematic because education serves a higher cause, and students are not clients. One typical administrator faux-pas is disregarding all information in the student questionnaire except the (last) question: "Would you recommend the instructor to other students?" Of course, ignoring valuable information provided by the other questions is inexcusable from a statistical, or just common-sense, viewpoint. Even more importantly, the effort by an instructor to score good evaluations may result in student pampering and an inadvertent lowering of the level of the course—a long-term loss for society as a whole.

Readers are invited to submit their views on issues important to IMS members—not limited to the above three threads of discussion—at the *IMS Bulletin* blog area when it launched (stay tuned for more news on this!). Space-permitting, excerpts from the blog discussions may be featured in future issues of the *Bulletin*.



Jon Wellner

#### **New Editor for Statistical Science**

The new executive editor of *Statistical Science* is Jon Wellner from the University of Washington. Jon takes over from David Madigan, who completed his three year term in December. Wellner has previously served as a co-editor of the *Annals of Statistics* and as IMS executive editor of *Statistics Surveys*. For more information about submissions, please see the *Statistical Science* website at http://www.imstat.org/sts/

# I IMS Awards

#### **Nomination for IMS Fellowship**

In order to qualify for Fellowship, the candidate shall have demonstrated distinction in research in statistics or probability, by publication of independent work of merit. This qualification may be partly or wholly waived in the case of:

- 1 a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or
- a candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas. Candidates for fellowship should be members of IMS on December 1 of the year preceding their nomination, and should have been members of the IMS for at least two years.

Electronic submission is highly encouraged. Please read all the details at http://imstat.org/awards/fellows.htm

#### Laha Awards for travel to JSM Miami

Deadline: February 1, 2011

Deadline: January 31, 2011

Travel awards for students and new graduates are available for travel to the IMS Annual Meeting, which will be at the 2011 Joint Statistical Meetings in Miami Beach, Florida, from July 30 to August 4 (see http://amstat.org/meetings/jsm/2011/)

With funds from a generous bequest by the late Professor Radha Govind Laha, IMS established the Laha Awards to provide funds for travel to present a paper at the IMS Annual Meeting. First priority to students, second priority to New Researchers within 2 years of PhD at the date of the meeting. Applicants must be members of IMS, though you can join at the time of application. Student membership is free and New Researchers also qualify for



substantially reduced rates. You can join online at https://secure.imstat.org/secure/orders/IndMember.asp. Grants provided to Laha awardees have been typically around US\$500 per award. The actual amount depends on the distance traveled to the IMS meeting. Grants will be reimbursed against receipts and may be combined with other sources of funding. Details of how to apply are at http://imstat.org/awards/laha.html

#### Carver Medal for exceptional service to IMS

Deadline: February 1, 2011

Nominations are invited for the Carver Medal created by the IMS in honor of Harry C.

Carver, Founding Editor of the *Annals of Mathematical Statistics* and one of the founders of the IMS. The medal is for exceptional service specifically to the IMS and is open to any member of the IMS who has not previously been elected President. The

the IMS who has not previously been elected President. The medal will be awarded at a ceremony during the next IMS Annual Meeting, in Miami Beach, Florida (see http://amstat.org/meetings/jsm/2011/).

Details of the nomination process are at http://imstat.org/ awards/carver.html

### **IMS Editors**

IMS Journals and Publications

Annals of Statistics: Peter Bühlmann and Tony Cai http://imstat.org/aos

Annals of Applied Statistics: Bradley Efron, Stephen Fienberg, Michael Stein, Karen Kafadar & Samuel Kou http://imstat.org/aoas

Annals of Probability: Ofer Zeitouni http://imstat.org/aop

Annals of Applied Probability: Andrew Barbour http://imstat.org/aap

Statistical Science: Jon Wellner http://imstat.org/sts

IMS Lecture Notes — Monograph Series http://imstat.org/publications/lecnotes.htm

MS Collections

http://imstat.org/publications/imscollections.htm

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: David Ruppert http://imstat.org/ejs

Electronic Journal of Probability: Bálint Tóth http://www.math.washington.edu/~ejpecp

Electronic Communications in Probability:

Timo Seppäläinen
http://www.math.washington.eu

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: Richard Levine

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

Statistics Surveys: Lutz Dümbgen http://imstat.org/ss

Probability Surveys: Geoffrey Grimmett http://imstat.org/ps

IMS Supported Journals

Annales de l'Institut Henri Poincaré (B): Alice Guionnet http://imstat.org/aihp

Bayesian Analysis: Herbie Lee http://ba.stat.cmu.edu

Bernoulli: Richard Davis http://isi.cbs.nl/bernoulli

Brazilian Journal of Probability and Statistics: Silvia Ferrari http://imstat.org/bjps

#### IMS Affiliated Journals

ALEA: Latin American Journal of Probability and Statistics: Claudio Landim http://alea.impa.br/english

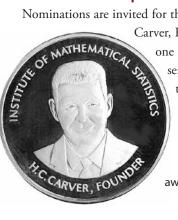
Probability and Mathematical Statistics: M. Musiela, J. Rosiński,W. Szczotka, A. Weron & W.A. Woyczyński http://www.math.uni.wroc.pl/~pms

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# Anirban's Angle: Reading the Classics



t was purely on impulse that on a cold icy evening a few years ago, I walked into a magnificent bookstore on Purdue campus, Von's, and asked the manager if he had any collections of classic short stories. He led me into a surreal underground archive, and showed me a massive collection of what looked like forgotten classics. I picked up a book of 71 short stories and over the next month or so, read one story each evening. Here were Steinbeck, Maugham, Huxley, O. Henry,

Chekov, Aymé, Hemingway, Tagore, Conan Doyle, and the like. I probably read only about half of that collection. I liked some more than the others; but, nearly every time, after I finished reading a story, I just sat there, an undefinable feeling of fulfillment reigning over my emotions.

Some time later I read Brad Efron's 1998 article, "R. A. Fisher in the 21st Century." His article prompted me to take Fisher's 1970 book out of the library. I then gradually re-read portions of the dusty books, the classics, that we read as students at the ISI in Calcutta. It had been a long time since I opened some of those books lying in unloved nooks of my bookcase. As I started re-reading them, it was clear to me that they said things in a way that we can rarely match nowadays. They really knew how to provide the perspective, to excite a reader about the subject, and to light up the entire room, rather than a corner. That's why they are our classics.

I did some enquiring among students. Sadly, our PhD students are not told to read those timeless classics. They do not have the time. But, if only they would just care enough, and find the time, I believe that they would discover many gold mines of ideas, explanations, original techniques, and even open problems, good ones. The late senator Daniel Moynihan said that everyone is entitled to his own opinion, but not his own facts. It is my opinion, and I hope not an overly elitist or an impractical one, that we should offer year-long courses on classics that PhD students can choose from, and take as credit courses. Departments could have several such classics courses, to be periodically coordinated by willing faculty members. A student could take as many of them as she wishes.

Inevitably, then, the question arises: what are our classics? It's such a subjective choice. I am evidently no one to define for the others what our classics are. But I did some asking around in and outside my university. I applied the arbitrary cutoff of 1985, rationalizing that it takes 25 years for a text to become a recognized

classic. On a purely personal basis, if I was made the emperor of a statistics department (and given ample immunity from prosecution), I would have my department run four classics-reading courses as part of a two-year sequence. PhD students would be asked to take at least two of these four courses in their third and fourth year. I, the emperor, would define my four classics courses as overviews of instructor-chosen portions of the books of the following kind. Classics-I: Feller, Volume 1; Jeffreys (1948); Cramér (1946); Cox and Miller (1965).

Classics-II: Neyman (1952); Fisher (1970); and two of Blackwell and Girschick (1954), Scheffé (1959), Cochran (1977; Sampling Techniques), and Cox (1958; Planning of Experiments).

Classics-III: Feller, Volume 2; Grenander and Rosenblatt (1957); Loève, Volume 1; Chung (1974); Williams (Volume 1, 1979; Markov Processes and Martingales).

Classics-IV: Lehmann (TSH, 1959); Rao (1973); Anderson (1958; Multivariate Analysis); Bickel and Doksum (1977); Berger (1985).

I certainly expect that others will have their own choices for the classics. After all, who would disagree that the Kendall-Stuart volumes and Lehmann's estimation book are classics? Or, Kolmogorov (1933), Doob (1953), Gumbel (1958), Cramér and Leadbetter (1967), Ferguson (1967), Petrov (1975), Karlin and Taylor (1975), Tukey (1977), David (1980), Hall and Heyde (1980), Serfling (1980)? But, as long as my classics sequence gets going, I will have that undeniable pleasure of giving my students an enlightened and challenging education, one that they deserve, and no less. The subject of probability and statistics was truly growing around the years that many of these classics were written. Anderson, Blackwell, Cochran, Cox, Cramér, Feller, Fisher, Kiefer, Kolmogorov, Lehmann, Neyman, Pitman, Rao, Scheffé, Wald, all of them were literally creating the subject, brick by brick, inch by inch, and putting down their thoughts for history. Then the other classics followed.

What better way can our students get a sweeping glimpse and feel of that mighty canvas than directly from the masters?



# IMS Collections: Volumes 6 and 7 released

Two new volumes in the *IMS Collections* series have been released. Volume 6 is a Festschrift for Lawrence D. Brown, titled *Borrowing Strength: Theory Powering Applications*, edited by James O. Berger, T. Tony Cai and Iain M. Johnstone (\$98 for IMS members, \$164 for non-members). This volume consists of articles prepared in honor of Larry Brown by some of his many friends, colleagues and students, on the occasion of his 70th birthday. It is associated with the conference "Borrowing Strength: Theory Powering Applications" at the Wharton School of the University of Pennsylvania, December 15–17, 2010, timed to coincide with Larry's birthday.

The editors say, "Larry is one of the leading statisticians of our time; his work has spanned the theory and application of statistics, from its mathematical and philosophical foundations in the decision theoretic assessment of widely used methods through to influential policy advice on critical national statistical instruments such as the decennial census. We shan't attempt to describe here the astounding depth and scope of his work, not least because we look forward to much more from him the years to come! Instead, the volume includes a wide-ranging interview with Larry, conducted in 2001, and published in Statistical Science in 2005. We also include a charming poem adaptation by Larry: "A Most Unusual Bird (Freely adapted from E. A. Poe)" presented at the 6th Purdue Symposium, in 1998, along with a list of Larry's publications to date. Larry is widely loved, by students, colleagues and friends alike, for his ready and powerful statistical insight, and his constant wisdom, generosity and geniality. He is truly a statistician's statistician, always at the center of any statistical community graced with his presence. On behalf of several of those communities, we feel privileged to have had the chance to help assemble this volume and to join in wishing him the happiest of birthdays!"

IMS Collections Volume 7 is a Festschrift in honor of Professor Jana Jurečková, Nonparametrics and Robustness in Modern Statistical Inference and Time Series Analysis, edited by J. Antoch, M. Hušková and P.K. Sen. The editors say, "In the broader domain of statistics and probability theory, Jana Jurečková is a distinguished researcher, especially in Europe and among women researchers. Her fundamental research contributions stemmed from the inspiring ideas of her advisor Jaroslav Hájek and covered the evolving areas of nonparametrics, general asymptotic theory, robust statistics, as well as applications in sampling theory, econometrics and environmetrics. She has a longstanding and exemplary leadership of academics; the Czech school of statistics has benefited from her professional acumen. Jana has an illuminating career in the Department of Probability and Mathematical Statistics at the Faculty of Mathematics and Physics, Charles University in Prague, for over forty years. It was thought that at the juncture of her career, Jana should be honored and recognized for her standing in her professional field. Besides an article of appreciation of Jana's life and work by the three editors, there are twenty-four articles with a list of over 40 co-authors." The volume is also priced at \$98 for IMS members, or \$164 for non-members.

Both volumes can be ordered securely online at https://www.imstat.org/secure/orders/imsbooks.html or by sending payment (US bank check payable to Institute of Mathematical Statistics; or credit card details) to the IMS Dues & Subscriptions Office, 9650 Rockville Pike, Suite L3503A, Bethesda MD 20814-3998 (fax 301-634-7099, tel 877-557-4674 or email staff@imstat.org).

#### Distinguished Alum Award at Harvard School of Public Health

The Department of Biostatistics at the Harvard School of Public Health named Daniel Scharfstein, ScD, of the Johns Hopkins Bloomberg School of Public Health, as the recipient of the 2010 Distinguished Alum Award. Dr. Scharfstein will present a lecture on February 10, 2011 at the Harvard School of Public Health.

Each year, the Distinguished Alum Award is awarded to an individual in government, industry, or academia, who by virtue of applications to support of research, methodology and theory, significant organizational responsibility, and teaching has impacted the theory and practice of statistical science. The overall career of the individual is considered with an emphasis on how the nominee has used their experience to bring out the best in life with research and academics. The award recipient will be invited to deliver a lecture on their career and life beyond the Department at the Harvard School of Public Health, for the primary benefit of our students. The recipient will also be presented with a plaque.

Nominations for the 2011 Alumni Award, to be presented in 2011 (date to be announced), should be sent to the *Distinguished Award Committee, Dept. of Biostatistics, Harvard School of Public Health, 655 Huntington Ave., Boston, MA 02115*. Nominations should include a letter describing the contributions of the candidate, specifically highlighting the criteria for the award, and curriculum vitae. Supporting letters and materials are welcome but not required. The deadline for submission of nominations is February 7, 2011.

# The Canadian Long-Form Census: Lessons for Statistics

Don L. McLeish, University of Waterloo, writes: Etymologically, the word 'statistics' is derives from 'affairs of state' so it is perhaps not so surprising that so much of Canadian statisticians' attention in 2010 was directed to the state's role in the census. Canada's first census, of the colony's 3,215 inhabitants, was initiated by Jean Talon in 1666, recording age, sex, marital status and occupation. Shortly before Canada Day 344 years later, and in the midst of protests at the G20 summit in Toronto in June, 2010, the government of Canada quietly cancelled the 2011 long-form of the Canadian census which had been distributed to 20% of Canadian households since 1971. The long-form census provided a snapshot of a changing nation with respect to citizenship and migration status, language, ethnic origins, aboriginal identity, religion, mobility, place and type of work, and commuting patterns, child care, support payments, income and housing. In short, this mother lode of information for research and planning was now to be replaced by a voluntary National Housing Survey 1. The anticipated 50% nonresponse rate of the survey was addressed by increasing the sample size to 33% of the population. The stated reason for the cancellation was that "no Canadian should be required to provide this information under threat of fine or imprisonment" (no Canadian had ever been imprisoned and the government had never moved to alter the penalties under the Statistics Act). Given the timing of the announcement, made without consultation with such bodies as the government appointed external advisory group the National Statistics Council, reaction was somewhat slow to manifest. The many users of census data and their representative societies began a respectful letter-writing campaign to the minister, the Prime Minister, Statistics Canada, their members of parliament and the press. Evidence was presented that the data were essential, that nonresponse bias would result in a more expensive survey with much lower data quality<sup>2</sup>, and that the cancellation would disrupt the regularity of the 5-year cycle. Ivan Fellegi, who had spent decades nursing the tradition of methodological independence of government at Statistics Canada, I myself, as president of the Statistical Society of Canada (SSC), and many other members of the SSC and other societies went on national and local radio, television, were

interviewed by newspapers, and appeared before the Standing Committee on Industry, Science and Technology of the House of Commons<sup>3</sup>. A procession of well-informed critics of the cancellation appeared before this committee, opposed largely by ideologues, including radio hosts, libertarians, and farmers, uncertain about which census was under discussion. International statistical societies responded similarly, including the ASA, represented by Sastry Pantula, the IMS, the Biometric Societies, COPSS, ISI, and the French Statistical Society, not to mention 389<sup>4</sup> other prominent individuals and societies, many users of long-form data. Rarely have so many national and international bodies spoken so unequivocally.

There was a naïve belief that with logic and the community so firmly on our side, the government would surely proceed more slowly with their agenda, and at the very least, conduct a pilot study of its ramifications much like the study of the American Community Survey<sup>5</sup> conducted in 2003<sup>6</sup>, a study which concluded that a strictly voluntary version was much more expensive and of lower quality. The press, though largely disinterested in the scientific details, was remarkably attuned to the political currents and attentive to a story that the government had expected to be stillborn. The reporting was generally well-informed, and kept an important but potentially invisible issue in the public eye. But this was not an issue that would be resolved by scientific principle or logic. Parliament was not in session, and the government was largely mute on the question and rendered deaf by ideology. The only sounds heard in Ottawa were sound-bytes: "privacy", and "forced, under threat of imprisonment". On July 21, 2010, the Chief Statistician Munir Sheikh acknowledged the turmoil regarding the census controversy by resigning with the courageous statement, "I want to take this opportunity to comment on a technical statistical issue which has become the subject of media discussion. This relates to the question of whether a voluntary survey can become a substitute for a mandatory census. It cannot." By late July, polls indicated that a majority of Canadians, even a majority of Conservatives, were in favour of retaining the long-form census<sup>7</sup>.

<sup>1</sup> http://www.statcan.gc.ca/survey-enquete/household-menages/pdf/nhs-enm-quest-eng.pdf

<sup>2</sup> For example a simulated NHS using the 2006 census data indicates that among visible minorities in CMA Toronto, Chinese would be overcounted by about 17.6%, blacks undercounted by around 13.2%. http://www.statcan.gc.ca/survey-enquete/household-menages/nhs-enmeng.htm

<sup>3</sup> http://ssc.ca/en/about/press-releases

<sup>4</sup> http://datalibre.ca/census-watch/

<sup>5</sup> H.R. 3131 has been introduced in congress to make participation in the American Community Survey voluntary http://www.govtrack.us/ congress/bill.xpd?bill=h111-3131

<sup>6</sup> http://pewresearch.org/pubs/1655/should-census-surveys-be-voluntary

<sup>&</sup>quot;Canadians support long-form census": http://www.theglobeandmail. com/news/politics/second-reading/spector-vision/canadians-support-long-form-census/article1650650/

In the calculus of politics, a few yards lost on the census may be regained with a "law-and-order agenda" or by a counter-attack on the long-gun registry. Only in September, was there a response to the thousands of letters, emails, and petitions from the Minister Clement's office, a reply which ignored all questions regarding bias, but simply repeated that the sample size has been increased<sup>8</sup>.

In one short article I cannot do justice to the census debate, or the valiant efforts made by groups ranging from the First Nations and Inuit to municipal planners to save a vital information base. The question is where do we go from here? Statistics, an essential key to measuring the performance of government economic and social policies, is easily found in its crosshairs. Are there general lessons to be learned about how sciences like ours can and should deal in the public arena? Such forays are by no means unusual for the statistical sciences. Statisticians are often found debating in the courts9, in medicine10 and pharmacology, as well as in the political and financial<sup>11</sup> spheres. Statistical methodology, an essential part of many of the primary issues governing our society, health, financial, social and economic planning, needs complete independence of political process to retain credibility. The independence of methodology has no protection by law in Canada<sup>12</sup>, although Canada cosponsored the 1995 United Nations principles of official statistics<sup>13</sup> which includes: To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data. Even if it had such safeguards, the administration of targeted budget cuts could effectively negate them. Adherence to this principle will surely require a concerted

effort to demonstrate the importance of statistics to the public, something we can no longer take for granted simply because we are surrounded by believers. We operate in an increasingly segmented political and ideological environment. Political divisions are further reinforced by proliferation of media, offering coverage tailor-made to customers' culture, tastes and preconceptions. Statisticians and, more generally, scientists are often singing first to the choir, then to the friends and relatives of the choir, but our voices are rarely listened to in the back pews, or heard on the street. On World Statistics Day 20.10.2010, we symbolically buried the long-form census<sup>14</sup>, not to add scientific weight to the arguments for its retention, but in an effort to get out of the church. Do such efforts to pitch to those least sympathetic to an academic culture, or debates with our political masters, necessarily sacrifice the integrity and nonpartisan nature of Science? This is only the case if, when all of the complexities and technicalities around an issue are stripped away, there is no residual truth.

There is room for cautious optimism. A non-binding motion calling for the Conservative government to reinstate the mandatory long-form census, a largely symbolic move, passed in the House of Commons. Two private members bills, Bill C-583 (first reading October 21, 2010) would specify how the chief statistician is to be appointed and Bill C-568<sup>15</sup> would reinstate the mandatory long-form of the census. Not to be swept up by giddy optimism, it must be noted that these private members bills very rarely make it into legislation since they require three readings and passage through both the Canadian House of Commons and the Senate and the latter will have a majority of conservative senators. However, the remarkable uniformity of view that most educated Canadians adopted on this issue, supported broadly by concerned international individuals and bodies, bodes well for the future. The press was generally well-informed and capable of cutting through the political rhetoric. In a spontaneous burst of digital democracy, multiple websites, petitions, videos and songs testified to the quality and value of the long-form census data and lamented its loss. Members of the public became aware of one of the best-kept secret of our discipline, that statistics is relevant to one or many groups of which they are a part. If we can maintain this view, it is far more likely that the next time statistical methodology finds itself a political football, statisticians will win the game.

<sup>8 &</sup>quot;The NHS will be distributed to 1 in 3 households, which represents approximately 4.5 million households, an increase from 2.9 million households surveyed in 2006."

<sup>9</sup> See the case of Lucia de Berk at http://www.few.vu.nl/~rmeester/ preprints/Lucia\_final.pdf

<sup>10</sup> See for example the article by David Spiegelhalter: "Understanding uncertainty: Breast screening, a statistical controversy" http://plus. maths.org/issue53/risk/

<sup>11</sup> A simple Gaussian copula model for pricing credit derivatives has even been blamed for the credit crisis of 2007–2008.

<sup>12</sup> The European Statistical Governance Advisory Board has recently decried Canada's failure to protect the independence of official statistics. http://www.ottawacitizen.com/news/scolds+Harper+governments+StatsCan+controversy/3874117/story.html

<sup>13</sup> http://unstats.un.org/unsd/methods/statorg/FP-English.htm

<sup>14</sup> http://www.youtube.com/user/dlmcleis?feature=mhum#p/a/u/1/ ntU3\_x6PqpY

<sup>15</sup> For this bill's progress and the debate see: http://www2.parl.gc.ca/Sites/LOP/LEGISINFO/index.asp?Language=E&query=7103&Session=23&List=stat

# Rick's Ramblings: A Few Seedlings of Research

Some of you may have noticed a phase transition in my contributions to the *IMS Bulletin*. Lately they all concern SAMSI. This is natural because between (i) participating in two working groups associated with the Complex Networks program and (ii) being a member of the four person SAMSI Directorate responsible for the day-to-day operations and the renewal proposal, I spend about 20 hours a week dealing with the ghosts of SAMSI past, present, and future.

This month I'll concentrate on (i), which is the fun part of my SAMSI job. The title of the column comes from an article by Hammersley in the *Proceedings of the Sixth Berkeley Symposium*. To (almost) quote the review: It is built around detailed discussion of a difficult problem posed by Ulam, on which the author makes remarkable progress. What is the distribution of the length  $L_n$  of the longest monotone subsequence of (not necessarily consecutive) terms in a random permutation? He proves that  $n^{-1/2}$   $L_n$  converges to a limit c. After proving bounds  $\pi/2 \le c \le e$  he then "continues without the shackles of rigor to suggest varied and ingenious lines of attack on the harder problem of establishing a numerical value for c. One of them leads to the conjecture that c=2 but the proof is not yet airtight." As I assume most of you know Logan and Shepp, and Vershik and Kerov independently, showed that c=2 in 1977.

In a similar spirit, I will now describe some of the problems we are investigating in the two working groups I participate in. The first is Explosive Percolation, the subject of Raissa D'Souza's talk at the opening workshop of the Complex Networks program. If one starts with n vertices and adds edges chosen at random one at a time, then this is essentially the Erdős-Rényi model and a giant component emerges when approximately n/2 edges have been added, but its size grows continuously when time is run at rate n. In one variant of explosive percolation, one picks two edges at random and adds the one which produces the cluster of the smaller size. Achlioptas, D'Souza and Spencer in a paper in Science 323 (2009), 233-234, used simulations to show that the size of the largest cluster went from size  $n^{1/2}$  to n/2 in a window of size  $n^{2/3}$  and this occurs when about 0.888n edges were added. If instead one greedily chooses the edge that makes the larger cluster, percolation is accelerated but the transition is continuous. To help remember the difference note that delaying percolation leads to a larger and more satisfying giant component, while if percolation comes too fast the result is disappointing.

In September of this year this problem became more intriguing. DaCosta, Dorogovstev, Goltsev and Mendes put a paper in the Condensed Matter part of the arXiv (1009.2534) claiming that the

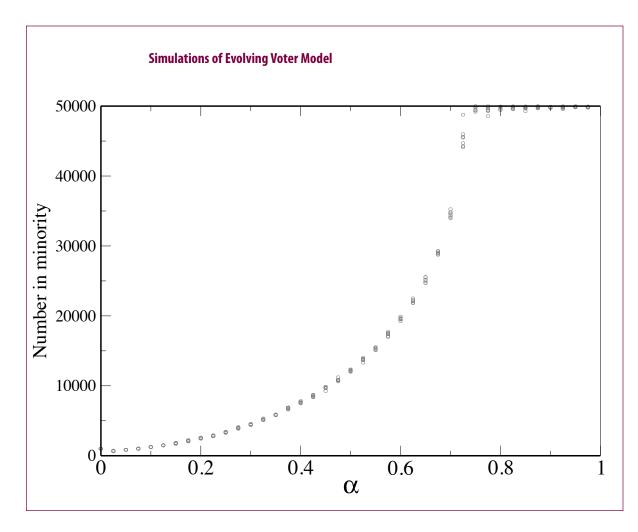
Rick Durrett brings us more news from SAMSI, focusing on complex and dynamic networks, and highlights some upcoming sessions of interest

transition is actually continuous with the density scaling as  $(t-t_c)^{1/18}$  above the critical value, which was  $t_c = 0.923207508(2)$  for the variant they considered and the 2 indicates the uncertainty in the last decimal place. Like D'Souza and Mitzenmacher in their 2010 *Phys Rev Letters* paper (104, 195702) the four physicists wrote and solved truncated equations for the distribution of cluster sizes. They also did simulations of networks up to size  $10^9$ . While that is remarkably large, the critical exponent 1/18 implies that adding one edge at the critical value leads to a cluster of size  $10^{-1/2} = 0.3162$ , which is strange because on the previous step one must have had at least one cluster of half that size. I know that the last sentence is not a valid extrapolation but the question remains: who is right?

My second vignette concerns the voter model, which has been studied on a number of complex networks. See Chapter 6 in my Cambridge book on *Random Graph Dynamics* (now out in paperback for less than \$30!) In reality, if you consult your neighbor who happens to be Sarah Palin, then rather than imitate her opinion (or hairstyle) you might with probability  $\alpha$  rewire the edge to someone who shares your opinion, while with probability  $1-\alpha$  you imitate her and throw a tea party.

Suppose we take an Erdős-Rényi graph in which each of the nvertices has an average of 4 neighbors, and assign opinions 0 and 1 by repeatedly flipping a fair. Each person changes their opinion at rate 1. If  $\alpha = 1$  (only rewiring) then in a time  $O(\log n)$  there are no 0–1 edges, while if  $\alpha = 0$  (only voting) in a time O(n) a consensus forms on the giant component. For any  $\alpha$  we will eventually reach a time when there are no 0-1 edges. Simulations suggest that there is an  $\alpha_c$  so that if  $\alpha > \alpha_c$  then in time  $O(\log n)$  we end up with roughly a 50–50 mix of 0's and 1's, while if  $\alpha < \alpha_c$  in a time O(n) consensus is reached with the minority opinion having a fraction that decreases to close to 0 when  $\alpha$  tends to 0 (small finite clusters mostly sit out the action). The figure on the next page shows the results of simulations for Erdős-Rényi graphs with average degree 4 and n = 100,000. This is for the version of the model where you rewire to someone chosen at random. Seven realizations are plotted, each of which took three days to run on Alun Lloyd's PC.

We are still working on this problem so if you make progress let me know. It is annoying not be able to prove an upper bound on



converge to a state with a 50-50 mixture of 0's and 1's. Each opinion can be active or inert so there are four states. I am currently working on this problem with Shirshendu Chatterjee. He is one of my best graduate students ever and is on the job market this year. It seems likely that using ideas from my Voter Model Perturbations with Ted Cox and Ed Perkins (an epic production six years in the making), we can prove coexistence of opinions when  $\lambda$  is large. Before you say "that

 $\alpha_c$ . Every transition (rewiring or voting) removes one 0–1 edge while a voting will, in our concrete example, on the average make 3 new ones so  $\alpha_c \leq 2/3$ . (This bound does not contradict the simulation because when you always rewire to someone who agrees with you the critical value is smaller.)

I have more than used up my page, but like a seminar speaker at 5:05 I can't resist telling you one more story. Lambiotte, Saramaki, and Blondel (*Physical Review E* 79, 046107) considered what they called the latent voter model. For motivation, suppose you have just bought a new laptop that runs Windows 7 and you see that one of your neighbors has an iBook. Having just spent several hundred bucks, it seems unlikely that you will immediately switch. This motivates a dynamic where voters who have just changed their opinions enter an inert state for an exponentially distributed amount of time with rate  $\lambda$ .

Mean field calculations given in the paper show that if we start with a positive density of 0's and 1's then the system will

is boring," note that the latent voter model is a small perturbation of the voter model, but the behavior is completely different.

These are just three of the interesting systems being investigated in the working group Dynamics OF Networks and in its sister Dynamics ON Networks. There will be workshops at SAMSI on these topics January 10–12 and March 21–23 in 2011. Yes, this is short notice, but there will be some interesting talks and the most fun you've ever had at a poster session. Perhaps one day SAMSI will announce its workshop schedule in advance of the start of the program, but the Directorate is still debating whether this is a bug or a feature.

Meanwhile, the slides for most of the talks for all of the workshops can be found at www.samsi.info. In addition, there are videos of the four tutorial lectures, including one by your not-so-humble narrator. If you get all a-Twitter from watching these videos then shout out 140 characters of praise at @nisssamsi.

### **OBITUARY: Bishnoedath Leo Raktoe**

### 1932-2009

Professor B. Leo Raktoe, a former Professor of Statistics in the Department of Mathematics and Statistics, University of Guelph, Ontario, Canada, passed away on Friday, November 13, 2009 in Singapore, where he had settled since 1997.

Professor Raktoe was born in Paramaribo, Surinam, on August 2, 1932. He received his preliminary education in Paramaribo and then went on to study at the State College for Tropical Agriculture in Deventer, The Netherlands, where he received a Diploma in Tropical Agriculture in 1952. From 1953 to 1960 he worked as an Agricultural Technical Officer in the Ministry of Agriculture in Paramaribo.

Starting in 1961, he undertook postgraduate study in statistics at Cornell University, earning a doctorate in 1964, with a major in Biometry and minors in Economics and Social Statistics.

After a two year appointment with the FAO/UN in Colonia, Uruguay, Raktoe joined the Department of Mathematics and Statistics at the University of Guelph

in Guelph, Ontario, Canada, as an Associate Professor of Statistics in 1967 and embarked on a teaching and research career. He was promoted to Full Professor in 1970 and he continued his tenure at Guelph until 1980. At Guelph, he helped develop the undergraduate and master's graduate programs in statistics.

From 1980 to his retirement in 1997, Professor Raktoe travelled extensively, teaching and carrying out collaborative research at various universities for periods of two to three years, in Saudi Arabia, Singapore, Thailand, Malaysia, Jamaica, Trinidad and South Africa.

While Professor Raktoe had research interests in many areas of statistics, his principal research activity was in the area of design and analysis of experiments; an area in which he authored or co-authored in excess of sixty papers. He published in leading journals such as the *Annals of Mathematical Statistics, Annals of Statistics*, the *Journal of the Royal Statistical Society*, the *Journal of the American Statistical* 



B Leo Raktoe

Association, the Annals of the Institute of Statistical Mathematics and the Journal of Statistical Planning and Inference. Raktoe also co-authored two books: Basic Applied Statistics (Marcel Dekker Inc., 1979, with J. J. Hubert) and a monograph, Factorial Designs (John Wiley and Sons, Probability and Mathematical Statistics Series, 1981, with A. Hedayat and W.T. Federer). The latter book has been heavily referenced in the literature of statistical design.

Professor Raktoe was a Fellow of the American Statistical Association (1971), a Fellow of the Royal Statistical Society (1972), a Fellow of the Institute of Mathematical Statistics (1975) and an elected Member of the International Statistical Institute (1974).

Professor Raktoe was a great mentor, teacher and researcher and above all, a great colleague and friend. He will be missed.

> Hosh Pesotan and Radhey S. Singh, University of Guelph, Ontario, Canada

## **OBITUARY: Herman P. Friedman**

### 1930-2010

HERMAN P. FRIEDMAN, President of Statistical Science and Technology Associates, Inc., a former President of the Classification Society of North America, and a longtime member of the IMS, died on October 17, 2010 in New York City. Herman is survived by his wife, Judith D. Goldberg, herself an IMS member and ASA Fellow; daughters Ellen, Anne and Lisa; and seven grandchildren.

Herman was born in New York City, where he lived all his life. He graduated from Brooklyn Technical High School and earned his BS and MA in mathematics, with a concentration in geometrical algebra, from Brooklyn College. He studied statistics at the New York University Courant Institute of Mathematical Sciences with Allan Birnbaum, and received an MPhil in statistics from Yale University, where he worked with John Hartigan.

Near the end of the Korean War, Herman was drafted into the US Army. He taught and then joined the Scientific and



Herman Friedman

Professional Program as a Mathematician in the Ballistic Research Laboratory until his discharge as a sergeant in the reserves. Herman then held positions of increasing responsibility while attending NYU and Yale as a part-time student. His first position was as a Mathematician for Project Cyclone at Reeves Instruments Corp., where he worked on the design of a missile seeker and missile target simulations.

Subsequently, he assumed roles as a Senior and Principal Mathematician at the System Development Corp. and Bulova Research and Development, where he began his work in statistical classification theory and pattern recognition. In 1963, he joined IBM where he spent most of his career—over 26 years. It was during those years that he pioneered the development of methods and software for cluster analysis as a member of the New York Science Center. As a Senior Institute Staff member of the IBM Systems Research Institute, and then Institute Consultant at Systems Research Education, he taught courses in advanced methods of data analysis and systems evaluation, continued his research, and consulted throughout IBM. Herman made significant contributions to the theory and application of classification and clustering, and received several awards for his contributions.

After early retirement from IBM, Herman founded Statistical Science and Technology Associates, Inc., and was Visiting Professor in the Psychometrics Program at Fordham University Graduate School of Psychology where he was a mentor to several graduate students.

During his career, Herman published on different topics, ranging from pattern recognition to classification and data mining; and gave numerous lectures at various institutions and professional meetings. He was President of the Classification Society of North America; a Fellow of the New York Academy of Science; a member of Pi Mu Epsilon, Sigma Xi Yale Chapter; and a National ACM Lecturer.

As an accomplished statistician, researcher, teacher, and mentor, Herman touched the lives of many young statisticians. The profession has lost one of its champions, and he will be deeply missed by all who had the good fortune to have known him.

Demissie Alemayehu, Columbia University

## **OBITUARY: J.N. Srivastava**

JAGDISH N. SRIVASTAVA (JNS), professor emeritus of statistics at

combinatorial theory, and many other areas of statistics and mathematics.

### 1933-2010



Jagdish Srivastava

Colorado State University, Fort Collins, will be remembered for his leadership in the statistics profession; his thought-provoking, penetrating and deep questions at meetings and conferences; and his pioneering research contributions in design of experiments, as well as in multivariate analysis, survey sampling, reliability, coding theory,

The 1973 conference he organized, "Statistical Design and Analysis of Experiments and Linear Models," started a new era of statistical design by bringing together leaders from different areas of theoretical and applied statistics, and demonstrating that both "good" design and "efficient" inference are fundamental for extracting pertinent information from the data collected for scientific investigations. With this spirit, JNS founded the Journal of Statistical Planning and Inference (JSPI) in 1975 with cooperation and support from distinguished statisticians all over the world. During this period, he introduced search linear models and search designs, his ground-breaking research. His PhD advisor Professor R.C. Bose remarked that his student JNS now truly surpassed him, the recognition of a great mind and a highly spirited advisor. As a PhD student and postdoctoral researcher at University of North Carolina, JNS also worked with Professor S.N. Roy, and was inspired by Professors R. A. Fisher, J. Neyman, P. C. Mahalanobis, C. R. Rao, J. Kiefer, and H. Chernoff. In design theory, JNS developed the mathematical theory of confounding for asymmetrical factorial experiments (with Professor K. Kishen), optimum balanced designs for fractional factorial experiments, introducing and studying balanced arrays and multidimensional partially-balanced association schemes, leading to the non-commutative algebra of Bose and Srivastava, which is a multi-set generalization of the Bose-Mesner algebra; created the new and influential fields of search linear models and search designs and its application in fractional factorial experiments as well as in figuring out non-additivity presence in row-column designs. In multivariate analysis, he worked on MANOVA with complete as well as incomplete data in estimation, hypothesis testing, classification, and meta-analysis; and a monograph on design and analysis of quantitative multi-response experiments jointly with Professors S. N. Roy and R. Gnanadesikan. In reliability theory, JNS introduced selfrelocating designs (SRD) for comparative experiments. In survey-sampling, JNS introduced a general class of estimators with almost all of the well-known estimators as the special cases. In coding theory, he introduced "Srivastava code", a class of parameterized errorcorrecting codes.

JNS studied quantum mechanics and mathematical logic. Gödel's theorem inspired him to realize the limitations of science. He studied the great religions of the world. He was particularly drawn to the Bhagavad Gita because of his nonsectarian outlook. This interest led him to obtain his 1991 joint appointment in the philosophy department of Colorado State University.

JNS was a fellow of IMS and ASA; an elected member of ISI; a foundation fellow of the Institute of Combinatorics and Applications; and a Fellow of the Third World Academy of Sciences. He was the past president of the Forum for Interdisciplinary Mathematics as well as the International Indian Statistical Association.

JNS is survived by his wife of sixty years Usha, three children and a granddaughter. Subir Ghosh, University of California, Riverside

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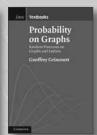
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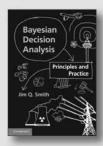


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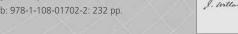
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# **OBITUARY: Edward J. Dudewicz**

### 1942-2010

EDWARD J. DUDEWICZ, born on April 24, 1942, died on September 22, 2010 after a six-year battle with cancer. He was Professor Emeritus of Mathematics at Syracuse University, New York. He received a bachelors degree from the Massachusetts Institute of Technology in 1963, and a masters and PhD degrees from Cornell University in 1966 and 1969, respectively. His dissertation, "Estimation of Ordered Parameters," was written under the supervision of Robert E. Bechhofer.

Professor Dudewicz was elected Fellow of the IMS, American Statistical Association, American Society for Quality, and AAAS. He was founding editor of *Basic References in Quality Control: Statistical Techniques* of the American Society for Quality, for which he received the ASQ Testimonial Award for "Leadership and Distinguished Service.". He also was the Founding Editor of the *American Journal of Mathematical and Management Sciences*, currently in its 30th volume. He had over 170 publications, including 11 books, one each translated into Arabic and into Indonesian.

Dr. Dudewicz was active as instructor, researcher, editor, and consultant for over four decades. He taught at Syracuse University, The Ohio State University, University of Rochester, University of Leuven, Belgium, and National University of Comahue, Argentina. His editorial posts included *Technometrics* (management committee), *Journal of Quality Technology* (editorial review board), *Statistical Theory and Method Abstracts* (editor, USA), *Statistics & Decisions* (editor) and *American Journal of Mathematical and Management Sciences* (founding editor and editor-in-chief).

Professor Dudewicz was internationally recognized for his solution of the

heteroscedastic selection problem, his work on fitting statistical distributions, his development of the multivariate heteroscedastic method, and his approach to the solution of the Behrens-Fisher problem. In 1975, Professor Dudewicz with co-author S.R. Dalal published a solution of "The Heteroscedastic Selection Problem" given by Professor Bechhofer in 1954. This paper was a comprehensive 51-page analysis of the problem and its solution, including the tables needed to apply the solution. There are now many published statistical procedures which follow the method established in this path-breaking paper, and they are often referred to as "Dudewicz-Dalal type" procedures. This approach considered the general ranking and selection goal as well, and gave details for the cases of selecting the t best populations and of subset selection. Extending this idea for many multi-population problems such as testing of hypotheses, multiple comparisons, estimation of ordered parameters, partitioning of a set of populations, confidence intervals, ANOVA and MANOVA and regression, Professor Dudewicz gave a general solution with the multivariate analogs of these problems. He and his graduate student, T.A. Bishop, in 1979 gave "The heteroscedastic method," in Optimizing Methods in Statistics.

An important statistical problem faced by researchers in virtually any field that uses statistics is that of fitting a distribution to a set of data. Some milestones in this problem have been the Pearson system (1895), the Johnson system (1949), and the Ramberg and Schmeiser Generalized Lambda Distribution (GLD) system (1972). In the years since, Professor Dudewicz and coauthors, principally Z.A. Karian, developed the GLD system further to satisfy such needs as being able to fit a distribution



to any set of moments, as well as to bivariate data. A comprehensive

book on this subject, *Handbook of Fitting Statistical Distributions with R*, co-authored with Z.A. Karian, appeared in print a few days after his death.

The problem of testing equality of two means when variances are not known, the Behrens-Fisher Problem, has been called the most important problem of applied statistics by Henry Scheffé. Following two exact solutions, in 1950 by Chapman and in 1974 by Prokof'yev and Shishkin, in 1998 Professor Dudewicz and S. U. Ahmed gave a third exact solution in the paper "New exact and asymptotically optimal solution to the Behrens-Fisher problem, with tables," *American Journal of Mathematical and Management Sciences*. Their solution was stated to be asymptotically optimal, hence preferable to the other two solutions.

Professor Dudewicz was a generous person, who went out of his way to help and encourage younger colleagues. Through his myriad professional activities he collaborated with many individuals who came to value him as a colleague and as a friend. His many associations with foreign colleagues were based on a genuine interest to stimulate their research. This led to many long-term collaborations and close friendships. He had a keen curiosity about their cultures and helped them with much advice.

Professor Dudewicz is survived by his wife of 47 years, Patricia, three children, and five grandchildren. He will be missed by his family, friends and the statistical community. We remember him as a person full of energy, inspiration and integrity.

Zaven A. Karian, Denison University E.C. van der Meulen, K.U. Leuven

# Terence's Stuff: Hidden history

A modern statistician needs to appreciate the historical roots of the profession, argues Terry Speed. Look to your statistical roots!



There is arcana associated with every profession: how to keep skin perfect, how to grow stunning azaleas, how to make lots of money. Most people have to learn these secrets from professionals. Do we have secrets? I was led to ponder this recently, when a new user of statistics asked me some questions, having just discovered Hotelling's 1936 paper Relations between two sets of variates on what we now call canonical variates and correlations, tried the method, and found it useful. Did I know about it? Did I use it? And could I tell him the best statistic (largest eigenvalue, trace or determinant) to use to test significance? I did know the paper, indeed I had used canonical correlations earlier that week. I felt that the question of the test statistic to get a p-value required an extended answer, and here it is.

Hotelling's paper on canonical correlation was part of the new field of normal multivariate analysis that had begun with the publication of Wishart's seminal 1928 paper deriving the distribution of the empirical covariance matrix under the assumption of multivariate normality. The field flourished for about four decades, with a large body of exact and asymptotic theory being created. In general the theory was hard. A priori, it is unlikely that something like the joint distribution of a set of eigenvalues of a random matrix would be a snap, and it isn't. Some deep and beautiful mathematical theory such as that surrounding zonal polynomials and hypergeometric functions with matrix arguments was developed specifically to deal with hard

distributional problems arising in the field. And a very wide variety of applications were explored, starting from anthropology and psychology, and ranging widely across biology, geology, chemistry and language and speech. Yet somewhere around the mid-1970s, theoretical research in normal multivariate theory slowed, and ultimately ground to a halt. What happened?

Perhaps all the important problems were solved, and theorists simply moved on to other things? There is doubtless some truth in this view, but I think there is more to it. Not only did the theory stop being developed, people largely stopped using it. It seems to me that one contributing factor was the growing awareness of the fragility – the non-robustness – of the multivariate normality assumption, even when it might be plausible. There was some research on the robustness of classical multivariate techniques such as Hotelling's  $T^2$ , and on extensions (e.g. using Edgeworth expansions) to deal with moderate non-normality, but this did not save them. If we can't get a more or less valid p-value for a multivariate test, we're probably not going to use that test, and it was easy to see by simulation just how reliant most normal multivariate methods were on exact multivariate normality. A second contributor was undoubtedly the rise of data analysis, and with it the rapid growth of exploratory and graphical multivariate methods that dealt with manifestly non-normal data. Variations on the theme of principal components, multidimensional scaling, clustering, projection pursuit, faces, Automatic Interaction Detection, and later tree-based methods, and many others all came in this period. Both of my possible explanations are associated with the greatly increased use of computers in statistics that came in the late 1960s and early 1970s. This enabled us to see things we couldn't see before, and to

be sceptical about things we'd previously accepted, including *p*-values.

These days it would be hard to find card-carrying members of our profession who routinely calculate p-values for multivariate tests in (say) 40 dimensions using standard multivariate normal theory, e.g. for a canonical correlation problem with p=q=20. Which brings me back to my questioner. Before I could address his question about test statistics and p-values, I felt I had to inflict on him a version of what I've just said. In a way I was saying "Listen kid, a lot has happened in statistics in the 74 years since that paper was published. You probably need to familiarise yourself with some of it before you rush off and calculate p-values for your eigenvalues using classical normal theory." Among the many things that have happened in that time, two are particularly relevant to him. One is the growth of computer-intensive methods such as permutation-based testing and the bootstrap, something that took off in the early 1980s and shows no sign of slowing down. The other is the more recent explosion of statistical methods incorporating sparsity, such as the lasso. It should surprise no-one to hear that these two ideas have been combined in recently published work. The larger problem remains. How does someone just coming into statistics find a middle way between ignoring the last 74 years and having to live them?

The Roman god Janus is often depicted simultaneously looking back at the past and forward to the future. Like a



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University of California Santa Barbara, CA. 93106-3110.

e feldman@pstat.ucsb.edu

This 35th SPA meeting features two IMS Medallion Lectures, given by Itai Benjamini (Weizmann Institute of Science) and Alice Guionnet (École Normale Supérieure de Lyon). There is also a Lévy Lecture by Jean-François Le Gall (University of Paris XI) and a Doob Lecture from Ruth Williams. There are also 16 plenary talks, from Louigi Addario-Berry (McGill University); Omer Angel (University of Toronto); Nathanaël Berestycki (University of Cambridge); Thierry Bodineau (École Normale Supérieure); Krzysztof Burdzy (University of Washington); René Carmona (Princeton University); Nathalie Eisenbaum (University of Paris VI); Franco Flandoli (University of Pisa); Renato Fontes (University of São Paulo); Christina Goldschmidt (University of Warwick); Luis Gorostiza (CINVESTAV, Mexico); Dima Ioffe (Technion-Israel Institute of Technology); Andreas Kyprianou (University of Bath); Malwina Luczak (London School of Economics); Shige Peng (Shandong University); Craig Tracy (University of California, Davis).

### At a glance:

forthcoming IMS Annual Meeting and JSM dates

#### 20II

#### IMS Annual Meeting @

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

#### 2012

### IMS Annual Meeting

@ World Congress:

İstanbul, Turkey, July 9–14, 2012

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

#### 2013

#### **IMS Annual Meeting**

@ JSM: Montréal,Canada, August3–8, 2013

#### **2014**

#### **IMS Annual Meeting:**

Sydney, Australia, July 7–11, 2014

JSM: Boston, MA, August 2–7, 2014

#### 2015

#### **IMS Annual Meeting**

@ JSM: Seattle, WA, August 8–13, 2015

# I More IMS meetings around the world

IMS sponsored meeting

2012 World Congress/IMS Annual Meeting July 9–14, 2012

**Grand Cevahir Hotel & Convention Center, Istanbul, Turkey** 

NEW WEBSITE: http://www.worldcong2012.org/

The eighth World Congress in Probability and Statistics will be held in Istanbul from July 9 to 14, 2012. It is jointly organized by the Bernoulli Society and the Institute of Mathematical Statistics. Scheduled every four years, this meeting is a major worldwide event for statistics and probability, covering all its branches, including theoretical, methodological, applied and computational statistics and probability, and stochastic processes. It features the latest scientific developments in these fields.

The program will cover 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, with indepth sessions on applications of these disciplines to other sciences, industrial innovation and society. It will feature several special plenary lectures presented by leading specialists. In addition, there will be many invited sessions highlighting topics of current research interests, as well as a large number of contributed sessions and posters.

The venue of the meeting is Grand Cevahir Hotel & Convention Center located in Istanbul, which is a vibrant, multi-cultural and cosmopolitan city bridging Europe and Asia. Istanbul has a unique cultural conglomeration of east and west, offering many cultural and touristic attractions, such as Hagia Sophia, Sultanahmet, Topkapı Palace and Maiden's Tower.

On behalf of the Program Committee and the Local Organizing Committee, we invite you to join us in Istanbul for this exciting scientific event. Your participation will ensure that the 2012 World Congress will be a memorable meeting.

Elvan Ceyhan and Mine Çağlar, Co-chairs of the Local Organizing Committee Arnoldo Frigessi, Chair of the Program Committee



#### IMS co-sponsored meeting

Statistical Challenges in Modern Astronomy V June 13–17, 2011

The Pennsylvania State University, USA

**w** http://astrostatistics.psu.edu IMS Rep: David Banks

#### IMS co-sponsored meeting

2nd International Workshop on Integer-Valued Time Series (WINTS 2011) June 18–21, 2011 Protaras, Cyprus

w http://www2.ucy.ac.cy/~wints2011/
IMS Rep: Konstantinos Fokianos
The aim of this meeting is to bring researchers together to discuss their recent contributions to this area. The workshop will cover topics such as integer autoregressive models and their generalizations; generalized linear models for time series; applications and case studies.

#### IMS co-sponsored meeting

### International Statistics Conference 2011 December 28–30, 2011 Colombo, Sri Lanka

Organized by the Applied Statistics

w TBC

Association of Sri Lanka (ASASL)

IMS Rep: Peter Hall, University of
Melbourne, Australia.

The meeting location is at the water's edge
in the capital city of Sri Lanka. The website
is under construction.

#### IMS co-sponsored meeting

Patient-Reported Outcomes and Quality of Life July 4–5, 2011 Université Pierre et Marie Curie, Paris, France

IMS Rep: Mounir Mesbah w http://www.lsta.upmc.fr/PROQOL/

#### IMS sponsored meeting

IMS Annual Meeting @ 2011 Joint Statistical Meetings July 30 — August 4, 2011, Miami Beach, FL

w http://amstat.org/meetings/jsm/2011/

Miami beach



#### IMS sponsored meeting

2012 Joint Statistical Meetings
July 28 – August 2, 2012, San Diego, CA
w http://amstat.org/meetings/jsm/2012/

#### IMS sponsored meeting

2011 ENAR/IMS Spring Meeting
March 20–23, 2011
Hyatt Regency Miami, Florida, USA
w http://www.enar.org/meetings.cfm

#### IMS sponsored meeting

2012 ENAR/IMS Spring Meeting April 1–4, 2012 Washington DC, USA

w http://www.enar.org/meetings.cfm

#### IMS sponsored meeting

IMS Annual Meeting @
2013 Joint Statistical Meetings
August 3–8, 2013, Montréal, Quebec, Canada
w http://amstat.org/meetings/jsm.cfm

#### IMS sponsored meeting

2014 Joint Statistical Meetings August 2–7, 2014 Boston, Massachusetts, USA w http://amstat.org/meetings/jsm.cfm

#### IMS sponsored meeting

IMS Annual Meeting @
2015 Joint Statistical Meetings
August 8–13, 2015
Seattle, Washington, USA
w http://amstat.org/meetings/jsm.cfm

#### IMS sponsored meeting

2013 ENAR/IMS Spring Meeting
March 10–13, 2013
Orlando, Florida, USA
w http://www.enar.org/meetings.cfm

#### IMS sponsored meeting

2014 ENAR/IMS Spring Meeting
March 16–19, 2014
Baltimore, Maryland, USA
w http://www.enar.org/meetings.cfm

#### IMS sponsored meeting

2014 IMS Annual Meeting July 7–11, 2014 Sydney, Australia

w TBC

The location for the 2014 IMS Annual Meeting has been selected as Sydney, Australia. Details will follow, but you can mark your calendars now!

Sydney Opera House, one of the world's iconic buildings



#### IMS co-sponsored meeting



w http://www.informs.org/Community/
Conferences/APS2011
Program Committee Co-chairs: Kavita
Ramanan, Marty Reiman
Other IMS Reps on Program Committee:
Baris Ata, Rami Atar, Vivek Borkar, Amarjit
Budhiraja, Paul Dupuis, David Gamarnik,
Takis Konstantopoulos, Thomas Mikosch,
Lea Popovic, Amber Puha, Devavrat Shah,
Steven Shreve, Assaf Zeevi

# IMS co-sponsored meeting

35th Conference on Stochastic Processes and their Applications June 19–25, 2011 Oaxaca, Mexico w http://www. matem.unam.mx/ SPA2011/

#### IMS co-sponsored meeting

Seventh Cornell Probability Summer School
July 11–22, 2011. Cornell University, Ithaca, NY

**NEW WEBSITE** http://www.duke.cornell.edu/~rtd/CPSS2011/

The Seventh Cornell Probability Summer School will feature six lecture series by Marek Biskup (UCLA), Geoffrey Grimmett (Cambridge) and Greg Lawler (Chicago). In addition Omer Angel (UBC), Julien Dubedat (Columbia), Dmitry Ioffe (Technion), and Alan Sly (Microsoft) who will each give two lectures.

The conference web page, which will be up by November 1, has more information, and a registration form for people who would like to participate. All accepted participants will have their dorm room paid for. US participants can apply for \$400 toward the cost of meals. This meeting is supported by a Research Training Group grant from the National Science Foundation to the probability group at Cornell.

# I More IMS meetings around the world

#### IMS co-sponsored meeting

Seminar on Stochastic Processes

March 24–26, 2011. University of California, Irvine

**w** http://math.uci.edu/~mcransto/ssp2011a.html IMS rep: Davar Khoshnevisan

#### IMS co-sponsored meeting

# 2011 IISA Conference on Probability, Statistics and Data Analysis April 21–24, 2011

NC State University, Raleigh, NC, USA

w http://www.iisaconference.info

IMS Reps on Program Committees: Soumendra Nath Lahiri (Chair of International Organization Committee), Subhashis Ghoshal (Co-Chair of Local Organization Committee)

#### IMS co-sponsored meeting

WNAR/IMS Meeting June 19–22, 2011 San Luis Obispo, California

w http://www.wnar.org/

IMS Program Chair: Jay Bartroff e bartroff@usc.edu
The 2011 WNAR/IMS meeting will be held on the campus of
Cal Poly San Luis Obispo, located halfway between San Francisco
and Los Angeles. See http://www.calpoly.edu/visitors/visitors.html
for local information, and visit http://www.wnar.org for meeting
information. Local Organizer: Jimmy Doi e jdoi@calpoly.edu

#### IMS sponsored meeting

# IMS-China International Conference on Statistics and Probability July 8–11, 2011

#### XiAn, China

IMS Organizing Chair: Heping Zhang, Yale University w http://www.stat.umn.edu/~statconf/imschina2011/index.html We are pleased to announce the 3rd IMS-China International Conference on Statistics and Probability 2011 in XiAn, China. The first two meetings in this series were held in Hangzhou (2008) and WeiHai (2009), China.

The meeting is open to all current and prospective IMS members by registration, until the maximum of 150 non-local participants is reached. Local participants are defined as those who reside in mainland China. It will feature plenary lectures, and invited and contributed talks in all areas of probability and statistics. The official languages of the meeting are English and Chinese.

If you live in China, contact Professor Geng Zhi (zhigeng@pku.edu.cn) and Gong Fuzhou (fzgong@mail.amt.ac.cn) for more information. If you live in other countries, send your enquiries in English to Professor Heping Zhang (heping.zhang@yale.edu).

#### IMS co-sponsored meeting

8th Workshop on Bayesian Nonparametrics June 26–30, 2011 Veracruz, Mexico

w http://www.bnpworkshop.org/

#### IMS co-sponsored meeting

IMS Asia Pacific Rim Meeting July 3–6, 2011 Tokyo, Japan

w http://www.ims-aprm2011.org/

The second IMS Asia Pacific Rim Meeting will take place in OMIYA Sonic City conference hall (http://www.sonic-city. or.jp/modules/english/), Tokyo, Japan during the period Sunday July 3 to Wednesday July 6, 2011. This conference is sponsored by IMS, The International Chinese Statistical Association (ICSA), The International Indian Statistical Association (IISA), The Japan Statistical Society (JSS), The Korean Statistical Society (KSS) and the Institute of Statistical Mathematics



(ISM). This meeting series provides an excellent forum for scientific communications and collaborations for the researchers in Asia and Pacific Rim. It also promotes communications and collaborations between the 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. Plenary speakers are Professor



Peter Hall (University of Melbourne, Australia), and Professor S.R.S. Varadhan (New York University, USA). A number of celebrated scholars will deliver distinguished lectures and invited talks in this conference. Details about distinguished lecture speakers, invited talk speakers and the key dates can be found in the website.

For more information, you may contact the program chairs: Byeong U. Park (bupark@stats.snu.ac.kr) and Runze Li (rli@stat.psu.edu).

# I Other meetings around the world

### The 7th IMT-GT International Conference on Mathematics, Statistics and its Application (ICMSA 2011) July 21-23, 2011

#### Bangkok, Thailand

w http://icmsa2011.nida.ac.th

The main objective of this conference is to provide a forum for researchers, educators, students and industries to exchange ideas, to communicate and discuss research findings and new advances in mathematics and statistics. To explore possible avenues to foster academic and student exchange, as well as scientific activities within the region. The conference will be a venue to communicate and discuss mathematical and statistical problems faced by the industries. The topics of the conference include mathematics, applications of mathematics, statistics, operations research, mathematical education, and computer sciences.

The themes include, but are not limited to: algebra, algebraic geometry, analysis, operator algebra, functional analysis, lie groups and lie algebras, ordinary differential equation, dynamic system, topology, mathematical computer sciences, number theory, combinatorics, control theory, optimization, numerical analysis and science computing, statistics, probability and stochastic process, mathematical finance and actuary, applied mathematics and statistics (bioinformatics, engineering mathematics, demography, operation research, logistics management, risk

#### Important dates

management etc.)

Full paper submission deadline: 31 March 2011; Notification of acceptance: 30 April 2011; Early bird registration deadline: 31 May 2011

#### Contact us

ICMSA 2011 Chair Organizing Committee School of Applied Statistics, National Institute of Development Administration 118 Serithai Road, Klongjan, Bangkapi, Bangkok, Thailand 10240.

t +662-727-3032

f +662-374-4061

e icmsa2011@as.nida.ac.th



### **Multivariate Statistical Analysis Conference** November 7-9, 2011 Łódź, Poland

w http://www.msa.uni.lodz.pl

The scientific programme of MSA 2011 will cover a range of statistical problems, such as: multivariate distributions, statistical tests, nonparametric inference, discrimination analysis, Monte Carlo analysis, and Bayesian inference.

In 2011 we will be celebrating the thirtieth anniversary of the conference.

The Polish Statistical Association boasts 100 years of history and a rich tradition. Among its contributors are eminent Polish statisticians as well as a large number of anonymous people dedicated to serving science and the state. To celebrate the 100th anniversary of the Polish Statistical Association we intend to hold an International Congress of Polish Statistics on 18-20 April, 2012, in Poznań and combine this event with the celebration of Polish Statistics Day in 2012. Updated information about this conference will be published on the Association's website, http://www.stat.gov.pl/pts/.

#### Second International Symposium on Biopharmaceutical Statistics February 28 – March 3, 2011



#### Berlin, Germany

w www.isBioStat.org

This symposium is jointly organized by European Medicines Agency (EMA), the International Society for Biopharmaceutical Statistics, and the International Biometric Society (IBS) Deutsche Region. The purpose of this symposium is to bring together worldwide statisticians and related professionals who are involved in quantitative biopharmaceutical research, development and regulations to share and exchange information, experience and research findings. The ultimate goal is to improve and promote the harmonization of statistical practice in the industry at the international front. The theme of the symposium is Statistics in Bridging Biopharmaceutical Development from Discovery to Marketing. Prominent statisticians from regulatory agencies, academic and the industry will deliver keynote speeches on various perspectives. Invited and contributed presentations will cover a wide range of topics from non-clinical statistics, preclinical discovery, clinical development, postlicensure surveillance, to regulatory science and statistics. A series of pre-conference halfday short courses will be given by experts in their respective professional fields. Contact Dr. Richard Vonk, Bayer Schering Pharma AG (richardus.vonk@bayerhealthcare.com) or Dr. Amit Bhattacharyya, GlaxoSmithKline USA (amit.bhattacharyya@gsk.com).

# I Other meetings around the world

# ASMDA 2011: XIV International Conference on Applied Stochastic Models and Data Analysis June 7–10, 2011



#### Università La Sapienza, Rome, Italy

w www.asmda.eu

Since 1981, ASMDA has aimed to serve as the interface between stochastic modeling and data analysis and their real life applications particularly in business, finance and insurance, management, production and reliability, biology and medicine.

Our main objective is to publish papers, both theoretical or practical, presenting new results having potential for solving real-life problems. Another important objective is to present new methods for solving these problems by analyzing the relevant data. Also, the use of recent advances in different fields, will be promoted such as for example, new optimization and statistical methods, data warehouse, data mining and knowledge systems, computing-aided decision supports and neural computing.

The role played by ASMDA as interface between theory and practice means that the symposia are of great interest for both the academic and business worlds. The high standards of the meetings are guaranteed by strong international scientific committees and by a permanent world-wide ASMDA Committee.

The Conference 2011 will focus on new trends in theory, applications and software of Applied Stochastic Models and Data Analysis. Particular interest will be given to interesting applications in engineering, productions and services (maintenance, reliability, planning and control, quality control, finance, insurance, management and administration, inventory and logistics, marketing, environment, human resources, biotechnology, medicine).

#### **Methodological approaches**

- Poisson, Markov, semi-Markov processes
- Point processes
- · Martingales, Stochastic calculus
- · Random evolutions
- · Decision and Controlled Processes
- · Diffusion and Poisson approximations
- · Asymptotic models and Weak Convergences
- · Statistical inference for Stochastic processes
- · Hidden Markov and semi-Markov processes
- Fitting models for data
- · Reliability and survival analysis
- Bayesian inference
- Functional data analysis
- · Discriminant and Regression Analysis

- Mixture model and Probabilistic approach to Clustering
- Analysis of complex data (incomplete, censored, missing, spatiotemporal, imprecise, fuzzy,...)
- Theories of uncertainty
- Graphical models and Bayesian networks
- · Multidimensional Scaling and Multi-way Data Analysis
- Sensory Analysis
- · Classification and Documentation
- · Data and Text Mining
- Chaotic and Stochastic processes
- · Analysis of Chaotic processes.

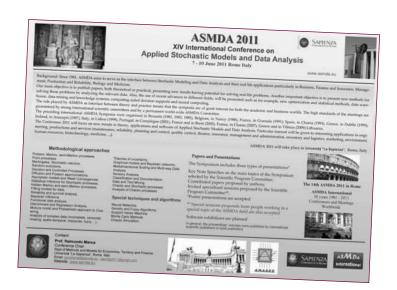
#### Special techniques and algorithms

- Neural Networks
- · Genetic and Fuzzy Algorithms
- Support Vector Machine
- · Monte Carlo Methods
- · Chaotic Simulation.

#### **Contact**

Prof. Raimondo Manca, Conference Chair Dept of Methods and Models for Economics, Territory and Finance Università La Sapienza, Roma, Italy

e secretariat@asmda.eu or asmda2011@gmail.com



# **Employment Opportunities around the world**

#### Canada: Scarborough, ON

# University of Toronto @ Scarborough, Department of Computer & Mathematical Sciences

Lecturer Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7259531

#### Canada: Waterloo, ON

#### **University of Waterloo**

Tenure Track - Assistant Professor in Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7283611

#### Canada: Waterloo, ON

#### **University of Waterloo**

Tenure Track - Assistant Professor in Actuarial Science http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7283594

#### **Hong Kong**

# The Hong Kong University of Science and Technology, School of Business and Management

Tenure-track Assistant Professor http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7360668

#### **Switzerland: Lausanne**

#### Swiss Federal Institute of Technology, Lausanne (EPFL)

Postdoctoral Position(s) in Statistics/Applied Probability at EPFL http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7412201

#### Taiwan: Taipei

#### **National Taiwan University, Department of Mathematics**

All ranks

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7217999

#### Taiwan: Taipei

#### Institute of Statistical Science, Academia Sinica

Assistant Research Fellow, Associate Research Fellow or Research Fellow

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7107563

#### **United Kingdom: Coventry**

#### **University of Warwick**

Assistant Professor (Harrison Early Career Professor) http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7381565

#### **United Kingdom: Oxford**

#### University of Oxford, Department of Statistics

University Lecturer in association with Lady Margaret Hall http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7444076

#### **United States: Berkeley, CA**

#### **UC Berkeley, Statistics Department**

Visiting Neyman Assistant Professor http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7419622

#### **United States: La Jolla, CA**

#### **UCSD, Department of Mathematics**

Tenure Track Professor of Mathematics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7249857

#### **United States: Athens, GA**

#### **University of Georgia, Department of Statistics**

Assistant/Associate Professor of Statistics and Bioinformatics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7444368

#### **United States: Chicago, IL**

#### University of Chicago, Department of Statistics

Director of Undergraduate Studies http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7344391

#### United States: Chicago, IL

#### **University of Chicago, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7344383

#### **United States: Williamstown, MA**

#### **Williams College**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7091803

#### **United States: Columbia, MO**

#### **University of Missouri, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7245838

#### **United States: Chapel Hill, NC**

#### **University of North Carolina at Chapel Hill**

Postdoctoral positions in Probability and Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7398900

#### **United States: Piscataway, NJ**

#### **Rutgers, The State University of New Jersey**

Associate/Full Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7290610

#### **United States: Piscataway, NJ**

#### Rutgers, The State University of New Jersey

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7290590

#### **United States: Albuquerque, NM**

#### **University of New Mexico, Mathematics and Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7444191

#### **United States: New York, NY**

#### Pronto.com

Director of Marketing Analytics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7300612

#### **United States: Portland, OR**

#### Fariborz Maseeh Department of Math & Stat, Portland State Univ.

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7256318

#### United States: Portland, OR

#### Portland State University, Fariborz Maseeh Department of **Mathematics & Statistics**

Maseeh Distinguished Chair in Mathematical Sciences http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7155921

#### **United States: Pittsburgh, PA**

#### **Carnegie Mellon University**

Applications are invited for possible tenure-track, lecturer, and visiting positions. Carnegie Mellon offers a collegial faculty environment, emphasizing a combination of disciplinary and cross-disciplinary research and teaching. All areas of statistics are welcome, and joint appointments with other units in the Pittsburgh area are possible. We especially encourage women and minorities to apply. Details at http://www.stat.cmu.edu (email: hiring@stat.cmu.edu). Application screening begins immediately and continues until positions closed. Send CV, research papers, relevant transcripts and three letters of recommendation to: Chair, Faculty Search Committee, Department of Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA. AA/EOE.

#### **United States: Philadelphia, PA**

# **Temple University**



The Department of Statistics in the Fox School of Business at Temple University invites applications for Tenure-Track faculty positions at all levels. Qualified candidates must hold a Ph.D. in Statistics, publications in top-tier journals, proven record of teaching excellence, and strong theory/application background. Strong candidates in any area of statistics will be considered. Apply electronically to Dr. Sanat K. Sarkar, stat.recruiting@temple.edu, with cover letter, full CV, evidence of excellence in teaching & three letters of recommendation. Additional information is available from the department websites at: www.fox.temple.edu/dept/statistics/.

Temple University is an Equal Opportunity/Affirmative Action Employer and specifically invites applications from women and minorities.

#### **United States: Philadelphia, PA**

#### **Department of Statistics, The Wharton School**

Post-doctoral Fellow

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7379201

#### **United States: Columbia, SC**

#### University of South Carolina, Department of Epidemiology & **Biostatistics**

Tenure-Track, Open Rank Faculty http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7413694

#### **United States: College Station, TX**

#### **Texas A&M University**

IAMCS Post Doctoral Researcher http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=5942093

#### **United States: Houston, TX**

#### **University of Texas**

Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=6923025

#### **United States: Houston, TX**

#### **University of Texas**

Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=6923033

#### **United States: Lubbock, TX**

#### **Texas Tech University**

Open-rank faculty position http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7221590

# **International Calendar of Statistical Events**

IMS meetings are highlighted in maroon with the lims logo, and new or updated entries have the very or very 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

### January 2011

January 3–4: Park City, Utah, USA AdapSki III, the satellite meeting to MCMSki III. w http://www.maths.bris.ac.uk/~maxca/adapsklll/

January 5–7: Park City, UT. MCMSki III: Markov Chain Monte Carlo in Theory and Practice w http://madison.byu.edu/mcmski/

January 24–26: CongresHotel De Werelt, Lunteren. 10th Winter School on Mathematical Finance w http://www.science.uva.nl/~spreij/stieltjes/winterschool.html

### February 2011

February 2–5: University of Zurich, Switzerland. Workshop on Bayesian Inference for Latent Gaussian Models with Applications w http://www.math.uzh.ch/bilgm11

February 8–9: Lahore, Pakistan. 8th International Conference on Recent Advances in Statistics **w** http://www.isoss.com.pk/8th%20 Conference.pdf

February 25–26: SAMSI, Research Triangle Park, NC. Education and Outreach Program: Two-Day Undergraduate Workshop w http://www.samsi.info

February 28 – March 3: Berlin, Germany. The Second International Symposium on Biopharmaceutical Statistics w www.isBioStat.org

#### March 2011

March 20–23: Hyatt Regency Miami, FL. 2011 ENAR/IMS Spring Meetings. w http://www.enar.org/meetings.cfm

23–25 March: The Netherlands. Spatial Statistics 2011 Conference w http://www.spatialstatisticsconference.com/

March 24–26: University of California, Irvine. Seminar on Stochastic Processes. IMS rep: Davar Khoshnevisan w http://math.uci.edu/~mcransto/ssp2011a.html

### April 2011

April 11–13: Bordeaux, France. Third International Biometrics Society (IBS) Channel Network Conference. e ibschannel@isped.u-bordeaux2.fr w http://www.ibs-channel-bordeaux2011.fr

April 16: Storrs, Connecticut. 25th New England Statistics Symposium w www.stat.uconn.edu/ness11

IISA Conference on Probability, Statistics and Data Analysis. IMS Reps: Soumendra Nath Lahiri (Chair of International Organization Committee), Subhashis Ghoshal (Co-Chair of Local Organization Committee). w http://www.iisaconference.info

### May 2011

May 16–20: SAMSI, Research Triangle Park, NC. Education and Outreach Program: Interdisciplinary Workshop for Graduates w http://www.samsi.info

May 31 – June 3: Agios Nikolaos, Crete, Greece. 4th Chaotic Modeling and Simulation International Conference: CHAOS2011 wwww.cmsim.org

#### June 2011

June 5–10: Ascona, Switzerland. Workshop on Statistical Challenges and Biomedical Applications of Deep Sequencing Data w http://www.cbg.ethz.ch/news/ascona2011

# I International Calendar continued

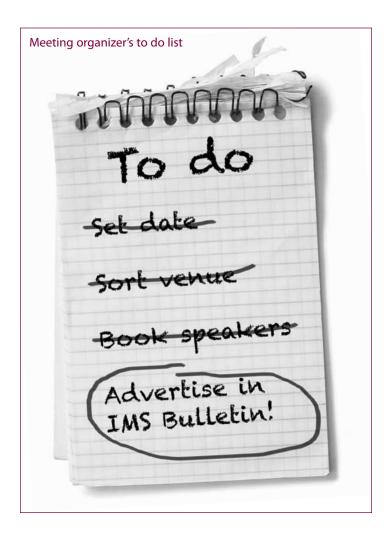
### June 2011 continued

June 7–10: Università La Sapienza, Rome, Italy. ASMDA 2011: XIV International Conference on Applied Stochastic Models and Data Analysis w www.asmda.eu

June 12–15: Wolfville, Nova Scotia, Canada. 2011 SSC Annual Meeting w http://www.ssc.ca/en/meetings/2011

ims June 13–17: Penn State University, USA. Statistical Challenges in Modern Astronomy V. w http://astrostatistics.psu.edu

June 18–21: Protaras, Cyprus. WINTS2011: 2nd International Workshop on Integer-Valued Time Series w http://www2.ucy.ac.cy/~wints2011/



June 19–22: San Luis Obispo, California. WNAR/IMS Meeting. IMS Program Chair: Jay Bartroff. w http://www.wnar.org/

June 19–25: Oaxaca, Mexico. 35th Conference on Stochastic Processes and their Applications. w http://www.matem.unam.mx/SPA2011/

June 20-24: Beijing Institute of Technology, China. Seventh International Conference on Mathematical Methods in Reliability www.mmr2011.cn

June 26–29: New York City, NY, USA. ICSA 2011 Applied Statistics Symposium. w http://www.icsa.org/2011/

June 26–30: Veracruz, Mexico. 8th Workshop on Bayesian Nonparametrics. w http://www.bnpworkshop.org/

June 27 – July 1: University of Lyon, France. 7th Conference on Extreme Value Analysis, Probabilistic and Statistical Models and their Applications (EVA 2011) w http://eva2011.univ-lyon1.fr/

June 27 – July 1: Valladolid, Spain. ICORS 2011: International Conference on Robust Statistics e congreso.icors2011@uva.es w http://www.icors11.uva.es

### July 2011

July 3-6: Tokyo, Japan. IMS Asia Pacific Rim Meetings. w http://www.ims-aprm2011.org/

July 4–5: Université Pierre et Marie Curie, Paris, France. Patient-Reported Outcomes and Quality of Life. IMS Rep: Mounir Mesbah. w http://www.lsta.upmc.fr/PROQOL/

Probability Society Conference w http://www.informs.org/ Community/Conferences/APS2011

July 8–11: XiAn, China. IMS-China International Conference on Statistics and Probability. IMS Organizing Chair: Heping Zhang. w http://www.stat.umn.edu/~statconf/imschina2011/index. html

July 11–22: Ithaca, NY. 7th Cornell Probability Summer School. NEW WEBSITE http://www.duke.cornell.edu/~rtd/CPSS2011/

July 18–19: Vancouver, Canada. ICIAM 2011: AWM Workshop for Women Graduate Students and Recent PhDs. Deadline has passed w https://sites.google.com/site/awmmath/programs/workshops/ICIAM-workshop

July 18–22: Vancouver, Canada. ICIAM 2011: 7th International Congress on Industrial and Applied Mathematics w http://www.iciam2011.com/

July 18–26: SAMSI, Research Triangle Park, NC. Education and Outreach Program: Industrial Math/Stat Modeling Workshop for Graduate Students w http://www.samsi.info

July 21–23: Bangkok, Thailand. 7th IMT-GT International Conference on Mathematics, Statistics and its Application (ICMSA 2011) w http://icmsa2011.nida.ac.th

July 30 – August 4: Miami Beach, Florida. IMS Annual Meeting at JSM2011. w http://amstat.org/meetings/jsm/2011/



### August 2011

August 1–4: Boulder, Colorado, USA. Uncertainty Quantification in Scientific Computing. **w** http://www.nist.gov/itl/math/ifipwoco-10.cfm

August 1–5: Sandbjerg Estate, Sønderborg, Denmark. Conference in Honour of Søren Asmussen: New Frontiers in Applied Probability w www.thiele.au.dk/asmussen

August 11–13: University of Connecticut, Storrs, USA. 46th Actuarial Research Conference. w http://www.math.uconn.edu/~valdez/46arc/46arc-storrs.php

August 17–19: Copenhagen, Denmark. Dynamic Statistical Models [ISI Satellite Meeting] w http://statistics.ku.dk/isi-satellite/

August 21–26: Dublin, Ireland. ISI Dublin: 58th World Statistics Congress w www.isi2011.ie

August 29 – September 1: Washington DC, USA. 7th International Conference on Multiple Comparison Procedures w http://www.mcp-conference.org

### September 2011

September 5–9: Lisbon, Portugal. 17th European Young Statisticians Meeting w http://www.fct.unl.pt/17eysm

September 12 – December 16: Institute for Pure and Applied Mathematics, Los Angeles, USA. Mathematical and Computational Approaches in High-Throughput Genomics www.ipam.ucla.edu/programs/gen2011/

#### November 2011

November 7–9: Łódź, Poland. Multivariate Statistical Analysis Conference w http://www.msa.uni.lodz.pl

November 25–27: Lahore, Pakistan. 3rd International Conference on Statistical Sciences w http://www.icss3.co.nr/

#### December 2011

ims December 28–30: Colombo, Sri Lanka. International
Statistics Conference 2011. w TBC

# **International Calendar** continued

#### December 2011 continued

December 28–31: Hong Kong, China. International Conference on Advances in Probability and Statistics Theory and Applications: A celebration of N. Balakrishnan's 30 years of contributions to statistics. **e** icaps2011@gmail.com **w** http://faculty.smu.edu/ngh/icaps2011.html

### April 2012

April 1–4: Washington DC, USA. 2012 ENAR/IMS Spring Meetings. w http://www.enar.org/meetings.cfm

April 18–20: Poznań, Poland. International Congress of Polish Statistics to celebrate the 100th anniversary of the Polish Statistical Association w http://www.stat.gov.pl/pts/

#### June 2012

June 3–6: Guelph, Ontario, Canada. 2012 SSC Annual Meeting w TBC

June 23–26: Boston, MA, USA. ICSA 2012 Applied Statistics Symposium. w TBC

### **July 2012**

July 9–14: Istanbul, Turkey. IMS Annual Meeting 2012 in conjunction with 8th World Congress in Probability and Statistics. w http://www.worldcong2012.org/

July 28 – August 2: San Diego, California. JSM2012. w http://amstat.org/meetings/jsm/2012/index.cfm

### March 2013

March 10–13: Orlando, Florida. 2013 ENAR/IMS Spring Meeting. w http://www.enar.org/meetings.cfm

### August 2013

August 3–8: Montréal, Canada. IMS Annual Meeting at JSM2013. w http://amstat.org/meetings/jsm/

#### March 2014

March 16–19: Baltimore, Maryland. 2014 ENAR/IMS Spring Meeting. w http://www.enar.org/meetings.cfm

### **July 2014**

July 7–11: Sydney, Australia. 2014 IMS Annual Meeting. w TBC

### August 2014

August 2-7: Boston, MA. JSM2014. w TBC

### August 2015

August 8–13: Seattle, WA. JSM2015. w TBC

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know. Email the details to Elyse Gustafson at erg@imstat. org. We'll list them here in the *Bulletin*, and online too, at www.imstat.org/meetings

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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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1:	January/February	December 1	December 15	January 1
2:	March	February 1	February 15	March 1
3:	April/May	March 15	April 1	April 15
4:	June/July	Мау 1	May 15	June 1
5:	August	July 1	July 15	August 1
6:	September	August 15	September 1	September 15
7:	Oct/Nov	September 15	October 1	October 15
8:	December	November 1	November 15	December 1



# March 2011

Meeting reports, news of members, information and announcements about conferences, and jobs around the world.

Send in your ideas, articles, and letters... We love to hear from you!

# DEADLINES submissions

# February 1, then March 15

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