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IMS Bulletin

August 2011

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Bulletin blog site goes live

Dimitris Politis writes: For many years, the *IMS Bulletin* has been available in two forms: as hard copy, and as a PDF file which was an exact mirror of the hard copy (with added hyperlinks) available as a download from the IMS Bulletin website, located at http://bulletin.imstat.org.

In accordance with the Institute's aim to encourage members to "go green" by opting to receive the electronic version of the *Bulletin*, and be paperless to the extent possible, the need to revamp the online *Bulletin*'s presence was brought forth by President-Elect Ruth Williams.

We are now in the happy position to announce the inauguration of the new electronic version of the Bulletin that was made possible via the efforts of our Assistant Editor, Tati Howell, and Andy Stevens, who has provided technical support. The "new" *Bulletin* can be found at the same website http://bulletin.imstat.org and, as well as having a new look and feel, is beautifully interactive. The PDF version will still be available for each issue, but now, in addition, selected articles from issues will be placed online, including our regular columns, member news, obituaries and meeting reports.

For the first time readers will be able to post their comments on any article they read, thus facilitating a quick and easy exchange of ideas. For example, we are very much looking forward to a lively debate following Anirban DasGupta's call for "A New Core" for the statistics PhD curriculum, on page 8 of this issue, and online.

As ever, we rely very much on IMS members to volunteer their news; you can still do this old-style, i.e., by email to bulletin@imstat.org as well as via the contact page of the Bulletin website.

We are also pleased to introduce a new website feature, a permanent column entitled "Open Forum" that will be an open blog-type area as promised in the January issue. Our "Open Forum" will be devoted entirely to readers' views and contributions on matters of current import.

We hope that readers will take advantage of these interactive features of the new online *Bulletin*. As a start, how about reading some articles and giving us some feedback via the "comment" feature? We look forward to hearing from you!

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Executive Committee

IMS Members' News

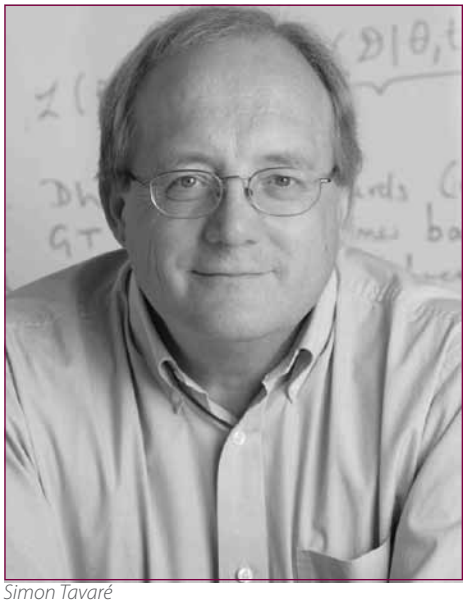
Royal Society elects Steffen Lauritzen and Simon Tavaré

The UK's Royal Society is a fellowship of the world's most eminent scientists and is the oldest scientific academy in continuous existence. Fellows are elected for life through a peer review process on the basis of excellence in science. Each year 44 new Fellows are elected by existing Fellows. Among those elected this year are two IMS Fellows.


Steffen Lauritzen

Professor Steffen Lauritzen is a professor of statistics in the Department of Statistics at the University of Oxford, and a Fellow of Jesus College, Oxford.

Steffen is distinguished for his many contributions to the theory and practice of statistical science. Most notably, he pioneered the field of graphical models, which provide simple and powerful tools for encapsulating conditional independence structures. The area is now a central part of mainstream statistics, and has revolutionized many applications. Lauritzen's contributions range from deep insights into the mathematical structure of this class of models, through innovative and efficient algorithms for their analysis, to applications in artificial intelligence, forensic science and medical diagnosis. Other important work has characterized the analytic structure of statistical models from a differential geometric perspective, via sufficiency


Simon Tavaré

Professor Simon Tavaré is a professor in the Department of Applied Mathematics and Theoretical Physics and Professor of Cancer Research, Department of Oncology, University of Cambridge, as well as Senior Group Leader in the Cancer Research UK Cambridge Research Institute.

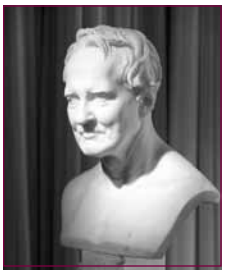
Simon is an internationally recognised figure in the interface between statistics, probability and biological and medical sciences. He has made important contributions to the study of combinatorial stochastic processes, population genetics and statistical bioinformatics. His work in the analysis and interpretation of DNA sequence and related genomic data includes statistical aspects of coalescent theory, including the first full likelihood-based methods for the analysis of sequence variation data, methods for ancestral inference, and for likelihood-free inference and approximate Bayesian computation for complex stochastic processes. He has pioneered the development of evolutionary genomic approaches for understanding cancer.

IMS Members' News

Don Rubin awarded honorary doctorate by University of Bamberg, Germany

Donald B. Rubin, John L. Loeb Professor of Statistics at Harvard University, has been awarded an honorary doctorate by the Faculty of Social Sciences and Economics at Otto-Friedrich-Universität Bamberg, Germany. The honorary doctorate is in recognition of his work in the social sciences and economics, and in particular, for his outstanding contributions to the field of applied statistics.

Jon Wellner received Humboldt Research Award



Jon A. Wellner, University of Washington, USA, has been elected the recipient of a Humboldt Research Award. He was nominated for this prestigious award by Prof. Tilmann Gneiting, University of Heidelberg, Germany. The Humboldt Research Award is conferred in recognition of lifetime achievements in research. In addition, the awardee is invited to carry out research projects of his own choice in cooperation with specialist colleagues in Germany, thereby promoting further international scientific cooperation. See http://www.humboldt-foundation.de/web/programmes-by-target-group.html for further information.

Marie Davidian elected ASA President-elect

Marie Davidian, North Carolina State University, has been voted the next President-elect of the American Statistical Association. She will serve as ASA President during 2012.

IMS Fellow Marie Davidian is William Neal Reynolds Professor of Statistics at NCSU. She is a Fellow of ASA and the American Association for the Advancement of Science, and an elected member of the International Statistical Institute. She has served as editor of *Biometrics* and has earned several awards, including the Award for Outstanding Statistical Application.

Distinguished Professor Bani Mallick

Bani K. Mallick has been promoted to distinguished professor in the department of statistics at Texas A&M University. Mallick is a pioneer researcher in the field of Bayesian nonparametric regression and classification and the author of *Bayesian Methods of Nonlinear Classification and Regression*. He does major collaborative research with scientists from other fields such as petroleum engineering, bioinformatics, traffic mapping, superfund hazardous waste sites, and industrial engineering. He develops novel methodology and theory essential for scientific research in these collaborations and has seven funded research grants.

Dipak Dey associate dean of University of Connecticut College of Liberal Arts and Sciences

Dipak K. Dey, Board of Trustees Distinguished Professor at the Department of Statistics, has stepped down as head of the department and has joined the administration of the College of Liberal Arts and Sciences at UConn as associate dean (Physical Sciences). In addition to his duties overseeing the Physics, Chemistry, Mathematics, Geosciences, Marine Sciences and Statistics Departments, Professor Dey will also be taking care of graduate education within the College of Liberal Arts, international program development, and fostering interdisciplinary research within the University.

Rick's Ramblings: Dehydrated Elephants

Is there actually any use for a dehydrated elephant? **Rick Durrett** thinks that just because we can solve a problem, it doesn't necessarily mean we're asking, or answering, the right question…

Well on my way to birthday "LX" (in an "XL" body), I am grateful that I had the opportunity to meet some of the greatest probabilists of our time. Monroe Donsker, with his wild and crazy eyebrows, took a hiatus from academia between inventing his invariance principle and working with Varadhan on large deviations in order to serve in the diplomatic corps. One night at a party in Spain, while hearing about the exodus of talented individuals from that country he quipped, "Oh you mean, the drain in Spain is mainly on the brain." This has to be one of the greatest one-liners of all time, even if he was later reprimanded for it.

My second dear departed hero, who gives the title to this piece, is Marc Kac, a self-described "simple pole." Throughout his life, he railed against dehydrated elephants. Naively, I thought that in the age of the Internet I could find a copy of the classic cartoon with the punch-line: "I'm not sure what you can do with a dehydrated elephant, but it is nice to see that it can be done." In my opinion, this phrase applies to many of the articles that the IMS publishes its two probability journals. The problem with our publications is best illustrated by a classic Mark Kac line that complains about people who *start with the answers and then figure out what is the question*. The joke begins, "The answer is: 9w." After a sufficiently pregnant pause, the question is revealed: "Do you spell your name with a V, Mr. Wagner?"*("Nein, W")*. If you want to learn more about the man behind these jokes, check out Kac's autobiography, *Enigmas of Chance*.

Returning to my diatribe, one of the problems about what is published in the *Annals of Applied Probability* lies in the dictum applied by referees: "if it's not hard, it's not good." It seems to me that one should give at least equal weight to the question: does the paper say something interesting about the application? To quote my academic godfather, Kai Lai Chung, from the preface of his book on Markov Chains: "Mathematicians are more inclined to build fire stations than to put out fires." Given the content of our journals, the quote should be updated to: "Once we have a blueprint for one fire station, there is no need to actually build it or to engage in the boring enterprise of putting out fires."

This is not to say that theoretical probability is dead and buried. The preview of Alice Guionnet's Medallion lecture on random matrices [*in the previous issue*] is very exciting. At my new home in Durham, we recently had a 2011 revival of the Southeastern Probability Conference. The first conference brought an excellent group of speakers: Timo Seppäläinen (Wisconsin), Jeremy Quastel (Toronto), Lionel Levine (MIT), Pete Kramer (RPI) , Davar Khoshnevisan (Utah), Sourav Chatterjee (NYU), and Gérard Ben Arous (NYU). As I sat there and watched the talks, I could only say WOW. Of course, much of the work presented at the SEPC had a motivation coming from physics or biology, but some talks like Lionel Levine's lecture were mathematically beautiful solutions.

Turning—as I inevitably do in this column—to discussing my own research, one of the great things about coming to Duke a year ago has been the fact that the medical school is on campus, rather than 4+ hours away from "centrally isolated" Ithaca (another Marc Kac phrase that could easily be applied to SAMSI's location in the Research Triangle Park).

One of my new collaborations with local medical researchers involves a study of ovarian cancer. In 2010, an estimated 21,800 new cases developed in the US with 13,850 deaths. As the numbers might suggest this is a deadly disease with a rapid time course. The five-year survival rate is 30%, due primarily to the fact that the tumors which start in the ovary and fallopian tubes do not have significant physical barriers to metastasis into the peritoneal cavity.

With a very talented Duke undergraduate, Kaveh Danesh, I have been working to apply a mechanistic model as an alternative to the phenomenological models that have women hopping from clinical stage I to II to III to IV according to a Markov chain. Our models are multitype branching processes in which type i individuals give birth at rate a_i, die at rate b_i, and mutate to type i+1 at rate u_{i+1}. Before you yawn and say that studying these models is not hard enough to be worth it, put down this issue of the *Bulletin* and try to figure out what the asymptotic behavior of Z_1 has to do with one-sided stable laws, an observation that provides useful insights into tumor heterogeneity and yields remarkably simple explicit formulas for various quantities.

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Returning to the theme of dehydrated elephants, in this project, Kaveh and I have benefited from email exchanges with Vladis Pipiras, Sid Resnick, and Gennady Samorodnitsky, hydrated humans who helped us navigate the voluminous literature of stable laws. Let Λ be a one-sided stable law with index α. Why the heck Peter Brockwell and Bruce Brown in an article in the *ZfW* in 1978 decided to look at $\Lambda^{-\alpha}$ and to produce a power series for its density that has two gamma functions in the denominator, I don't know. Probably, they just wrote down the formula because they had the tools to do so. However, it has been useful for making connections with Kaplan-Meier estimates of the size of the primary tumor when the patient enters the deadly stage III of the disease.

To wrap up this Ramble, the take-home message, which I learned almost twenty-five years ago in work with Simon Levin is this: when your problems come from real questions, then the answers lead you to a territory that is more interesting than when you start with the answer and figure out the question.

Grinding my other ax: probability theory was designed to solve problems, but much of what is published is like poetry in Esperanto, an esoteric art form that can be appreciated only by a handful of people. Is this *really* what we want in our "yellow journalism"?

2011 IMS Election Results

We are pleased to announce the results of the 2011 IMS elections. The next President-Elect is Hans R. Künsch. The five new Council members, for a three-year term, are: Sandrine Dudoit, Steve Evans, Sonia Petrone, Christian P. Robert, and Qiwei Yao. 866 people (21% of members) participated in the elections. Thanks for voting!


Hans Künsch


Sandrine Dudoit


Steve Evans


Sonia Petrone


Christian Robert


Qiwei Yao

NEW IMS EXECUTIVE SECRETARY

Aurore Delaigle will become the IMS's Executive Secretary from August 2, 2011 to July 9, 2014, following Marten Wegkamp's three-year term.

Aurore is a Principal Research Fellow in the Department of Mathematics and Statistics at the University of Melbourne, with research interests in nonparametric estimation of curves, measurement errors, deconvolution problems, functional data analysis, and high-dimensional problems. She is an associate editor for *JCGS*, *JRSSB*, *Statistica Sinica*, the *Journal of Nonparametric Statistics* and the *Journal of the Korean Statistical Society*.

Aurore's web page is http://www.ms.unimelb.edu.au/~aurored/

The Executive Secretary's role is explained in the IMS Handbook, the online version of which is at http://imstat.org/handbook/officers.html#ExecSec

Medallion Lecture preview: Sylvia Richardson

Sylvia Richardson has held the Chair of Biostatistics in the Department of Epidemiology and Biostatistics at Imperial College London since 2000, and heads the Biostatistics group. After a first degree in Mathematics, she received a PhD in probability theory from the University of Nottingham and a *Doctorat ès sciences* from Université Paris XI. She held lectureship positions at Warwick University and Université Paris V and subsequently became "Directeur de Recherches" in the French Research Institute for Medical Research. She was awarded the Guy Medal in Silver from the Royal Statistical Society in 2009 and holds a Royal Society Wolfson Research Merit award for her work on Bayesian integrative analysis in epidemiology, systems biology and genomics. Her Medallion Lecture is at JSM Miami, on Tuesday, August 2, at 10:30am.

Recent developments in Bayesian methods for discovering regression structures: applications in the health sciences

The use of regression analyses to provide important insight into an array of problems is a fundamental approach within the health sciences. Whether the focus is at the detailed molecular level or the broad epidemiological level, regression analyses aim to tease out the likely part played by key variables, often in the presence of complex sources of diversity in the observed and underlying health indicators. The understanding of patterns and sources of heterogeneity derived from these methods can then be used to inform more structured analyses.

From a statistical perspective, heterogeneity is naturally modelled via the use of a rich class of models that can broadly be referred to as mixture models. The fundamental structural uncertainty associated with such models makes the Bayesian statistical paradigm particularly attractive for delivering interpretable inference. Bayesian mixture models have been used in this way in a wide range of applications spanning from molecular biology experiments to determine differential gene expression, to geographical epidemiology applications which study disease patterns across space to suggest potential environmental risk factors. Depending on the context, interest can be directed towards a number of tasks, for example the interpretation of subgroups or the classification and selection of unusual patterns.

Recently, attention has turned to multidimensional models focussed on understanding the combined effects of multiple predictors (such as biomarkers or environmental exposures) on the health of subjects. Furthermore, many current studies now collect data on different stages of biological processes with the aim of enabling joint analysis of large sets of predictors and of responses in order to discover, for example, key predictors that influence many phenotypes. This is a challenging bi-directional situation, where the number of subjects is often much smaller than the number of possible predictors, commonly known as the 'large p, small n' paradigm.

In such applications, the set of predictors can be very large and also correlated in an intricate way. This means that inference via standard regression models is plagued by instability and difficulty of interpretation. There are many ways in which progress can be made, but the reducing the dimensionality of the problem is often a key component of successful analyses.

One approach to accomplish this goal is to include within the analyses the ability to cluster multivariate patterns, using the subject covariate profile, a multidimensional vector, as the main unit of inference. Adopting a flexible mixture model, the covariate profiles are iteratively clustered into groups, whilst also allowing the cluster assignments to be introduced as random effects in a regression model of the response, thereby permitting the response to influence the cluster assignment. Thus, it is the overall effect of combinations of covariates which is assessed in a semi-parametric manner. Although the technical details of such models are fairly well established, in order to apply them in epidemiology, it is important to focus on issues regarding the interpretability and exportability of the inference. Careful post-processing of the output is needed to circumvent labelling issues and to allow the full uncertainty of the cluster assignment to be propagated onto the inference for random effects of interest. A second (and sometimes complementary) approach for dimension reduction is the inclusion of some functionality within the chosen model to explicitly select only those variables that are statistically associated with the response(s). Variable selection for high dimensional data is a generic component of many analyses. In particular, in genetic epidemiology one of the most sought-after statistical output is a set of reproducible 'sparse' models that select only a few relevant predictors (i.e. SNPs, transcripts) amongst a very large set of possible candidates, together with good assessment of how uncertain their role is. The question of how to build suitable prior models that achieve a compromise between the aims of controlling sparsity and that of borrowing information across the responses in order to enhance discovery of key predictors is an active area of research.

I will discuss some recent results in these areas, together with computational issues. The talk will be illustrated throughout by case studies from epidemiology and integrative genomics.

Medallion Lecture preview: Qi-Man Shao

Qi-Man Shao is Chair Professor in the Department of Mathematics at the Hong Kong University of Science and Technology. He received a bachelor's degree in Mathematics and a master's degree in probability/statistics from Hangzhou University and then received a PhD in probability/statistics from the University of Science and Technology of China, under the guidance of Professor Xiru Chen. He is a Fellow of IMS, and was an invited speaker at the International Congress of Mathematicians in 2010.

Qi-Man's primary research interests include limit theory in probability, large sample theory in statistics, self-normalized large deviation theory, high-dimensional and large-scale statistical analysis, Stein's method for normal and non-normal approximation; Gaussian random fields, random polynomials and matrices and Monte Carlo studies. He has served on the editorial boards of *Annals of Applied Probability* and *Annals of Statistics*.

Qi-Man will give his Medallion Lecture at JSM Miami, on July 31 at 4:00pm.

Normal and Non-normal Approximation by Stein's Method

Let W_n be a sequence of random variables of interest. Assume that W_n is asymptotically standard normal. When the accuracy of the normal approximation is the central concern, there are mainly two approaches for estimating the error of the approximation. One approach is to study the absolute error $\sup_z |P(W_n \geq z) - (1 - \Phi(z))|$ via a Berry-Esseen type bound. The other approach is to estimate the relative error of $P(W \geq z)$ to $1 - \Phi(z)$ through a Cramér type moderate deviation. A standard and classical approach to Berry-Esseen type bound and Cramér type moderate deviation is Fourier transform and/or conjugate methods.

However, there are many situations where, for example, for W_n under dependence structure, the aforementioned methods are very difficult to use. It is Stein (1972) who introduced a totally different method to determine the accuracy of the normal approximation to the distribution of a sum of dependent random variables. The method has been shown to be a powerful tool in estimating accuracy of various probability approximations. In contrast to the classical characteristic function method, the merit of Stein's method is that it works well for both independent and dependent random variables. The method has been extended beyond the normal approximation and applied to problems in various areas.

In this lecture, we will give a brief survey of recent developments of Stein's method for both normal and non-normal approximation. Motivated by applications to false discovery rate in simultaneous hypothesis tests, our focus will be on the Cramér-type moderate deviations for Studentized non-linear statistics, and for W_n under a general framework of the Stein identity which includes the sum of random permutation arrays, the binary expansion of a random integer, the anti-voter model on a complete graph and the Curie-Weiss model as special cases. On the other hand, when the limiting distribution of W_n is unknown, an exchangeable pairs approach will be introduced to identify the limiting distribution and evaluate the absolute error of approximation. Applications to Curie-Weiss model at the critical temperature and other models in statistical physics will also be discussed.

There seem to be many unsettled questions and much territory that can be explored with the help of Stein's method. Indeed, the potential of Stein's method is unbounded.

IMS activities at JSM

If you're coming to the Joint Statistical Meetings in Miami, Florida (July 30 to August 4), please drop by the IMS booth in the Expo to say hello. If your students will be there, remind them that IMS membership is free, and provides them with online access to all the IMS journals—they can join up at the IMS booth or online.

There will be an opportunity to socialize with other IMS members and JSM attendees after the **IMS Presidential Address and Awards Ceremony**, on Monday August 1 from 8:00–11:00pm, in Ballroom D at the Convention Center. Hope to see you there!

For program and other information about Miami, please see the JSM website, at http://amstat.org/meetings/jsm/2011/

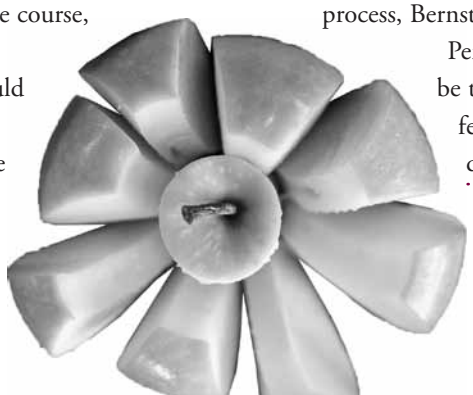
Anirban's Angle: A New Core?

Anirban DasGupta writes: PhD students in statistics departments across the world are asked to take a course on the core theory of inference, the so-called "qualifier theory course". I took mine at the ISI in Calcutta in 1977. It was masterfully taught by K.K. Roy, and covered what was essentially globally regarded as the core of inference, exponential families, sufficiency, ancillarity, completeness and UMVU, MLEs, Fisher information and Cramér-Rao, asymptotics of MLE, consistency, delta and Slutsky's theorem, NP lemma, MP and UMP tests, MLR families, LRT, UMA confidence sets, duality of confidence and testing, basic game theory, Bayes rules, admissibility, minimaxity, Wald's SPRT, and rank tests. Bickel and Doksum had just come out and hadn't reached India; we used Ferguson (1967), and we all agreed that it was a fulfilling course.

But that was then, and this is now. Through purely personal interactions, I have had anecdotal evidence of some sentiment that a part of what was long regarded as the core of inference is not considered too relevant now. The events and the discoveries of the last thirty years make it necessary to re-evaluate what is the core theory of statistics that a fresh PhD ought to be expected to know, and understand. To get a sense of my colleagues' pulse, I checked out the syllabi of the core course at Berkeley, Stanford, Chicago, Washington, UPenn, Carnegie Mellon, and Duke. I also contacted 11 experts in the US, Europe, Australia, and India, and solicited their definition of what should be in the qualifier theory course. The responses quite surprised me.

I was surprised by the fantastic diversity of the opinions on what should be in that first theory course. The intersection of the definitions was empty, barring sufficiency, exponential families, and MLEs. But there was an unmistakable desire to put less emphasis on parametrics, unbiasedness, on UMP tests, on certain parts of decision theory, traditional sequential analysis, and the old nonparametrics. On the other hand, the responses included many "new age" topics: the bootstrap, AIC and BIC, VC theory, empirical processes, permutation tests, EM, MCMC, function estimation, sparsity, causal inference, extreme values, and some more.

The responses are revealing. They told me that while there is a sharp hunger for change in that traditional core course, it is no longer possible to have an approximate global consensus on what that first course should teach. The core course will probably become rather local, and we wouldn't be able to assume that a fresh PhD from a statistics program has seen and been tested on a set of common topics in inference.



What would I teach personally in that first course? After reading all the responses that I received, I think I personally agree with these two statements from John Marden and Philip Stark: *the first math-stat course should be about how to think about models and inference and the mathematical (as opposed to computational) framework to attack the problems*; and, *you need to have some idea of what's possible, and where to look for approaches, ideas, inspirations, theorems*. I think my own *dottrina à nouveau* could be something like this, the topics and the number of 50-minute lectures on each (43 in total).

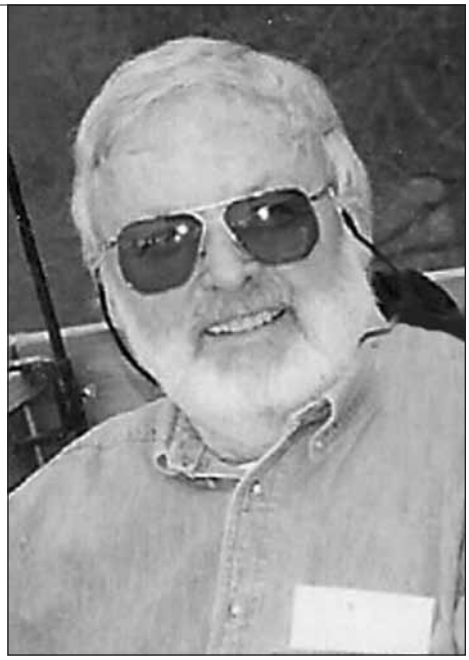
Problems and basic principles of inference, selecting and evaluating a procedure, loss and risk, bias, variance, parametric vs. nonparametric modelling, optimality vs. robustness, Hogg's adaptive estimate (nontechnical; 2); modelling, location-scale, exponential families, mixtures, heavy tails, non/semi-parametric models, dependence (4); data summary, likelihood function, sufficiency, factorization and Rao-Blackwell, definition of UMVU (3); score function, Fisher information, information matrix, Cramér-Rao (3); MLEs, general and in exponential family, some nonregular, some multiparameter, nonexistence, difficulty of computing, refer to EM in Bickel-Doksum (3); simulate the Cauchy MLE and median, statement of Portmanteau, asymptotic normality and Cramér-Rao conditions, observed information and sandwich, two parameter Gamma, plug-in, delta and Slutsky, applications (5); priors, posteriors, conjugate priors, posterior means, posterior and Bayes risk, comparison with MLE, Bayes vs. minimaxity, from Bickel-Doksum (5); testing, error probabilities and power, NP lemma, applications, statement of UMP one sided tests (3); LRT, three examples of Bickel-Doksum, chi square limit (3); confidence sets, duality with testing, t interval, asymptotic confidence intervals, definition of posterior credible interval (3); the empirical CDF; SLLN, Glivenko-Cantelli and DKW; purpose, use, and scope of bootstrap; bootstrap bias and variance estimation; consistency of bootstrap, permutation tests (4); a personal selection from James-Stein and Donoho-Johnstone estimates, sparsity, SURE, Gaussian sample maximum, kernels, RKHS and function estimation, model choice, AIC, BIC, VC and martingale inequalities, Bayes factors, Dirichlet process, Bernstein-von Mises (5).

Perhaps someone else will address what should be taught in Stat 100. Opinions will probably differ on that, too. But that's an issue for another day.

Log on to the Bulletin website and share your comments at http://bulletin.imstat.org

Obituary: Timothy Robertson

1937–2010



Tim Robertson

Professor Tim Robertson passed away on April 5, 2010, to the regret of his colleagues, family and friends. His former students, collaborators and colleagues who had held him in high esteem throughout his distinguished academic career covering 39 years in the Department of Statistics and Actuarial Science at The University of Iowa mourned his passing.

Professor Robertson died suddenly at the age of 72. He was preceded in death by his loving wife and lifelong companion Joan, who had passed away on February 25, 2010. He is survived by his four children--Kelly, Jana, Doug and Mike--and six grandchildren.

Timothy Joel Robertson, son of Helen Oliver-Girdner and stepfather Flick Girdner, was born October 4, 1937, in Denver, CO. Tim's family moved to Chilicothe, MO, in 1942. He graduated from Chilicothe High School in 1955. Tim attended the University of Missouri in Columbia and received his B.A. in mathematics in 1959. He and Joan were married prior to his senior year at M.U. Tim entered Graduate School in the fall of 1959, and obtained his M.S. in mathematics in 1961. Tim accepted an Assistant Professor position in mathematics at Cornell College in Mount Vernon, IA, and he and Joan also served as houseparents in the men's dormitory from 1961–1963.

Tim and Joan enjoyed the environment at Cornell College, but they decided to return to Columbia, MO, in 1963 for Tim to pursue his Ph.D. Tim's thesis advisor at M.U. was H.D. (Dan) Brunk, and he and Tim established a close friendship which existed until Dan's death in 2009. Dan instilled an appreciation for mathematical rigor and a thrill of research in Tim that carried through Tim's entire academic life.

Tim joined the Department of Statistics and Actuarial Science at the University of Iowa as a new Ph.D. in 1965. Tim was a good teacher and researcher, and was promoted to Associate Professor in 1968, and to full Professor in 1974. Eighteen students wrote their Ph.D. dissertations under Professor Robertson's guidance. Most became successful scholars in their own rights, and several maintained contact with Professor Robertson until his death.

Professor Robertson was a successful and well-respected scholar. He was a Fellow of both the American Statistical Association and the Institute of Mathematical Statistics. He was elected to membership in the International Statistical Institute, and he was an active member of the Mathematical Association of America. Professor Robertson was the lead author (with F.T. Wright and R.L. Dykstra) on the monograph "Order Restricted Statistical Inference," which was considered the standard reference on the topic. Tim was the recipient of a University of Iowa Collegiate Teaching Award in 1990 and was generally recognized as being an outstanding teacher. Tim served as Associate Editor for several statistical journals, and also took an active role in University activity. He served on the Educational Policy Committee for several years as well as on the Board in Control of Athletics. Though Tim was a demanding advisor, he was also nurturing. Though he had high expectations of his students, his office door was always open to them. Tim was enthusiastic in the classroom, and many of his students recall being kept on their toes by relevant questions being directed at them.

Tim eventually developed many interests outside the University. Tim loved the outdoors and often took his family on camping and canoeing trips to the Boundary Waters of Minnesota and various Iowa rivers. Tim trained hunting dogs, competed in field trials with them, and was a founding member of the Eastern Iowa Shooting Dog Association. In 1992, Tim and Joan purchased a farm near the Cedar River at Cedar Bluffs. They built a modest home (referred to as the Cabin) on the farm, and the Cabin was later enlarged to become the elegant, comfortable home that he and Joan enjoyed until their deaths.

Tim loved his children, grandchildren, children's spouses, dogs, jawbreakers, horses, fishing, red sweatshirts, beautiful sunsets, risqué songs, his four wheeler, riding his bike to work, a good debate, and popcorn. Tim was a man of great intellect, passion, laughter, strength and love that will be missed by all who knew him.

Richard Dykstra
Professor of Statistics & Actuarial Science
College of Liberal Arts and Sciences
The University of Iowa.
This obituary first appeared on the University of Iowa's website and is reproduced by kind permission,

Obituary: Bernard Harris

1926–2011

Bernard Harris passed away peacefully on January 28, 2011, at Tulane University Medical Center in New Orleans, La., following complications from heart surgery.

Bernard was born on June 20, 1926, in New York City, the son of Samuel S. and Ella L. (Heyman) Harris. An academically precocious youngster, he graduated at an early age from Townsend-Harris High School, and then entered City College of New York. During his college education, he was drafted into the army, assigned to the Counter Intelligence Corps, and sent to Germany towards the end of World War II. Upon completion of military service, he finished his bachelor's degree in business administration at City College in 1946. He changed his academic focus to mathematics and statistics, earned a master's degree from George Washington University in 1953, and in one year, completed his doctorate at Stanford University in 1958.

During the years between his master's and doctorate degrees, he worked as a statistician at the US Census Bureau and as a mathematician for the National Security Agency. After completing his doctorate, he became an associate professor in the Department of Mathematics at the University of Nebraska–Lincoln. He moved to Madison, Wisconsin, to work as a professor in the Mathematics Research Center at the University of Wisconsin–Madison from 1964 to 1985, and as a professor in the Statistics Department at the University of Wisconsin-Madison from 1966 to 2002. After his retirement from UW–Madison, he rejoined the faculty of the Statistics Department at the University of Nebraska-Lincoln and was an adjunct faculty member there until his death. Bernard enjoyed visiting professorships at the Technical Institute in Munich, Germany; Technical University of Eindhoven, Netherlands; University of Lund, Sweden; the Mathematics Institute Steklova, Moscow, Russia; University of Münster, Germany; Heinrich Heine University in Düsseldorf, Germany; and KTH in Stockholm.

Bernard was a member of many commissions and advisory boards for the government including a review board of the US Nuclear Regulatory Commission and the Statistics Task Force for the FAA/DOD Committee on Material Properties. He was an elected fellow of the Institute of Mathematical Statistics and the American Statistical Association. He was proud to be one of founding members of the Section on Risk Analysis for the American Statistical Association and served as its first chair. He was a member of the Classification Society of North America, and served on its board of directors. He was also a member of the International Classification Society and the American Mathematical Association. He was a recipient of the Pioneers of Science Award. Professor Harris was a perennial advocate of and contributor to statistical science for the Department of the Army. He participated as part of the Mathematics Research Center at Wisconsin that supported the Army in addressing research questions and presented his work at countless statistical conferences sponsored by the Army spanning the years, 1964–2010.

His contributions to risk analysis, reliability, probability, and statistical inferences with application to open DOD questions, such as the survivability of subterranean targets, was recognized in 1982 with the Wilks Award for Contributions to Statistical Methodologies in Army Research, Development and Testing. His work continued to address current problems in his later years, with recent work concerning mathematical methods in combating terrorism, and his 2010 paper entitled "Random Contamination of Semiconductor Materials."

Bernard was the author of a book, *Theory of Probability,* and the editor of *Spectral Analysis of Time series* and *Graph Theory and its Applications*. He published hundreds of articles and reviews in professional journals over the course of his career. He was most proud of his work in random mappings, combinatorics, reliability and risk analysis.

In addition to his academic interests, Bernard enjoyed a wide variety of music (classical, opera and jazz), reading in several languages, gourmet cooking, films and doing the *New York Times* crossword puzzles (in ink). He loved to create simple and complex puns.

Most of all, Bernard deeply loved and appreciated his family and steadfastly supported them with his advice and presence. Bernard was a member of the Beth Israel Congregation in Madison.

Bernard married Anita (Greenberg) in 1949. He and Anita had four children, Shelley Nolte, Mark Harris (Katherine), David Harris (Susan) and Susan Handrich (Tom). His wife, Anita, died in 1977. He married Susan Stephens Burns in 1983, and was a stepfather to Laura Burns (Brad Sinner) and Erin Charles (Jesse). He was the proud grandfather of seven. He was preceded in death by his parents; his brothers, Alan and Alvin; his first wife, Anita; and his beloved daughter, Shelley.

Memorials may be directed to the American Statistical Association to support the education of young statisticians.

Written by members of the Harris family.
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http://madison.com/obit/179112

Meeting report: ISOSS Lahore Conference

Munir Ahmed, the Founding President of Islamic Countries Society of Statistical Sciences (ISOSS), reports on the Lahore ISOSS Conference, which emphasized the increased strategic role of statisticians.

The 8th International Conference on Recent Advances in Statistics: "Statistics, Biostatistics and Econometrics," was held on February 8–9, 2011 at the National College of Business Administration and Economics (NCBA&E), Lahore, Pakistan. The conference was organized by the Islamic Countries Society of Statistical Sciences (ISOSS) in collaboration with the NCBA&E in honour of the ISOSS President, Dr Shahjahan Khan, for his outstanding contribution in leading ISOSS as an international professional organisation of statisticians through organisation of a number of international conferences and promoting statistics globally.

Delegates from around the world, including Australia, Europe, Middle East, South Asia and USA, presented their recent research outputs in diverse areas of statistics. A total of 320 participants from Pakistan and other countries took part in the conference deliberations. In various scientific sessions, 142 research papers were presented highlighting recent advances in statistics, biostatistics and econometrics. Unfortunately, many Western participants were unable to present their submitted papers due to travel restrictions to Pakistan. A large number of statisticians who could not join the conference sent their messages of appreciation emphasizing the great contributions of Dr Shahjahan Khan.

Mian Shamim Haider, a former Federal Minister of Railways and Sports of the Government of Pakistan, inaugurated the conference as the chief guest. He emphasized the use of statistics in planning and development of Pakistan and how high-tech industries can be established in Pakistan by importing the latest statistical techniques and developing new indigenous technologies based on recent advances in Pakistan. The founding President of ISOSS Dr Munir Ahmad, and Vice-President of ISOSS Dr Mohammad Hanif Mian, spoke in the opening session. All the speakers spoke highly of the groundbreaking work of Dr Shahjahan Khan, and the chief guest presented a crest to him to mark his remarkable contributions to the promotion and development of statistics.

In his address Dr Shahjahan Khan highlighted how the perception of statistics has changed from a mere tool of calculation of numbers to making decisions in the face of uncertainly and taking the role of strategists for government and business. He emphasized more visible and dominant presence of statistics to the solution of complex issues the humanity faces today. Statisticians are uniquely positioned, he said, to contribute significantly in addressing the burning problems of our time. Statistics has come up with solutions to many problems where other disciplines have failed.

Dr Munir Ahmed (left), former Minister Mian Shamim Haidar presenting the crest of honour to Dr Shahjahan Khan, University of Southern Queensland, Australia

One of the main attractions of the conference was the official opening of ISOSS House, which had been recently completed. The participants reflected on the dream of the founding President of ISOSS, Dr Munir Ahmad, and thanked everyone who had contributed to the project financially and otherwise. The office of ISOSS has now been shifted to the ISOSS House and it has facilities for offices, library, computer lab, training and meeting rooms etc. In the next phase of the project, ISOSS plans to build facilities to accommodate visiting scientists and research workers to promote excellence in statistical teaching, learning and collaborative research.

The Business Session of the conference recommended unanimously that: in Pakistan the National Statistical Council must be revived, the recently-created Pakistan Bureau of Statistics should be properly staffed by qualified statistical scientists, Pakistan should take necessary steps to meet the requirements for becoming a statistically-advanced country, the Government must work on international bodies particularly in the UNO, UNDP etc. for inviting local statistical experts by other countries as advisors, establish Statistical Research Station in each province for the discovery of new knowledge and development of new techniques, conduct micro-censuses at every alternate year for the updating of population growth, and address an immediate need for an International Journal of Official Statistics.

Ann Appl Stat paper in "Hockey Stick" debate

The "Hockey Stick" Debate: new study finds "substantial uncertainty" with temperature reconstructions using natural proxies

A press release from the Kellogg School of Management, home of one of the authors of a controversial paper in the Annals of Applied Statistics, outlines a few of the issues:

Since 1998, climate scientists have attempted to reconstruct global annual temperature over the last millennium using natural proxies such as tree rings and ice cores. However, a new study finds substantial uncertainty in these reconstructions.

In their research, [IMS members] Professors Blakeley McShane of the Kellogg School of Management at Northwestern University and Abraham Wyner of the Wharton School at the University of Pennsylvania, find that natural proxies are weak predictors of global annual temperatures over the last one thousand years.

Proxy-based temperature reconstructions such as the renowned "hockey stick" graph have arguably become the most iconic illustration of global warming. The hockey stick is a temperature reconstruction which features a long flat "handle" indicating temperatures were relatively consistent for 900 years followed by a sharp upward "blade" indicating that temperatures dramatically increased over the past 100 years.

"We conclude unequivocally that the evidence for a 'long-handled' hockey stick is lacking in the data," the authors wrote. The handle of the hockey stick "is best understood to be a feature of regression and less a reflection of our knowledge of the truth... The fundamental problem is that there is a limited amount of proxy data which dates back to 1000AD; what is available is only weakly predictive of global annual temperature." While they do not deny the existence of climate change, they believe the case as it pertains to proxy-based temperature reconstructions has been overstated.

In their study, the statisticians assessed the reliability of temperature reconstructions and their statistical significance against various models. Additionally, they compared existing reconstructions of Northern Hemisphere average annual land temperature over the last millennium to their own reconstruction. While their reconstruction produced temperature estimates over the last 500 to 1000 years which largely matched those produced by climate scientists' models, McShane and Wyner found substantially larger uncertainty intervals as compared to the other models.

"Natural climate variability is not well understood and is probably quite large," the authors wrote. "It is not clear that the proxies currently used to predict temperature are even predictive of it at the annual or decadal scale over several centuries. Nonetheless, paleoclimatological reconstructions constitute only one source of evidence in the Anthropogenic Global Warning (AGW) debate."

The study, "A Statistical Analysis of Multiple Temperature Proxies: Are Reconstructions of Surface Temperatures Over the Last 1000 Years Reliable?" was published in March 2011 issue of *The Annals of Applied Statistics*.

Oh? Not that kind of hockey stick?

AOAS Editor's comment

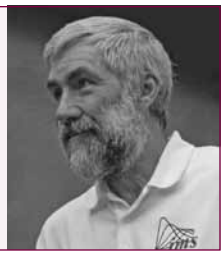
Bradley Efron, Editor-in-Chief of *The Annals of Applied Statistics*, notes that the article was published with 13 commentaries, by both statisticians and climate specialists, most of which were quite critical.

In Other News: *AOAS* in the News!

The *New York Times* featured an article on July 8 about false cancer cure medicine. The article, by Gina Kolata, credits *The Annals of Applied Statistics* with publishing the key whistle-blowing article: a paper by Keith Baggerly and Kevin Coombes (AOAS 2009, Vol. 3, No. 4). Read Kolata's article at http://www.nytimes.com/2011/07/08/health/research/08genes.html

Terence's Stuff: Gender Equity

Terry Speed believes that gender equity is not just desirable but possible and beneficial—but it is not an easy journey



In February 2010 the director of my (medical research) institute created a committee to formulate policies and actions promoting gender equity (GE), with the understanding that he would do whatever was in his power to implement its recommendations.

What is the problem? Statistics can help us see it. Trends in the percentage of females at different academic levels can be an eye-opener. In my institute, nearly 60% of the undergraduate and PhD students are women, about half of our post-doctoral scientists are women, 25% of our lab heads are women—but just one of our 15 division heads, and two of our 21 full professors, are women. These proportions have barely changed in the last decade, and the disparities were even greater further back. Of course statistics alone don't prove that there is a problem. The introductory comments by Professor Lotte Bailyn, then chair of the MIT faculty, to a landmark 1999 report put it nicely: *Our first instinct is to deny that a problem exists (if it existed, it would surely have been solved by now), or to blame it on the pipeline or the circumstances and choices of individual women.* She continued, *None of these, however, explains the inequities surfaced by the Committee*.

Why does it matter? Professor Rachel Webster of the University of Melbourne's physics department said this, at a recent GE workshop: *It is abundantly clear that women and men are equally talented in their capacity for scientific research. However they may not operate in the same way within our social context. Our challenge is to create the environment that realises* all *that talent, rather than just a fraction of it.*

It came as no surprise to me to learn that, to the women on our GE committee, the single most important GE issue is child-care. At last our institute is doing something about *that*, although it will clearly be some time before it is adequately addressed. I was surprised to learn how much is going on elsewhere to promote GE, and embarrassed to realize that I have been dragging my feet for a quarter of a century.

Many US universities now have an office or centre of Work/Life, to help implement family-friendly policies on parenting, child- and elder-care. Good policies on tenure clock extension, modified duties after the arrival of new children, flexible working patterns, and emergency assistance, are widespread. For example, UC Berkeley gives one semester off teaching for all new parents, and two semesters off for the birth parent. This gives a semester for transitioning and research catch-up, and a semester for the physical maternity leave. The University of Michigan gives both to both parents. There are now many policies on these matters in place around the US, institutional contributions to GE.

In my own institute, we now try to confine meeting times to 9:15–4:30; we have a generous child-care subsidy for selected individuals; there's a private room where mothers can breast-feed, or express and store milk; a family room for emergency child-care is planned; and we are trying to make it easier to work from home. The capacity exists to hire temporary technical assistance for continuity of effort during maternity leave. We have a "Women in Science" lecture series. We send women on leadership-training courses and we fund a family-friendly viewing room at a series of annual national conferences,

Changes of the kind I have just mentioned are the easiest to bring about. The ideas might come from those below, but their implementation is from the top. And note that they tend to be aimed at women in the first 10–15 years of their careers, and specifically address the issue of children. Different policies and practices are needed to affect the middle and later years of a woman's career, and to include women who do not have children.

How can we bring about changes to institutional and broader professional cultures, to ensure that all women realize their potential? There are no quick fixes here. Committees addressing hiring, prizes, conference programs, and other decisions must consciously look for women as fellow committee members, candidates or speakers, since qualified females can be overlooked on all fronts. Effective and uniform policies for mentoring all junior colleagues are needed. Women may require more support as they approach key career transition points, by encouragement to apply for positions or fellowships, and by having "champions" in the system to promote their interests, e.g. through a network of senior colleagues. There must be equitable distribution of rewards, resources and responsibilities—salaries, fellowships, awards, space, teaching and committee assignments—and effective mechanisms to notice and address inequities when they arise.

I believe gender equity *is* achievable, but getting there will require imaginative and sustained effort on the part of all of us.

IMS meetings around the world

IMS co-sponsored meeting

International Conference *Ars Conjectandi* 1713–2013 NEW

October 15–16, 2013

Basel, Switzerland

w http://www.statoo.ch/bernoulli13/

2013 marks the 300th anniversary of the publication of Jacob Bernoulli's book, *Ars Conjectandi,* in 1713. A meeting has been organized to celebrate this: the "International Conference *Ars Conjectandi* 1713–2013" will be held October 15–16, 2013, in Basel, Switzerland.

IMS Representatives on the program committee are Hans Künsch and Lutz Dümbgen.

IMS Annual Meetings, 2012 & 2014

IMS sponsored meeting

2012 World Congress/IMS Annual Meeting

July 9–14, 2012

Grand Cevahir Hotel & Convention Center, Istanbul, Turkey

w 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.

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

Istanbul's Bosphorus Bridge connects Europe (on the left) and Asia (right)

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!

Joint Statistical Meetings, 2011–2015

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/

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

IMS Annual Meeting @

2013 Joint Statistical Meetings

August 3–8, 2013, Montréal, Quebec, Canada

w TBC

IMS sponsored meeting

2014 Joint Statistical Meetings

August 2–7, 2014, Boston, Mass., USA

w TBC

IMS sponsored meeting

IMS Annual Meeting @ 2015 Joint Statistical Meetings

August 8–13, 2015

Seattle, Washington, USA

w TBC

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2011

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, **August 3–8, 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**

The Second IMS Asia Pacific Rim Meeting
July 1–4, 2012
Tsukuba, Japan
w http://www.ims-aprm2012.org/

Program Chairs: Byeong U. Park **e** bupark@stats.snu.ac.kr), Runze Li **e** rli@stat.psu.edu

Meeting postponed from 2011

Since the massive earthquake struck Japan on March 11, the local organizing committee and the scientific program committee decided to postpone the meeting until next year. We have rescheduled it to **July 1–4, 2012**, and moved it to **Tsukuba**, the science city and academic center of Japan, which is about 60km from Tokyo.

We hereby cordially invite you all to attend the meeting next year, when we are certain that you will witness a strong recovery of Japan from one of the most severe natural disasters in recent history.

Akimichi Takemura, LOC Chair
Byeong Park & Runze Li, SC Co-Chairs

IMS co-sponsored meeting

Colloquium in honor of Hans Rudolf Künsch on the occasion of his 60th birthday
October 3–4, 2011, ETH Zurich, Switzerland

IMS Reps: Peter Bühlmann, Marloes Maathuis, Sara van de Geer
w https://stat.ethz.ch/events/Colloquium_Kuensch

Keynote speakers are Jim Berger (Duke University), Stuart Geman (Brown University), Peter Green (University of Bristol). Invited speakers are: Rainer Dahlhaus (University of Heidelberg), Arnoldo Frigessi (University of Oslo), Reinhard Furrer (University of Zurich), Havard Rue (Norwegian Univ. S&T Trondheim), Reto Knutti (ETH Zurich), Christian P. Robert (Université Paris-Dauphine).


Hans R. Künsch

IMS co-sponsored meeting

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

Organized by the Applied Statistics Association of Sri Lanka (ASASL). The meeting location is at the water's edge in the capital city of Sri Lanka.
IMS Rep: Peter Hall.
The website is under construction.

ENAR, 2012–2014

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

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 co-sponsored meeting

International Symposium in Statistics (ISS) on Longitudinal Data Analysis Subject to Outliers, Measurement Errors, and/or Missing Values
July 16–18, 2012
Memorial University, St. John's, Canada
w www.iss-2012-stjohns.ca

IMS Rep: Brajendra Sutradhar

IMS co-sponsored meeting

36th Conference on Stochastic Processes and their Applications
July 29 – August 2, 2013
University of Colorado, Boulder, USA
w TBC

Other meetings around the world

Second Announcement

Third Latin American Meeting on Bayesian Statistics
(3er Congreso Bayesiano de América Latina—COBAL)
and XXXVIII National Meeting of Statistics
(XXXVIII Jornadas Nacionales de Estadística—JNE)
October 23–27, 2011
Pucón, Chile

w http://cobal2011.usach.cl

The 3rd Latin American Meeting on Bayesian Statistics and the XXXVIII National (Chilean) Meeting of Statistics, organized by the Universidad de Santiago de Chile in collaboration with several national universities, will take place on October 23–27, 2011, at the exotic and beautiful southern city of Pucón, Chile (http://www.visitpucon.com).

The main goals of this joint event are to facilitate the exchange of recent research developments in statistical methodology and theoretical developments (Bayesian for COBAL, miscellaneous for JNE), to establish new collaborations and partnerships among attendants, and finally, to provide opportunities for students and researchers to share ideas and discuss statistical methods.

Confirmed Invited Speakers are Trevor Hastie (Stanford University, USA); Peter Müller (University of Texas, Austin, USA); Fabrizio Ruggeri (CNR - IMATI, Italia); Wilfredo Palma (Pontificia Universidad Católica de Chile); Fernando Quintana (Pontificia Universidad Católica de Chile); Jean-Michel Marin (Université Montpellier II, France); Alexandra Schmidt (Universidade Federal do Rio de Janeiro, Brasil); Ramsés Mena (Universidad Nacional Autónoma de México); and Sujit Ghosh (North Carolina State University, USA).

There will be thematic sessions related to Identifiability, Biostatistics and Bayesian Foundations, as well as an AMSBI (Applied Stochastic Modeling in Business and Industry) discussion paper session.

A confirmed mini-course relates to specific topics on "Item Response Data Modeling". Tentatively, the second one is entitled "Measurement Error Modeling"

The thematic sessions will include a young statisticians session for doctoral students in the final stage of their thesis work, or young researchers, who want to share and show their more recent developments. There will also be oral communications and poster sessions for contributed papers.

Registration is available on the website. For foreign attendants, it is important to be registered before the deadline. They may make their payments the first day of the meeting.

See website for deadlines

Meeting email **e** cobal2011@gmail.com

We are looking forward to seeing you in Pucón!

Organizing Committee

Concentration inequalities and their applications
January 23–27, 2012
Centre International de Rencontres Mathématiques (CIRM),
Marseille, France

w http://www.cirm.univ-mrs.fr/

The workshop will focus on recent advances and applications of measure concentration and will gather participants from various areas where this idea has been useful and fruitful to favour exchanges and collaborative research. The topics of interest are, among others, asymptotic geometric analysis, probability theory, statistical mechanics, random matrices, dynamical systems, (quantum) information theory, random graphs, randomized algorithms, statistics, compressed sensing, learning theory.

The workshop will be organized around four mini-courses by S. Chatterjee, Courant Institute, USA; A. Guillin, University of Clermont-Ferrand, France; P. Massart, University of Paris XI at Orsay, France; and A. Panconesi (La Sapienza University, Roma) & D. Dubhashi (University of Trier, Germany). There will also be invited talks on different topics covering the main interests.

The CIRM covers all the living expenses but not travel expenses.

Looking forward to your participation to the workshop.

The organizers:

J.-R. Chazottes, Ecole Polytechnique, Paris, France

M. Ledoux, University of Toulouse, France

F. Redig, Radboud University of Nijmegen, The Netherlands

Analytical Methods in Statistics (AMISTAT)
October 28–30, 2011
Prague, Czech Republic

w http://amistat2011.karlin.mff.cuni.cz

The Workshop Analytical Methods in Statistics (AMISTAT) is held in honor of Professor Abram Kagan in Prague from October 28 to October 30, 2011.

The main speakers are Abram Kagan, Ildar Ibragimov, Lev B. Klebanov, Gerard Letac, Lutz Mattner, Yakov Nikitin, Stephen Portnoy, Yosef Rinott, Georgy Shevlyakov.

Discussant: Dmitrii Chibisov.

Contact: amistat2011@karlin.mff.cuni.cz

or Jana Jureckova: jurecko@karlin.mff.cuni.cz

Statistical Analyses for Next Generation Sequencing NEW
September 26–27, 2011
Birmingham, Alabama

w http://www.soph.uab.edu/ssg/courses/nhgri_r13/ngsstat

The University of Alabama at Birmingham's Section on Statistical Genetics is pleased to announce our NHGRI-funded conference on Statistical Analyses for Next Generation Sequencing.

Next-generation sequencing technology is impacting almost all aspects of biomedical research. This technology generates an unprecedented wealth of data that demands novel analysis strategies. While IT infrastructure and bioinformatics developments are obviously required to enable sound information extraction, sophisticated statistical methodologies and algorithms are also essential for interpreting the data. In this regard, we are organizing a NHGRI funded two-day conference, calling statisticians, genetic epidemiologists, bioinformaticians, and genome biologists, to discuss the statistical challenges and opportunities in next-generation sequencing data analysis. We believe that this conference will provide a venue for exchanging of cutting-edge information and ideas, and fostering collaborations among methodologists, analysts, and biomedical investigators.

Topics include:

1. New advances in the application of next-generation sequencing technology
2. RNA-seq and miRNA-seq data analyses
3. ChIP-seq, methyl-seq data analyses, and integration with other high dimension data types.
4. Next-generation sequencing for de novo sequencing and resequencing
5. Incorporating next-generation sequencing data into the genetics study of complex disease
6. Rare Variant Association Analyses and next generation sequencing
7. SNP and structure variation analysis using next-generation sequencing
8. Haplotype analysis with sequencing data

Poster Session available! Deadline for Abstract submission for posters and short talks is August 14, 2011. Short talk acceptance will be notified by Friday, Aug 21, 2011.

Invited Speakers: Hongkai Ji, Suzanne Leal, Xiaole (Shirley) Liu, Ali Mortazavi, Richard Myers, Benjamin Raphael, Stephanie Santorico, Hongyu Zhao, Thomas Wu.

Attendance is limited. Please register early. Women, members of underrepresented minority groups and individuals with disabilities are strongly encouraged to apply.

NIMBioS Investigative Workshop: NEW
Mathematical Modeling of Intracellular Movements
October 24–26, 2011
Knoxville, TN

w http://nimbios.org/workshops/WS_intracellular_mv.html

The National Institute for Mathematical and Biological Synthesis (NIMBioS) is now accepting applications for its Investigative Workshop, "Mathematical Modeling of Intracellular Movements" to be held October 24–26, 2011, at NIMBioS.

Recent advances in live cell microscopy have resulted in a flood of time-lapse observations that reveal a high degree of motility inside cells. Quantitative analysis of these movements is necessary to gain a full understanding of intracellular dynamics and their regulation. This analysis is often hampered by the sheer complexity of the movements, the great number of objects to be tracked, and the diffraction limit of optical microscopes. At the same time, mathematical and statistical models have made significant progress in producing fast algorithms that reliably track multiple objects in space. In some cases, these models were successfully applied to cell biological data sets, but the full potential of a rigorous mathematical approach that can be employed across a wide range of biological processes has not been realized. This NIMBioS Workshop will bring together experts from cell biology as well as mathematics, statistics, computational science and physics to discuss current approaches and possible alternatives.

For more information about the workshop and a link to the online application form, go to the website above.

If needed, applicants may request travel and lodging support. Participation is limited, and those selected to attend will be notified within two weeks of the application deadline. Application deadline: **July 24, 2011**

The 2012 Stochastic Networks Conference NEW
June 18–22, 2012
MIT, Cambridge, MA, USA

w http://stoch-nets-2012.lids.mit.edu/

This event will bring together researchers who share an interest in stochastic network models, to survey recent developments, and identify future research directions. The meeting will be structured in a workshop format, with approximately twenty hour-long invited talks, and ample free time, so as to maximize interactions between speakers and participants, and to facilitate a fruitful exchange of ideas. In addition, there will be a poster session for contributed papers.

Employment Opportunities around the world

Canada: Montreal, Québec

McGill University Faculty of Medicine

Chair of the Department of Epidemiology, Biostatistics and Occupational Health

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Mexico: Guanajuato

CIMAT
Department of Probability and Statistics

Two positions

See advertisement on next page

New Zealand: Dunedin and Palmerston North, Otago

AgResearch

Statistician/Senior Statistician

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United Kingdom: London

University College London

Chairs of Statistics x 2

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=8032140

United States: Ithaca, New York

Cornell University
Department of Mathematics

Two tenure-track Assistant Professor positions, or higher rank

See advertisement below

The Department of Mathematics at Cornell University invites applications for two tenure-track Assistant Professor positions, or higher rank, pending administrative approval, starting July 1, 2012. The searches are open to all areas of Mathematics with an emphasis on the areas of probability, number theory, and PDE. The Department actively encourages applications from women and minority candidates.

Applicants must apply electronically at http://www.mathjobs.org.

For information about our positions and application instructions, see: http://www.math.cornell.edu/Positions/positions.html

Applicants will be automatically considered for all eligible positions.

Deadline November 1, 2011. Early applications will be regarded favorably.

Cornell University is an Affirmative Action/Equal Opportunity Employer and Educator.

Mexico: Guanajuato

Positions in Statistics at Centro de Investigación en Matemáticas (CIMAT), Guanajuato, Mexico

Centro de Investigación en Matemáticas (CIMAT), located in Guanajuato, Mexico (www.cimat.mx), is a federally funded CONACYT (www.conacyt.gob.mx) research center devoted to research, teaching and applications. It comprises departments in pure and applied mathematics, probability and statistics, and computer science. Undergraduate programs in mathematics, and graduate (master's and doctoral) programs in all represented branches are fostered. Some CIMAT signatures are dynamic research groups in both theoretical and applied fields, recruitment of some of Mexico's finest mathematics students, a time-honored tradition in hosting numerous academic national and international meetings, consulting with scientists and industry and government, outreach programs for youngsters, and the advancement of mathematics and science in society.

The Department of Probability and Statistics (www.cimat.mx/index.php?m=3) invites applications for two positions, beginning as early as January, 2012. All areas of statistics are sought, with preference given to current, challenging and important topics with potential for group development and multidisciplinary work.

Applicants are required to hold a Ph.D. degree in statistics by the time of employment. Duties consist of research and graduate and undergraduate level quality teaching in a mathematically inclined curriculum, for which the Spanish language is an asset, yet not an absolute requirement. The Department hosts a Master's and Doctoral program in Probability and Statistics.

A total of two positions are available, in any combination of the following three types:

A) **Postdoctoral, or young researcher position**, for a maximum of three years.

Specific requirements:

i. Demonstrate potential for important academic research in statistics.
ii. Willingness to apply to the Sistema Nacional de Investigadores (SNI) (www.conacyt.mx/SNI/Index_SNI.html, in Spanish), a federal-funded, peer-reviewed research grant agency.

B) **Experienced researcher**.

Requirements:

i. A noteworthy career in research, having productivity consistent with time since graduation.
ii. A curriculum vitae that is agreeable for application to the SNI (see above), at a level consistent with time since graduation.
iii. Potential for leadership.
iv. Teaching experience in introductory and advanced subject-matter courses in undergraduate and graduate programs supported by the Department of Probability and Statistics at CIMAT.

C) **Sabbatical stay, or visitor position.**

In addition to the requirements described above for option (B), potential for the strengthening of academic programs and research at the Department of Probability and Statistics.

Interested applicants should send a letter of application to Dr. Daniel Hernández Hernández (dher@cimat.mx), before November 30, 2011, with the following materials attached:

1) Current Curriculum vitae.
2) Brief description of research topics.
3) Work plan spanning the first year at CIMAT.
4) Two letters of reference.
5) Date of likely incorporation and type of position sought.

International Calendar of Statistical Events

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

July–August 2011

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

July 31 & August 3: at JSM Miami. **2011 NISS/ASA Writing Workshop for Junior Researchers w** http://www.amstat.org/meetings/wwjr/

August 2011

August 1–4: Boulder, Colorado, USA. **Uncertainty Quantification in Scientific Computing. w** http://www.nist.gov/itl/math/ifip-woco-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 15–19: Prague, Czech Republic. **Nonparametrics and Geometry w** http://nonparam11.karlin.mff.cuni.cz

August 16–18: University of Warwick, Coventry, UK. **useR! 2011 w** http://www.R-project.org/useR-2011

August 17–19: Belfast, Northern Ireland. **International Association for Official Statistics conference** *"The Demography of Ageing and Official Statistics"* **w** http://www.nisra.gov.uk/IAOS2011.html

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

August 19–21: Dublin, Ireland. **Young Statisticians Meeting (YSI 2011)** *ISI Satellite Meeting* **w** http://www.scss.tcd.ie/conferences/YSI2011

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 7–8: Statistical Center of Statistics Korea, Daejeon, South Korea. **Third International Workshop on Internet Survey Methods w** www.kostat.go.kr

September 12–16: Mathematical Biosciences Institute, Columbus, Ohio. **Workshop on New Questions in Probability Theory Arising in Biological Systems w** http://mbi.osu.edu/2011/ws1description.html

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

September 13–16: Jaca, Spain. **Statistics, Probability and Operations Research (SPO 2011) w** http://metodosestadisticos.unizar.es/~jaca2011

September 24: Cambridge, MA. **2011 New England Symposium on Statistics in Sports w** http://www.amstat.org/chapters/boston/nessis11.html

September 25–28: Ribno, Bled, Slovenia. **Applied Statistics 2011 w** http://conferences.nib.si/AS2011

NEW September 26–27: Birmingham, Alabama. **Statistical Analyses for Next Generation Sequencing w** http://www.soph.uab.edu/ssg/courses/nhgri_r13/ngsstat

October 2011

IMS October 3–4: ETH Zurich, Switzerland. **Colloquium in honor of Hans Rudolf Künsch on the occasion of his 60th birthday w** https://stat.ethz.ch/events/Colloquium_Kuensch

October 12–14: Washington DC/ Silver Spring MD. **Conference on Risk Assessment and Evaluation of Predictions w** http://brac.umd.edu/~Risk2011/Main.htm

October 18–20: Harvard Medical School, Cambridge, Mass. **2011 Non-clinical Biostatistics Conference w** http://www.hsph.harvard.edu/ncb2011/

NEW October 23–27: Pucón, Chile. **Third Latin American Meeting on Bayesian Statistics (COBAL) and XXXVIII Chilean National Meeting of Statistics (JNE)** **w** http://cobal2011.usach.cl

NEW October 24–26: Knoxville, TN, USA. **NIMBioS Investigative Workshop: Mathematical Modeling of Intracellular Movements** **w** http://nimbios.org/workshops/WS_intracellular_mv.html

NEW October 28–30: Prague, Czech Republic. **Analytical Methods in Statistics (AMISTAT)** **w** http://amistat2011.karlin.mff.cuni.cz

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

December 18–21: Amman, Jordan. **11th Islamic Countries Conference on Statistical Sciences (ICCS-11)** **w** http://www.iccs11.isoss.net/

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

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

January 2012

NEW January 1–6: Hyderabad, India. **22nd Annual Conference of The International Environmetrics Society** **w** www.ties2012.com/

NEW January 23–27: Centre International de Rencontres Mathématiques (CIRM), Marseille, France. **Concentration inequalities and their applications** **w** http://www.cirm.univ-mrs.fr/

April 2012

ims 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/

March 2012

NEW March 14–16: Hong Kong. **IAENG International Conference on Data Mining and Applications 2012** **w** www.iaeng.org/IMECS2012/ICDMA2012.html

NEW March 30–31: Washington DC. **Information and Econometrics of Networks** **w** www.american.edu/cas/economics/info-metrics/workshop/workshop-2012-spring.cfm

June 2012

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

NEW June 18–22: MIT, Cambridge, MA, USA. **The 2012 Stochastic Networks Conference** **w** http://stoch-nets-2012.lids.mit.edu/

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

June 25–29: Kyoto, Japan. **2012 ISBA World Meeting** **w** http://www2.e.u-tokyo.ac.jp/~isba2012/

July 2012

ims July 1–4: Tsukuba, Japan. **IMS Asia Pacific Rim Meetings.** **w** http://www.ims-aprm2012.org/ **(meeting postponed from July 2011 due to the earthquake)**

July 3–6: University of Oslo, Norway. **Third biennial International Statistical Ecology Conference** **w** http://www.cees.uio.no/news/2010/isec2012.html

Continues on **page 22**

International Calendar *continued*

July 2012 continued

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 16–18: Memorial University, St. John's, Canada. **International Symposium in Statistics (ISS) on Longitudinal Data Analysis Subject to Outliers, Measurement Errors, and/or Missing Values** **w** www.iss-2012-stjohns.ca

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

July 2013

July 29 – August 2: University of Colorado, Boulder, USA. **36th Conference on Stochastic Processes and their Applications** **w** TBC

August 2013

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

August 24–31: Hong Kong. **International Statistical Institute: 59th ISI World Statistics Congress** **w** www.isi2013.hk

October 2013

NEW October 15–16: Basel, Switzerland. **International Conference *Ars Conjectandi* 1713–2013** **w** http://www.statoo.ch/bernoulli13/

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 and ASA's 175th Anniversary.** **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

Membership and Subscription Information

Journals

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

Individual and Organizational Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of $103. An additional $53 is added to the dues of members for each scientific journal selected. **Reduced membership** dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members. **Organizational memberships** are available to departments, corporations, government agencies and other similar research institutions at $155 per year.

Individual and General Subscriptions

Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2011 are available to *The Annals of Applied Probability* ($166), *The Annals of Applied Statistics* ($166), *The Annals of Probability* ($166), *The Annals of Statistics* ($166), *Statistical Science* ($146), and *IMS Bulletin* ($113). **General subscriptions** are for libraries, institutions, and any multiple-readership use. General subscriptions for 2011 are available to *The Annals of Applied Probability* ($360), *The Annals of Applied Statistics* ($320), *The Annals of Probability* ($360), *The Annals of Statistics* ($390), *Statistical Science* ($210), and *IMS Bulletin* ($95). Airmail rates for delivery outside North America are $109 per title.

IMS Bulletin

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

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Advertising job vacancies

A single 60-day online job posting costs just $250.00. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See http://jobs.imstat.org

Advertising meetings, workshops and conferences

Meeting announcements in the *Bulletin* and on the IMS website at http://imstat.org/meetings are free. Send them to Elyse Gustafson; see http://www.imstat.org/program/prog_announce.htm

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Issue	Deadline	Online by	Mailed
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2: March	**February 1**	February 15	March 1
3: April/May	**March 15**	April 1	April 15
4: June/July	**May 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

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the next issue is September 2011

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

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We love to hear from you!

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August 15, then September 15

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Articles

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