Volume 43 • Issue 5

IMS Bulletin

August 2014

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Read it online at http://bulletin.imstat.org

IMS: a cross-continent human network (with free student membership)

IMS President Bin Yu writes: As I am finishing my term as the IMS President and transitioning into the role of Past-President, I have been reflecting on the roles of IMS in an effort to attract new members. As stated on the IMS website (http://imstat.org/), "The purpose of the institute is to foster the development and dissemination of the theory and applications of statistics and probability". With the emergence of data science and the eminent role of probabilistic and statistical thinking and training in data science, it is important for IMS to attract more members, especially young people who are getting their degrees in statistics, probability, applied mathematics, computer science and electrical engineering, and other data science related fields. For such young people, a substantial part of their professional life after graduating will be at their work place, but another big part is through professional societies such as IMS.

What is IMS? It is good to remember how IMS began. In fact, *The Annals of Mathematical Statistics* started in 1930, before IMS became an organization in 1935, in an effort by Harry Carver (Professor of Statistics at University of Michigan) to have a "home" for mathematical statisticians separate from ASA. In 1938, the editorial board of the *Annals* consisted of Wilks (editor), Fisher, Neyman, Hotelling, Pearson, Darmois, Craig, Deming, von Mises, Rietz, Shewhart. The *Annals* was split into *The Annals of Statistics* and *The Annals of Probability* in 1973. *Statistical Science*, *The Annals of Applied Probability*, and *The Annals of Applied Statistics* were added later. In addition IMS co-sponsors with other societies several journals, like the *Electronic Journal of Probability*, the *Electronic Journal of Statistics*, the *Journal of Computational and Graphical Statistics*, *Probability Surveys*, and *Statistics Surveys*.

Since its very beginning, high-quality journals have been a central part of IMS. Today, IMS offers much more besides. It runs important conferences and gives major awards in statistics and probability.

IMS is a cross-continent human network of about 4000 members from North America, Europe, Asia, Oceania, Africa, and South America. With the globalization of the world economy, the fact that IMS is cross-continent and moderately sized gives its members a huge advantage for meeting professionals from other cultures and places. A recent member survey was sent to all 4,561 active members at that time, and 1,492 responded. Among the respondents, 61.1% are from North America, 20.0% from Europe, 12.5% from Asia, 3.4% from Oceania, 1.7% from Africa, and 1.3% from South America; 80.0% male and 20.0% female; 53.2% checked the box of statistics, 47.3% for applied statistics while 14.3% for probability and 11.6% for applied probability (more information about the survey in the article on page 10). Most of IMS organization colleagues are volunteers including the President, Past President and President-Elect, Council and committee members. IMS runs on a lean and effective budget, with a paid Executive Director.

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IMS Members' News

IMS Fellows announced

We announce the class of new IMS Fellows for 2014, who will be presented at the IMS Presidential Address and Awards session at the IMS-ASC meeting in Sydney. They are: Rami Atar, F. Jay Breidt, Alexander Goldenshluger, Thomas C.M. Lee, Richard A. Lockhart, Bin Nan, Richard Samworth, Martin Wainwright, and Harrison H. Zhou. You can read the new Fellows' citations on page 4.

Christopher Genovese heads Carnegie Mellon's Department of Statistics

IMS Fellow Christopher R. Genovese has been selected by Carnegie Mellon University to head its Department of Statistics, succeeding Mark Schervish, who served as department head for 10 years. John Lehoczky, dean of the Dietrich College of Humanities and Social Sciences, said that Chris Genovese "is a truly brilliant applied and theoretical statistician who is ideally suited to lead the department at a time when statistical science is rapidly evolving to meet the challenging demands of Big Data and a wide array of scientific problems. Under his leadership, I am confident that the department will continue its international prominence."

Chris joined Carnegie Mellon in 1994. His research focuses on solving complex and high-dimensional problems in the sciences, which has produced new methods and results in neuroscience, evolutionary biology, learning science, and cosmology/astrophysics.

Genovese is a fellow of IMS and ASA. He has been awarded funding from numerous agencies, including the National Science Foundation, National Institutes of Health, NASA, and U.S. Department of Energy. He is a recipient of a CAREER Award from the National Science Foundation and a Shannon Award from the National Institutes of Health.

H.N. Nagaraja honored at conference

"Ordered Data Analysis, Models, and Health Research Methods: An International Conference in Honor of H.N. Nagaraja for his 60th Birthday" was held at the University of Texas at Dallas March 7–9. In a report in *Amstat News*, Pankaj Choudhary, Chaitra Nagaraja and Tony Ng said that H.N. Nagaraja "began his academic career in the department of statistics at The Ohio State University in 1980 and is now the biostatistics division chair in the college of public health there. He has made distinguished contributions in areas such as order statistics, stochastic modeling, distribution theory, characterizations, asymptotics, and statistical methods in the health sciences. He is a fellow of both the American Statistical Association and American Association for the Advancement of Science. The conference featured three plenary talks: "Ordering Order Statistics" by N. Balakrishnan of McMaster University; "Data, Design, and Analysis for Comparative Effectiveness Research Decisions" by Sally C. Morton of the University of Pittsburgh; and "Variations on Some Exponential Characterization Themes" by Barry Arnold of the University of California at Riverside. Nearly 200 participants from 14 countries representing academia, industry, and government attended. There were 46 sessions, more than 120 talks, 11 posters, and a SAS JMP workshop. Many students and young statisticians, including the 11 winners of travel awards sponsored by The Ohio State University, were involved."

For more information, visit http://faculty.smu.edu/ngh/hnnconf.html

Statisticians without Borders

Jean Opsomer taught a short course in Rwanda, organized by Statistics Without Borders, with Mary Meyer and Brian Fannin. Read about their experience on page 16.

IMS Election results

New President and Council elected


Next President-Elect Richard Davis

We are pleased to announce the results of the 2014 annual IMS elections. The next President-Elect is Richard Davis. The newly-elected Council members are Peter Bühlmann, Florentina Bunea, Geoffrey Grimmett, Jonathan Taylor, Aad van der Vaart and Naisyin Wang.

Jonathan Taylor is serving a two-year term, and the others three years. They will be replacing outgoing Council members Sandrine Dudoit, Steve Evans, Sonia Petrone, Christian Robert and Qiwei Yao, who have served IMS for three years. Still on the Council are Alison Etheridge, Xiao-Li Meng, Nancy Reid, Richard Samworth, Ofer Zeitouni, Rick Durrett, Steffen Lauritzen, Susan Murphy, and Jane-Ling Wang.

Thanks to all of them for volunteering to help shape our institute!


Peter Bühlmann


Florentina Bunea


Geoffrey Grimmett


Jonathan Taylor


Aad van der Vaart


Naisyin Wang

Nominate an IMS Named or Medallion Lecturer

Beginning this year, the IMS Committee on Special Lectures is accepting nominations for IMS Named and Medallion Lectures. Available for nomination this year are the **2016 Wald and Rietz Lecturers, and the 2017 Medallion Lecturers**.

See http://imstat.org/awards/lectures/nominations.htm

Deadline for nominations is October 1.

The submission process is simple: send the nomination materials listed below via email to Elyse Gustafson **e** erg@imstat.org, with the subject line *LECTURE NOMINATION: <last name of nominee>*. The items should be sent as a single PDF attachment. You will receive an email confirming receipt within 72 hours. If you do not receive this confirmation, please email or call Elyse: **e** erg@imstat.org or **t** 216.295.2340.

Nomination Materials: a nomination letter of half a page, including the nominator's name, the nominee's name and the name of the IMS lecture for which the nominee is nominated; together with a list of the nominee's five most relevant publications, with a URL where these publications are accessible.

= access published papers online

IMS Journals and Publications

Annals of Statistics: Peter Hall and Runze Li
http://imstat.org/aos
http://projecteuclid.org/aos

Annals of Applied Statistics: Stephen Fienberg
http://imstat.org/aoas
http://projecteuclid.org/aoas

Annals of Probability: Krzysztof Burdzy
http://imstat.org/aop
http://projecteuclid.org/aop

Annals of Applied Probability: Timo Seppäläinen
http://imstat.org/aap
http://projecteuclid.org/aoap

Statistical Science: Peter Green
http://imstat.org/sts
http://projecteuclid.org/ss

IMS Collections
http://imstat.org/publications/imscollections.htm
http://projecteuclid.org/imsc

IMS Monographs and *IMS Textbooks:* David Cox
http://imstat.org/cup/

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: George Michailidis
http://imstat.org/ejs
http://projecteuclid.org/ejs

Electronic Journal of Probability: Michel Ledoux
http://ejp.ejpecp.org

Electronic Communications in Probability: Anton Bovier
http://ecp.ejpecp.org

Current Index to Statistics: George Styan
http://www.statindex.org
log into members' area at imstat.org

Journal of Computational and Graphical Statistics: Thomas Lee
http://www.amstat.org/publications/jcgs
log into members' area at imstat.org

Statistics Surveys: Donald Richards
http://imstat.org/ss
http://projecteuclid.org/ssu

Probability Surveys: Laurent Saloff-Coste
http://imstat.org/ps
http://www.i-journals.org/ps/

IMS-Supported Journals

Annales de l'Institut Henri Poincaré (B): Thierry Bodineau & Lorenzo Zambotti http://imstat.org/aihp
http://projecteuclid.org/aihp

Bayesian Analysis: Marina Vannucci
http://ba.stat.cmu.edu

Bernoulli: Eric Moulines
http://www.bernoulli-society.org/
http://projecteuclid.org/bj

Brazilian Journal of Probability and Statistics: Nancy Lopes Garcia http://imstat.org/bjps
http://projecteuclid.org/bjps

Stochastic Systems: Peter W Glynn
http://www.i-journals.org/ssy/

IMS-Affiliated Journals

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

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

IMS Fellows 2014

We announce the class of new IMS Fellows for 2014, who will be presented at the IMS Presidential Address and Awards session at the IMS-ASC meeting in Sydney. Congratulations, Fellows!

Rami Atar:
for his fundamental contributions in applied and theoretical probability theory, specifically the analysis and control of stochastic networks and queues.

F. Jay Breidt:
for his influential contributions in time series analysis, survey sampling and environmental statistics.

Colorado State University

Alexander Goldenshluger:
for his outstanding work in nonparametric and adaptive estimation, aggregation methods and change-point detection.

Thomas C.M. Lee:
for his influential work in the areas of nonparametric statistical methods, image processing, and multiple detection and tracking.

Richard A. Lockhart:
for his fundamental research in the area of model assessment and goodness-of-fit testing

Bin Nan:
for his influential contributions to statistical methods for semiparametric inference for complex survival data in the presence of missing data, bivariate survival data, and high dimensional data analysis in survival analysis.

Michigan Photography

Richard Samworth:
for his fundamental research in nonparametric classification, nonparametric inference under shape constraints and high-dimensional variable selection.

Martin Wainwright:
for his fundamental research in statistical machine learning and high-dimensional statistics, specifically sparse modeling, graphical models, data compression and coding.

Harrison H. Zhou:
for his influential work in Le Cam's theory, nonparametric function estimation, and high-dimensional statistical inference, in particular: optimal estimation of large covariance and precision matrices.

Hand writing: On Measuring National Wellbeing

Contributing Editor David Hand writes:

How should we measure national wellbeing? The first stage in answering such a question is deciding exactly what it is that we're talking about. It's clear, at least for national wellbeing, that the definition of what we want to measure and the procedure we construct for measuring it are intimately bound. One might even say they are two sides of the same question. Such measurements, where the definition and measurement procedure are in some sense the same thing, are sometimes called *pragmatic* measurements. They stand in contrast to *representational* measurements—measuring attributes such as mass or length, for example, where one makes an explicit mapping from the physical system to a numerical system. With pragmatic measurements, change your measurement procedure and you change the definition: in our context, you change what you mean by wellbeing.

However you look at measuring national wellbeing, it's a statistical question. One way or another it's necessary to summarize and aggregate a wide range of numbers to yield one (or perhaps a vector) which answers the question. Indeed, Ronald Fisher himself (1922) said, "the object of statistical methods is the reduction of data."

Motivated by the Great Depression of 1929–31, efforts were made in the 1930s to condense economic numbers down to measure national income. These gradually matured into today's gross domestic product (GDP), which has become the single headline indicator used to guide economic policies. But it's clear, even from the very name, that as a measure of national *wellbeing*, GDP has significant shortcomings. Its focus on economic matters leaves a great deal unsaid.

In a famous speech delivered in 1968, Robert Kennedy drew attention to this. He was speaking about gross national product rather than GDP, but the point is the same: "Too much and too long, we seem to have surrendered community excellence and community values in the mere accumulation of material things. Our gross national product ... counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and jails for those who break them. It counts the destruction of our redwoods and the loss of our natural wonder in chaotic sprawl. It counts napalm and the cost of a nuclear warhead, and armored cars for police who fight riots in our streets. ... Yet the gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile." (Kennedy, 1968)

Recognizing these shortcomings of simplistic economic indicators of "progress," the then-president of France, Nicholas Sarkozy, set up a Commission on the Measurement of Economic Performance and Social Progress, chaired by the Nobel laureate Joseph Stiglitz, advised by fellow laureate Amartya Sen, and coordinated by economist Jean-Paul Fitoussi. The report appeared in book form in 2010 with the title *Mismeasuring our Lives*, and contained 12 recommendations for broader measures of social progress: five concerned with classical economic issues, five concerned with quality of life, and two concerned with sustainable development and the environment. After all, regarding the last, it would be hard to argue that a nation was in a good state of wellbeing if it was rapidly exhausting its non-renewable resources. In general, national wellbeing should consider

human capital, social capital, natural capital, the measurement of household wealth, and subjective wellbeing. It should also consider inequality: there is evidence that greater inequality (e.g. of wealth) in societies is associated with lower overall average wellbeing.

The Stiglitz report was just one of a number of initiatives aimed at better capturing the state and progress of a nation. Others include the OECD's "Better Life Initiative" and the UK's "Measuring National Well-being" programme. More generally still, United Nations resolution 65/309 invites countries "to pursue the elaboration of additional measures that better capture the importance of the pursuit of happiness and well-being in development with a view to guiding public policies."

Ken Alder, in his book describing how Jean-Baptiste-Joseph Delambre and Pierre-Françoise-André Méchain measured the Earth, says, "Measures are more than a creation of society, they create society." By deciding what to measure, we can decide what sort of society we would like to create.

References

Alder, K. (2002) *The Measure of All Things: the Seven-Year Odyssey that Transformed the World.* London: Little, Brown. (p342)

Fisher, R.A. (1922) On the mathematical foundations of theoretical statistics. *Philosophical Transactions of the Royal Society of London, Series A,* **222**, 309-368

Kennedy, R.F. (1968). Univ. of Kansas Address http://www.youtube.com/watch?v=z7-G3PC_868 (quote starts at 16:22 mins). Accessed 26 July 2013

IMS as a human network *continued from cover*

Continued from **cover**

One indispensable (cross-continent) human network of IMS is people who are behind its premier journals. Every year, the IMS President appoints a third of members of IMS committees, including the publication committee (general policy), and the editor selection committee that appoints editors for IMS journals. Journal editors appoint associate editors who then work with referees. The IMS support staff include the managing editor and VTeX colleagues who do the actual printing. **As readers of IMS journals, one could give back by working as referees and later as associate editors. Good quality and timely referee reports put one on the list of potential associate editors. There are many other values added to a referee at a professional level: one gets inspired by ideas in the new papers refereed (often related to one's own research interests), one learns how to write papers better and how to evaluate others' works with feedback from associate editors, and one meets colleagues on paper first before meeting them in person.** It is worth noting that evaluating others' works in a fair and articulate manner is an important and integral part of a senior person's job in both industry and academia (e.g. hiring, and tenure reviews and award/recognition nominations).

The second indispensable (and cross-continent) human network of IMS is the people who are behind IMS conferences where people communicate and exchange ideas and meet colleagues in person. Every four years the IMS organizes its annual meeting outside North America (2014 in Sydney). In other years it is joint with other societies: in odd years at the Joint Statistical Meetings (JSM) and every year divisible by four at the World Congress, together with Bernoulli Society (2016 in Toronto). An important meeting is the IMS New Researchers Conference, which takes place each year immediately before the JSM (2014 in Boston). In addition IMS sponsors and cosponsors a large number of other meetings, among them the JSM in even years, and the Conference on Stochastic Processes and its Applications (2014 in Buenos Aires, every year). IMS appoints organizing committee members. IMS members could participate in the organization by proposing invited and contributed Sessions. **A young researcher could use this opportunity to organize sessions of interest to him/her and meet other researchers by inviting them. This is an opportunity to raise one's visibility in the community, obtain new ideas for research and teaching, and meet in person potential collaborators and reference letter writers.**

The third human network of IMS is through the IMS committees, which are appointed by the IMS president in consultation with the Past President and President Elect (with possible suggestions from the Council).

IMS gives prestigious awards such as Wald, Neyman, Rietz, and Le Cam, and eight Medallion Lectures. **For advancements/promotions in many universities, these awards are highly recognized and valued and often are the basis for more than normal recognitions and salary increases. Moreover, professional service is expected for reviews and promotions in universities at all levels, and leadership in professional societies is often expected for senior faculty members. To ease into leadership roles in IMS, serving on IMS committees or council, or on editorial boards of IMS journals is a first step and IMS committees require membership.**

For a group of people with a shared interest, IMS has a special interest group structure (http://imstat.org/groups/)to allow a small human network to form within IMS. One such active group is on finance and it holds a conference every year (http://www.ieor.berkeley.edu/~xinguo/FPS/) and two other group-like IMS communities are IMS-China and IMS-Asia Pacific Rim, which hold regular conferences in the respective regions. IMS also offer joint memberships with, among others, the Bernoulli Society (www.bernoulli-society.org/) and International Society of Bayesian Analysis (ISBA) (http://bayesian.org/).

In summary, even in this age of information technology, important decisions in our professional life are still made by humans (e.g. paper acceptance, hiring, grant awards, tenure decision). Human networking is becoming more important—vital—now than ever also because we are flooded with information. Trusted human opinions, in my view, are the best guides for us to use efficiently the finite amount of time and energy, that is, to decide on which papers to read and what talks to go to, for example. Through IMS conferences, committees, editorial boards, and groups, one meets potential collaborators, reviewers and employers—these people are prospective evaluators (e.g. tenure reviewers, promotion letter writers) and they could lead to job opportunities worldwide.

IMS provides a premier human network of global nature. Join IMS and make it even better! It is free for students, and reduced rates for new graduates and for people with permanent residence in a number of countries designated by the IMS Council (http://imstat.org/membership/designated_countries.htm).

Before signing off, I would like to bring your attention to an exciting change of nomination process for named and medallion lectures: starting in 2015, the committee will be open to nominations from its membership (see http://imstat.org/awards/lectures/nominations.htm for more information). Moreover, IMS has joined NISS and ASA to sponsor a NISS-ASA-IMS Writing Workshop at JSM 2014 (with a special half day for non-native speakers) and we expect a similar workshop at JSM 2015.

XL-Files: The Future of Statistics…?

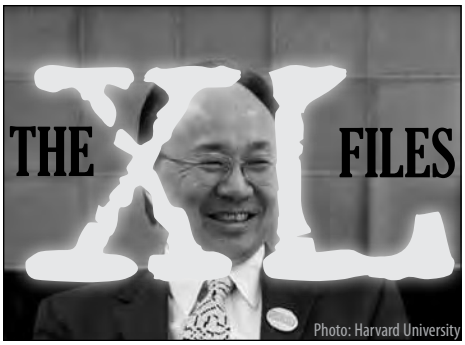


Photo: Harvard University

Xiao-Li Meng writes: Life sometimes teases us. The older one gets, and hence the shorter future one has to contemplate, the more often one is asked to predict the future. I keep being invited to speculate about our future. But asking a statistician to predict the future of statistics is as cruel as asking a barber to cut his own hair or a surgeon to operate on herself, or worse, asking sausage makers to consume their own sausages!

Fortunately, as statisticians we can proudly say "I'm not sure," and "Let me collect some data!" Recently, I've had opportunities for discussions with several groups about our future in academia. Five possible states emerged, as synthesized below. These "wisdoms of crowds" came with neither citation nor validation. Readers therefore must apply their favorite methods to separate noise from signal, if any, and to determine which was/is the modal state (leave your comment in the online version!).

So should/would we...

Fear OR's Minimization?

The prominence of Operational or Operations Research (OR) grew during WWII, peaked around the 1960–70s, and declined steadily since then, at least in the popular media. Many pointed out that what have been minimized are not the methods, techniques, or even the theories developed in OR—they are as popular as ever and encompass most of the optimization methods we routinely use, for example. Rather, it is the brand name, OR, that has been overshadowed by sexier labels such as Management Science or Business Analytics. But isn't this exactly the worry some of us share that the brand name Statistics, *not its substance*, will be overshadowed by sexier labels such as Data Science or Predictive Analytics?

Establish Mathematics' Justification?

A more optimistic opinion is that statistics will enter a state that mathematics has enjoyed for a long time (and likely will indefinitely). Although our society often portrays mathematics as esoteric, few would suggest eliminating mathematics departments even in hard times; this threat remains real for some statistics departments (particularly in some countries), though much less so now than just a decade ago. What did/do mathematicians do to establish and justify that they are indispensable? No learned person would dismiss the centrality of mathematics in the evolution of science and civilization. Nor would any responsible parent dissuade their children from acquiring basic mathematical training even if they themselves flunked it. Are we about to enter an era where the same statement continues to apply when we replace "mathematics" by "statistics"?

Achieve Biology's Diversification?

An even more ambitious prediction came from witnessing how the field of biology has evolved since the '50s into a full Division or School of Life/Biological Sciences. For example, at the two universities where I have taught, Chicago has at least five departments involving the B-word (Microbiology, Neurobiology, BMB, MGCB, OBA), and Harvard has at least six (Systems Biology, CCB, HEB, MCB, OEB, SCRB), not counting many more such as "Ecology and Evolution" and "Human Genetics". Could there be a future for a Division or School of Statistical/Data Sciences, hosting as many departments but with the S-word: *Astrostatistics, Geostatistics, Engineering Statistics, Financial Statistics*, etc., without even counting various *-informatics* or *-metrics*?

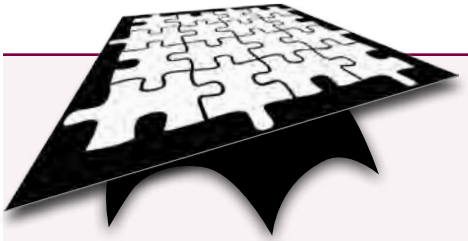
Follow MBA's Professionalization?

Of course as far as degrees go, nothing is more popular or populated in our society than the professional degrees such as MBA. Statistics has now grabbed our society's attention, or at least that of high school and undergraduate students, to a degree far exceeding, almost surely, any statistician's dreams just half a decade ago. For example, about 20% of Harvard Freshmen this year listed statistics as a potential concentration/major choice and we already have 160 concentrators in-house, not counting any secondary fields/minors. If I opened a bottle of champagne for every 2% increase—the bar I set for myself six years ago—I'd be too intoxicated to finish this sentence. Could this dramatically increased attention eventually transform into something truly intoxicating (with the buzz and hangover both included)?

Employer: *"Sorry, but you don't have an MDA."*
Applicant: *"I* do *have an MBA, it's on my CV."*
Employer: *"No, you don't. I mean MDA, Master of Data Analysis."*

Enjoy Physics' Unification?

Compared with biology, physics has more presence in our universe(s) but many fewer departments in our universities, even though it requires as much lab work. For example, Chicago only has two departments with "physics" in their titles (Physics, Astronomy and Astrophysics) and Harvard has one department (Physics) and one degree committee (Biophysics), a situation not unlike having Statistics and Biostatistics. Could it be that physicists' mentality of finding a unified theory of everything unites their field, from experimental physicists to string theorists? If so, can our desire to find a unification of Bayesian, Frequentist and Fiducial (BFF) perspectives do the same trick, allowing all of us to thrive under one roof as BFFs (Best Friends Forever)?

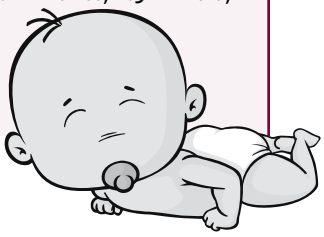


Student Puzzle Corner 5

The problem in the last issue was on statistics. This time we pose a problem on probability.

Suppose couples in a certain country have a Poisson number of children with mean λ. Little Dennis is a son of the Mitchells. For what values of λ would you bet that Dennis has an equal number of brothers and sisters? Assume, as is usual, that childbirths are independent and that each birth results in a boy or a girl with probability ½ each.

It is a little difficult to get reliable data on number of children per couple in various countries. It is easier to get some data on the average number of children per woman. For example, in the US, it seems to be about 1.8 among whites; about 0.8 in Singapore; about 1.2 in the Czech Republic; 1.4 in Japan, Germany and Greece; 1.5 in Switzerland; 1.6 in Canada and Russia; 1.8 in Brazil, Norway and Australia; in the UK it's about 1.9; 2.0 in France; 2.5 in India; 2.6 in Israel; 2.9 in Egypt; 3.3 in Jordan; 4.4 in Madagascar; 5.0 in Tanzania; 6.0 in Uganda; 7.0 in Niger. The worldwide average is about 2.5.



The *Student Puzzle Corner* contains one or two problems in statistics or probability. Sometimes, solving the problems may require a literature search.

Current student members of the IMS are invited to submit solutions electronically (to **bulletin@imstat.org with subject "Student Puzzle Corner"**). Deadline **August 15, 2014**.

The names and affiliations of (up to) the first 10 student members to submit correct solutions, and the answer(s) to the problem(s), will be published in the next issue of the *Bulletin*.

The Editor's decision is final.

Last issue's Student Puzzle:

Suppose a parameter μ was measured at two different laboratories, of which one is more renowned and reliable than the other. Formally, $X \sim N(\mu, 1)$, $Y \sim N(\mu, \sigma^2)$, where X, Y are independent, and $\sigma^2 \geq 1$. Find, explicitly, a 95% confidence interval of finite length for σ^2. It seems a little odd at first that one can estimate the variance of the second laboratory with only one observation from the second laboratory. In some sense, a more basic question is how will you estimate μ in such a case, or what are the maximum likelihood estimates of μ, σ^2, but they are not being asked here.

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Last issue's correct answer

Anirban DasGupta, *IMS Bulletin* Editor, explains:

Peng Ding (*pictured left*) of the Statistics Department at Harvard University sent a correct—and nicely written—solution to the problem asked. We encourage more of our student members to send solutions!

Suppose $X \sim N(\mu, 1)$, $Y \sim N(\mu, \sigma^2)$, where X, Y are independent, the parameters μ, σ^2 are both unknown, but it is known that $\sigma^2 \geq 1$. Such a problem might arise if an unknown parameter μ was measured at two laboratories, of which one is more reliable and established than the other one. The puzzle's problem was to construct a 95% confidence interval for σ^2 of finite length. There are infinitely many 95% confidence intervals for σ^2 with such data, but some have infinite length, i.e., they really are one-sided intervals. But there are also confidence intervals of finite length.

To construct a confidence interval for σ^2, notice that $Y - X \sim N(0, 1 + \sigma^2)$; that $Y - X$ has a distribution free of μ, i.e., it is a *partial ancillary*, enables the construction of confidence intervals for σ^2 although there is only one observation from the second laboratory.

We may as well solve the problem for a general confidence level $1-\alpha$, $0 < \alpha < 1$. Denote the $\alpha/2$th quantile of a χ^2_1 distribution by a and the

Continues on **page 9**

$(1-\alpha/2)$th quantile of χ_1^2 by b. Thus, $P(a \le \chi_1^2 \le b) = 1-\alpha$. Since $\frac{(Y-X)^2}{1+\sigma^2} \sim \chi_1^2$, this leads to

$$1-\alpha = P\left(a \le \frac{(Y-X)^2}{1+\sigma^2} \le b\right) = P\left(\frac{(Y-X)^2}{b} - 1 \le \sigma^2 \le \frac{(Y-X)^2}{a} - 1\right).$$

Since we know that $\sigma^2 \ge 1$, this means that the interval

$$\left[\max\left\{\frac{(Y-X)^2}{b} - 1,\, 1\right\},\, \frac{(Y-X)^2}{a} - 1\right]$$

is an $100(1-\alpha)\%$ confidence interval for σ^2, the interval being empty if $(Y-X)^2 < 2a$. It would be an embarrassment to report an empty set as (say) a 95% confidence interval if it were to happen. Procedures based on sample space calculations can, at times, give seemingly silly answers. What the answer is trying to tell you is that data contradict your model, i.e., there is no $\sigma^2 \ge 1$ consistent with the data obtained. In contrast, Bayesian confidence intervals will never be empty, but will require writing down a prior. Much has been written on these foundational issues. We can calculate the probability that our confidence interval will be empty. It equals:

$$P\left((Y-X)^2 < 2a\right) = P\left(\chi_1^2 < \frac{2a}{1+\sigma^2}\right)$$

$$= 2\Phi\left(\sqrt{\frac{2a}{1+\sigma^2}}\right) - 1 = \frac{2\sqrt{a}}{\sigma\sqrt{\pi}} + O(\sigma^{-3}).$$

For example, if $\alpha = .05$ and $\sigma^2 = 2$, then the probability of reporting an empty confidence interval is about .015. The interval above is equal tailed; one may also find intervals that are not equal tailed. They may have certain advantages as regards the expected length.

It was mentioned in the puzzle that a more basic problem in this case is the estimation of μ. How should one combine the reports of the two laboratories? It may be shown that a unique maximum likelihood estimate for μ exists for all X, Y. However, this estimate is nonlinear. Of the two observations X, Y, X is more reliable. The MLE takes the average of X and Y and shrinks it towards X. The amount of shrinkage depends on $(Y-X)^2$, i.e., how similar are the two lab results. The maximum likelihood estimate of σ^2 will equal the boundary value $\sigma^2 = 1$ with a positive probability under all σ^2; once again, one can write it down exactly.

ICIAM: Call for Minisymposia

8th International Congress of Industrial and Applied Mathematics 2015: Call for Minisymposia
Beijing, China, August 10–14, 2015

This congress is the main activity of the International Council of Industrial and Applied Mathematics (ICIAM), held every four years. In 2015 it will be in Beijing from August 10–14. **IMS joined ICIAM as an associate member in 2012**, in the conviction that both applied mathematics, and probability and statistics, can gain a lot from an intensified collaboration and exchange of ideas. Just a few topics of interest to both communities are biological models, mathematical finance, filtering and data assimilation, stochastic PDE's, uncertainty quantification in PDE models, compressed sensing and Monte Carlo methods.


Qian Fang

China's National Centre for the Performing Arts is housed in this striking building in Beijing.

The importance of probability and statistics is also reflected in the list of invited speakers, which includes several IMS members and researchers who have published in IMS journals: Martin Hairer, Shige Peng, Nancy Reid and Simon Tavaré.

In addition, there is the possibility to **submit proposals for minsymposia at the conference**. A minisymposium consists of four 25-minute presentations plus five minutes of discussions after each presentations. A minisymposium organizer is encouraged to make the first presentation and should find three other speakers on the same topic, preferably from different institutions. The deadline for submitting a proposal for a minisymposium is September 30, 2014. Such a proposal should contain a title, a description of the topic (not to exceed 100 words) and a list of speakers and titles of their presentations. Hopefully, many IMS members will take advantage of this occasion to foster interactions of probability and statistics with applied mathematics.

More details can be found at http://www.iciam2015.cn/Call%20for%20Minisymposia.html

IMS Membership Survey results

Jean Opsomer, IMS Treasurer, reports:

During the final two months of last year, IMS conducted a brief survey of its membership. The goal of the survey was to assess the demographic characteristics of the membership, something that had not been previously done. The results, described below, provide the first ever comprehensive glimpse into who IMS members are.

The survey was sent to all 4,561 active members, and 1,492 responded. Given the informal manner in which the survey was conducted, no attempt was made to create survey weights or provide bounds on the uncertainty, with the exception that the results were post-stratified by student status.

Survey results

Looking first at the educational background of the survey respondents, Table 1 shows the highest degree obtained, broken down by decade during which that degree was obtained. Not surprisingly given the nature of IMS, a very large majority have a PhD or equivalent degree. The Masters and Undergraduate numbers in the last group (2010s) and to a lesser extent in the 2000 decade are likely to contain a significant fraction of individuals still pursuing their education.

Table 2 shows the current employment status of the survey respondents, again broken down by decade. Over half the respondents are employed by academic institutions, and approximately one quarter are post-doc or students, hence also mostly affiliated with academic institutions. The students and post-docs are almost exclusively in more recent decades, while the "Retired" category in mostly in the earliest decades, as expected. In the table, the category labeled "Private" includes respondents stating that they work for non-profit institutions. Together with those working for governmental institutions, these make up 10% of the total respondents.

Table 1: Percentage of respondents with highest degree obtained, by decade.

Highest degree	1960s or prior	1970s	1980s	1990s	2000s	2010s	Total
Doctorate	7.3	14.1	15.7	13.3	14.8	10.3	75.5
Masters	0.2	0.3	0.7	0.6	5.5	11.2	18.5
Undergraduate	0.0	0.1	0.2	0.2	1.9	3.6	6.0
Total	7.5	14.5	16.6	14.1	22.2	25.1	100.0

Table 2: Percentage of respondents with current occupation, by decade.

Current occupation	1960s or prior	1970s	1980s	1990s	2000s	2010s	Total
Academic	2.7	8.1	13.9	11.9	13.7	6.6	56.9
Private	0.3	1.3	1.5	1.2	1.1	1.6	7.0
Government	0.0	0.6	0.5	0.5	0.7	0.7	3.0
Retired	4.5	4.4	0.9	0.2	0.1	0.1	10.2
Postdoc	0.0	0.0	0.0	0.0	0.4	2.1	2.5
Student	0.0	0.0	0.0	0.3	6.2	13.9	20.4
Total	7.5	14.4	16.8	14.1	22.2	25.0	100.0

Table 3 displays the distribution of respondents by the country in which they reported spending the majority of their time. A clear majority of members live in North America, followed by Europe and Asia.

The distribution of respondents by age and sex is shown in Table 4. Assuming that the respondents are representative of the IMS membership as a whole, it is clear that the sex balance within IMS is heavily skewed towards males. The balance appears to improve somewhat for the younger members, approaching 2-to-1 male:female among the members in their 20s and below, instead of the 4-to-1 overall.

Tables 5 to 7 show several tabulations highlighting the mix of primary area(s) of research or professional activity reported by the respondents, according to four broad categories: statistics, applied statistics, probability and applied probability. The first of these tables shows that the large majority (over 80%) of respondents report working in statistics or applied statistics, with only a small fraction (9%) of them also reporting working in probability or applied probability.

Table 3: Geographic distribution of respondents (in percent).

Continent	%
Africa	1.7
Asia	12.5
Europe	20.0
Oceania	3.4
North America	61.1
South America	1.3

Table 4: Percentage of respondents by age (in decade) and gender.

Age	Male	Female	Total
20s and younger	12.0	6.1	18.1
30s	15.4	5.7	21.1
40s	13.1	3.0	16.1
50s	13.8	2.6	16.4
60s	16.3	1.9	18.2
70s	7.3	0.4	7.7
80s and older	2.1	0.3	2.4
Total	80.0	20.0	100.0

A smaller fraction of respondents work in probability or applied probability (23%), with the same 9% reporting also working in statistics or applied statistics. Finally, just under 5% indicated none of these four broad categories as their primary areas of research or professional activity.

In Table 6, respondents are classified according to whether they reported working in probability (*yes/no*) and in applied probability (*yes/no*). Corresponding to the results in Table 5, a large fraction reported working in neither area. Among the remaining respondents, only a relatively small percentage (3.2%, corresponding to 14% of those working in either area) work in both probability and applied probability, with somewhat more of the rest working in probability than in applied probability.

The similar results are shown in Table 7 for statistics and applied statistics, with a much smaller percentage working in neither area. Among the remaining respondents, almost 19% work in both statistics and applied statistics, corresponding to 23% of those working in either area. Similarly, as in Table 6, more of the rest report working in statistics than in applied statistics.

Table 5: Percentage of respondents with primary area(s) of research or professional activity.

Primary area(s) of research or professional activity	%
Statistics or applied statistics, but not probability or applied probability	72.7
Probability or applied probability, but not statistics or applied statistics	13.7
Both (applied) statistics and (applied) probability	9.0
Neither (applied) statistics nor (applied) probability	4.6

Table 6: Percentage of respondents with stated primary area(s) in probability or applied probability.

	Probability		
Applied probability	Yes	No	Total
Yes	3.2	8.4	11.6
No	11.1	77.3	88.4
Total	14.3	85.7	100.0

Table 7: Percentage of respondents with stated primary area(s) in statistics or applied statistics.

	Statistics		
Applied statistics	Yes	No	Total
Yes	18.8	28.5	47.3
No	34.4	18.3	52.7
Total	53.2	46.8	100.0

Some thoughts on the results

Based on these results, it would be somewhat tempting to say that the typical member of IMS is a male PhD graduate working in statistics at a university located in North America. While there is clearly some truth to that, the results can also be read to indicate that the membership spans six continents, that members' education ranges from undergraduate to PhD level, and members are active in a wide spectrum of scientific areas related to statistics and probability. In addition, there appears to be a growing presence of women among the younger members, something we would do well to encourage so that this trend continues.

Recent papers

Brazilian Journal of Probability and Statistics

Volume 28, Number 2: May 2014

The *Brazilian Journal of Probability and Statistics* is an official publication of the Brazilian Statistical Association and is supported by the IMS. It is published four times a year, in February, May, August, and December. The Journal publishes papers in applied probability, applied statistics, computational statistics, mathematical statistics, probability theory and stochastic processes.

Access papers at http://projecteuclid.org/bjps

Bayesian Analysis

Volume 9, issue 2: June 2014

Bayesian Analysis is an electronic journal of the International Society for Bayesian Analysis. It seeks to publish a wide range of articles that demonstrate or discuss Bayesian methods in some theoretical or applied context. The journal welcomes submissions involving presentation of new computational and statistical methods; reviews, criticism, and discussion of existing approaches; historical perspectives; description of important scientific or policy application areas; case studies; and methods for experimental design, data collection, data sharing, or data mining.

Access papers at http://projecteuclid.org/ba

Meeting Report: The 7th China R Conference

A Folk Festival: The 7th China R Conference (May 24-25, Beijing)

Xizhi Wu, Professor of statistics, Renmin University of China, reports on the latest conference in a series he has helped to organize:

More than 1800 enthusiastic participants (including those unregistered) of various data-related disciplines, from more than 600 organizations with about 200 universities or institutes and 400 companies, rushed to overcrowded rooms of The 7th China R Conference, organized by students, graduates and COS, the student-run website Capital of Statistics, to listen to speakers on different topics. The speakers ranged from university professors, IT engineers to students. It was a big party. "I was really invigorated by the enthusiasm of the many R users at the conference," said keynote speaker David Smith of Revolution Analytics on his website[1].

Photo taken at the Lightning talk, courtesy of the SupStat blog, http://blog.supstat.com

Six years ago, The 1st China R Conference, initiated and organized entirely by a group of students and the student-run website COS, was held in a classroom of 100 seats with packed audience motivated by desire for promoting data analysis via the programming language R. Nowadays the R conference is not confined only to the R language. It propagates data analysis with all kinds of programming languages, including those for big data, and their combinations.

With the aim of promoting data-driven statistics application, the annual China R Conference is, if not the only one, an irreplaceable supplement to numerous mainly model-driven statistics conferences in China, and it also provides a meaningful and practical platform for communication between industry and academia. In developed countries programming languages, especially R, are widely used in universities and research institutes, whereas in China the classroom of statistics is mainly occupied by illegally pirated commercial software without any risk. The R Conference therefore is also a significant attempt to reduce the dependence of Chinese statisticians on pirated commercial software. Now, more and more Chinese students and teachers of statistics are using R for research and application; more and more statistics books published in China are using R. This was unthinkable six years ago.

Half of the participants in this seventh conference were under 26, while two thirds were under 29, and this age distribution implies a hopeful and promising future for Chinese statistics. No doubt, *we either compute or we concede*, as mentioned by Prof. Bin Yu, the president of IMS.

Such was the enthusiasm that participants sat on the floor, leaned against the walls, listened at the doors…

Editor's note: We would like to recognize the instrumental contribution of Professor Wu to this conference series.

1 David Smith put the Conference on his website with a photo: http://blog.revolutionanalytics.com/. This conference is also on other websites such as http://blog.supstat.com/ and Chinese COS website http://cos.name/2014/06/7th-china-r-beijing-summary/#more-9944.

A Twenty-first Century Global Math Library

Planning a 21st Century Global Library for Mathematics Research
Jim Pitman and Clifford Lynch were members of the Committee on Planning a Global Library of the Mathematical Sciences, which wrote the report discussed here. Other members were Ingrid Daubechies, Kathleen Carley, Timothy Cole, Judith Klavans, Yann LeCun, Michael Lesk, Peter Olver, and Zhihong Jeff Xia.
Pitman and Lynch report.

This article appears in the August 2014 *Notices of the American Mathematical Society*.

The literature corpus and knowledge base of mathematics is both bedrock and wellspring for future research. How can we make this resource more valuable as it transitions to digital form and is used in conjunction with new network and computationally based services? Over the past two years, a committee established by the National Research Council, a part of the United States National Academies, with funding from the Alfred P. Sloan Foundation, has explored these issues. Many scholarly disciplines are considering these questions; the answers for each discipline seem to be different, and they are shaped by the practices of the discipline, the extent to which the historical literature continues to be relevant to current research, and many other factors. The report of this **Committee on Planning a Global Library of the Mathematical Sciences** has been recently published by The National Academies Press at http://www.nap.edu/catalog.php?record_id=18619 and is also available at http://arxiv.org/abs/1404.1905.

The committee's charge called for an evaluation of the potential value of such a library, and some consideration of its appropriate scope; an assessment of the issues and alliances involved in establishing such a library; the identification of a range of desired capabilities for such a system, and a consideration of which of these capabilities were likely to be within reach given current and foreseeable technology; and a sketch of resource needs and the way forward with such a project. The committee was specifically asked not to focus on issues such as copyright and open access, but rather to take a pragmatic view of operating within the current diverse landscape of scholarly information. Further, the committee was asked to focus on the needs of researchers in the mathematical sciences, rather than needs of the vast range of other disciplines that use and rely on mathematics. In its work, the committee took a broad view of the ecosystem of mathematical literature and information services, and the extent to which the needs of mathematics researchers (particularly within major research institutions) are currently met.

The committee report included a number of findings and recommendations, indicated here by italicized paragraphs which are quoted verbatim from the report.

Finding: *The construction of mathematical libraries through centralized aggregation of resources has reached a point of diminishing returns, particularly given that much of this construction has been coupled with retrospective digitization efforts.*

Put another way, the committee recognized the potential value of moving toward a broader view, going beyond aggregation alone to create a comprehensive digital mathematics information resource which could be of much greater value than the sum of its contributing publications. Building on the extensive work done by many dedicated individuals under the rubric of the World Digital Mathematical Library (http://www.mathematik.uni-bielefeld.de/%7Erehmann/DML/dml_links.html), as well as many other community initiatives, the committee recommended establishment of an organization, tentatively called the **Digital Mathematics Library** (DML), to support a wide variety of new functionalities and services over aggregated mathematical information, including dramatically improved capabilities for searching, browsing, navigating, annotating, and linking mathematical concepts. Specifically, the DML organization should

- develop a collection of platforms, tools, and services for curation and navigation of mathematical information;
- mobilize and coordinate the mathematical community to engage with these capabilities;
- support an ongoing applied research program in mathematical information management to complement the development work.

The report envisions a combination of computational machine learning and textual analysis methods with community-based editorial efforts in order to make a significantly greater portion of the information and knowledge in the global mathematical corpus available to researchers as linked open data through the DML. The report describes how such a library might operate—discussing development and research needs, its role in facilitating discovery and interaction, and the importance of establishing partnerships with publishers,

abstracting and indexing services, and other current players in the mathematical information ecology. Several of the capabilities described, such as the ability to annotate across the full corpus of mathematical literature, seem to be low-hanging fruit. One focus of particular interest, tantalizingly on the fringe of current technology in the committee's view when combined with community editing, was the extent to which the mathematical literature might be adequately tagged with identifiers for mathematical concepts to facilitate linking and navigation.

Finding: *While fully automated recognition of mathematical concepts and ideas (e.g., theorems, proofs, sequences, groups) is not yet possible, significant benefit can be realized by utilizing existing scalable methods and algorithms to assist human agents in identifying important mathematical concepts contained in the research literature—even while fully automated recognition remains something to aspire to.*

Following are some further recommendations of the report:

Recommendation: *A primary role of the DML should be to provide a platform that engages the mathematical community in enriching the library's knowledge base and identifies connections in the data.*

Recommendation: *The DML should rely on citation indexing, community sourcing, and a combination of other computationally based methods for linking among articles, concepts, authors, and so on.*

Recommendation: *Community engagement and the success of community-sourced efforts need to be continuously evaluated throughout DML development and operation to ensure that DML missions continue to align with community needs and that community engagement efforts are effective.*

Recommendation: *The DML should be open and built to cooperate with both researchers and existing services. In particular, the content (knowledge structures) of the library, at least for vocabularies, tags, and links, should also be open, although the library will link to both open and copyright-restricted literature.*

Recommendation: *The DML should serve as a nexus for the coordination of research and research outcomes, including community endorsements, and encourage best practices to facilitate knowledge management in research mathematics.*

Recommendation: *A DML organization should be created to manage and encourage the creation of a knowledge-based library of mathematical concepts such as theorems and proofs... It should be an advocate for the mathematics community and help develop plans for development and funding of open information systems of use to mathematicians.*

Recommendation: *The initial DML planning group should set up a task force of suitable experts to produce a realistic plan, timeline, and prioritization of components, using this report as a high-level blueprint, to present to potential funding agencies (both public and private).*

Recommendation: *The DML needs to build an ongoing relationship with the research communities spanning mathematics, computer science, information science, and related areas concerned with knowledge extraction and structuring in the context of mathematics and to help translation of developments in these areas from research to large-scale application.*

Members of the committee, and others, hope to offer several articles in coming issues of the *Notices of the American Mathematical Society* (http://www.ams.org/notices/) that look into various facets of the proposed DML in more detail, and there are ongoing discussions about how the work outlined in the report might be advanced. But perhaps the most important objective now is broad vetting of the report within the mathematical sciences community.

As one step in this process, there will be a presentation and Panel Discussion about these recommendations by the Committee on Electronic Information and Communication (CEIC) at the upcoming International Congress of Mathematicians in Seoul, Korea, 6:00-7:30pm on August 20, moderated by Peter Olver of the committee that authored the Academies report. The panel discussion will involve Thierry Bouche, Ingrid Daubechies, Gert-Martin Greuel, Rajeeva L. Karandikar, and June Zhang.

Teaching a short course in Rwanda

Jean Opsomer writes: In January 2014, Statistics Without Borders (SWB: http://community.amstat.org/statisticswithoutborders/home/) emailed its members about a request from the Rwanda Biomedical Center. There was a need for training in survey data analysis, and the R programming language. The classes would be in English, and the students would have some statistics background. Together with my colleague Mary Meyer and Brian Fannin, an actuary with a passion for R, I decided to give it a try.

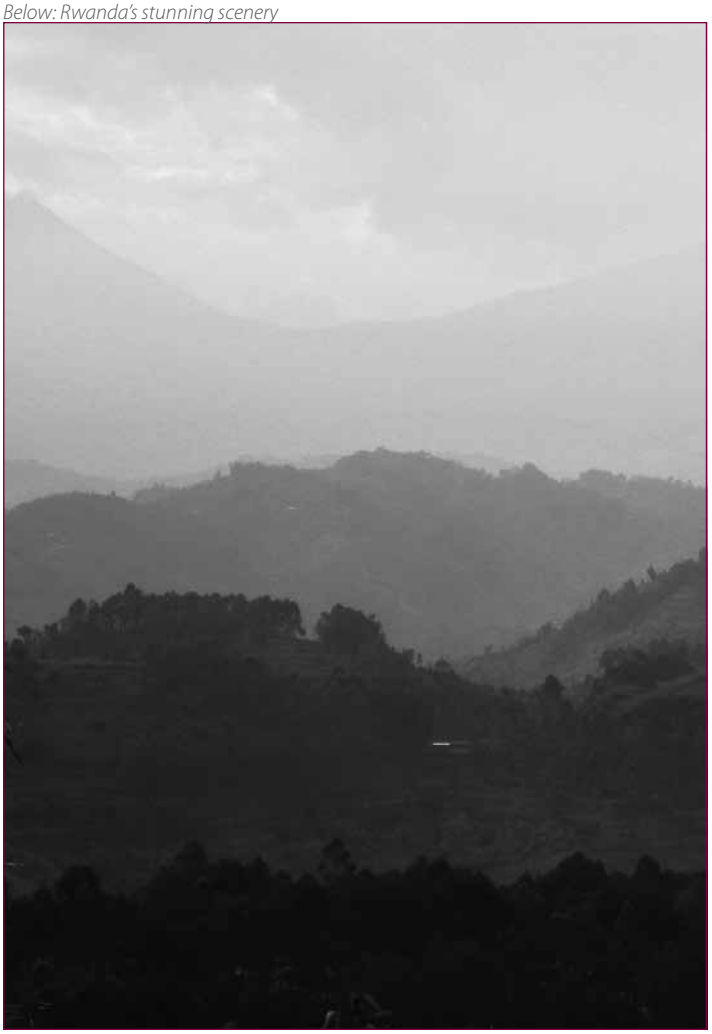
On May 5, we found ourselves in the meeting room of a modest hotel on the outskirts of Kigali, the capital of Rwanda, to begin teaching a short course on linear regression and survey estimation using R to a group of 15 young public health professionals. Our course was the last of three, spread over a two-month period.

During the ensuing week, we spent each day alternating sessions on basic R data manipulations, sampling, survey estimation, linear and logistic regression, and making plots and maps in R. The students were eager to learn, and asked frequent questions, especially about how to implement the methods on some of the Rwanda health and demographics datasets in their charge. The participants brought their own laptops, and we interspersed the lectures with hands-on exercises during which they gained more familiarity working in R. At the end of the week, the participants and the instructors were exhausted, but everyone was happy with the new knowledge and skills that were imparted.

For Mary, Brian and me, this was our first visit to central Africa. We were stunned by the natural beauty of Rwanda, with lush green hills and the impressive mountains on the borders of Uganda and the Democratic Republic of the Congo, and we were impressed by the spirit of its people, moving forward from the tragic events of 20 years ago. We ended our visit in Volcanoes National Park, hanging out with a gorilla family and observing the golden monkeys and colorful birds.

Above: three instructors and 13 of the enthusiastic participants learning about R

Below: Rwanda's stunning scenery



Golden monkey in Volcanoes National Park

Terence's Stuff: *"To See Oursels as Ithers See Us"*

Terry Speed is thinking about how "ithers" see us, and what we can do to make ourselves more appealing…

It wad frae monie a blunder free us," wrote Robert Burns in his poem *To A Louse*. How do others see us, and if we could see ourselves as they do, from what blunders would that free us? If I sound as though I'm talking about public relations, image or brand management, then I probably am.

Imagine saying to someone at a party "Hi, I'm a statistician!" Such encounters have led to many jokes and comparisons with accountants or other supposedly boring professionals. In my experience they often bring back the other person's memories of learning statistics, eliciting comments such as, "I never did understand the statistics in my psychology course," or, "I hated statistics in college," occasionally "I really liked statistics when I was at school (but went on to become a rocket scientist or a brain surgeon)."

Many of us will have helped people with their statistics. For example, over the years I've had many colleagues from other fields come to me when they found themselves unable to publish a paper on their work until they satisfied a referee on some statistical matter with which they were unfamiliar. Often a grad student or I was able to help. As long as we gave what was needed, we can expect that most of these people will go away from their encounter with us having a better informed and more positive view of statisticians and statistics than they did initially. They had a need, and we helped fill that need. I've always felt that these were very positive moments for statistics.

Our long-term scientific collaborators will be among our best informed and most faithful supporters. They know first-hand that our discipline is not simply the routine application of cook-book procedures. They have seen us puzzle, sweat, agonize, feel defeated, detour, think, learn, sweat some more, have ideas, and ultimately rise from the ashes to do something half-reasonable with their data. Unlike the lady in Burns' poem, they see us as we would like to be seen.

Lately I've been reading books and attending conferences about Big Data, places where people like us do not figure very prominently. I've been wondering why not. At a meeting on Big Data in Health Informatics I asked professor from a medical school why she thought there were so few statisticians present. She replied that statisticians "don't deal with risk, with uncertainty," that we're "too absolute, we do *p*-values, confidence intervals, definite things like that." She, and others at this meeting, felt that something different was needed in their field: data visualization, pattern recognition, learning, prediction, modelling, simulation, multivariate testing, separating signal from noise. They didn't see these activities as part of our world, as things statisticians do. We can smile (or grimace) at this misunderstanding, but again and again I hear or read that we deal with *p*-values, that we show how to do tests correctly, and that we can help calculate sample sizes for carrying out tests. I also see it in books on Big Data or Analytics. We're not mentioned very often, but when we are, it's usually in relation to testing.

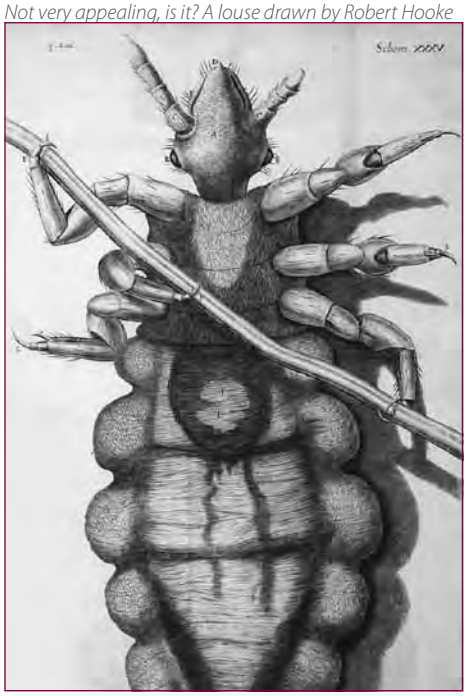
Another view of statisticians: we tend to "raise arcane concerns about mathematical methods." New York City's first Director of Analytics is quoted as saying that, as well as, "I had no interest in very experienced statisticians," and "I wasn't even thinking about what model I was going to use. I wanted actionable insight, and that was all I cared about."

What about the editors of journals such as those from *Nature Publishing Group:* how do they see us? They want us to help them reduce their irreproducibility, and so I suspect that they would agree with the view I saw on a recent statistics blog: "It's our job to keep people honest."

This is a sample of ways that others see us. Some are downright negative, others lukewarm, while others still (e.g. the policing role) are not likely to endear us to people. I don't want to be seen as a policeman, or as a person who computes *p*-values correctly. Perhaps only our collaborators hold positive views, of us doing what we like to do and do best. If only more people knew us as our collaborators know us. Let's get more of them!

What blunders can be avoided? I do think we need to talk much more about data visualization, pattern recognition, learning, prediction, modelling, simulation, and much *less* about testing. At parties we have an opportunity to explain that statistics is more understandable, more interesting and rewarding, indeed more fun than others might think; grasp it. Can you imagine ever saying "Simply: I make *beautiful things with data*"? Try it some time, and thank Hilary Mason.

Not very appealing, is it? A louse drawn by Robert Hooke



IMS meetings around the world

IMS sponsored meeting

JSM 2014: August 2–7, 2014, Boston, USA

w http://amstat.org/meetings/jsm/2014/

JSM Program Chair: Jean Opsomer. IMS Invited Program chair: Nancy Reid. IMS Contributed Program chair: Bertrand Clark

The 2014 Joint Statistical Meetings will be held at the Boston Convention and Exhibition Center. You can book your hotel accommodation through the JSM website from May 1 – July 2: http://www.amstat.org/meetings/jsm/2014/housing.cfm. General registration for conference attendees and add-on registration for all registrants is open.

IMS co-sponsored meeting

9th World Congress on Probability and Statistics

July 11–15, 2016

Toronto, Canada

w http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/

This meeting is jointly sponsored by the Bernoulli Society and the IMS. The Scientific Programme Chair is Alison Etheridge. The Local Chair is Tom Salisbury.

Plenary Sessions at JSM 2014

Stephen Stigler, University of Chicago: **ASA President's Invited Address**
The Seven Pillars of Statistical Wisdom. Monday, August 4, 4:00 p.m.

Nathaniel Schenker, 2014 ASA President: **ASA Presidential Address and Founder & Fellows Recognition**
Why Your Involvement Matters. Tuesday, August 5, 7:00 p.m.

Sharon Lohr, Westat: **Deming Lecture**
Red Beads and Profound Knowledge: Deming and Quality of Education. Tuesday, August 5, 4:00 p.m.

Grace Wahba, University of Wisconsin–Madison: **COPSS Fisher Lecture**
Positive definite functions, reproducing kernel Hilbert spaces and all that. Wednesday, August 6, 4:00 p.m.

Gareth Roberts, University of Warwick: **IMS Blackwell Lecture**
Rao-Blackwellisation for improved Monte carlo for stochastic processes. Sunday, August 3, 4:00 p.m.

Mathias Drton, University of Washington: **IMS Medallion Lecture**
What do we know about linear structural equation models? Monday, August 4, 10:30 a.m.

Joint Statistical Meetings dates, 2015–2020

IMS sponsored meeting

IMS Annual Meeting @ JSM 2015: August 8–13, 2015

Seattle, WA, USA

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

IMS sponsored meeting

JSM 2016: July 30–August 4, 2016, Chicago, IL, USA

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

IMS sponsored meeting

IMS Annual Meeting @ JSM 2017: July 29–August 3, 2017

Baltimore, MD, USA

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

IMS sponsored meeting

JSM 2018

July 28–August 2, 2018

Vancouver, Canada

IMS sponsored meeting

IMS Annual Meeting @ JSM 2019:

July 27–August 1, 2019, Denver, CO

IMS sponsored meeting

JSM 2020

August 1–6, 2020

Philadelphia, PA

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2014

IMS Annual Meeting: Sydney, Australia, **July 7–10, 2014**
ims-asc2014.com

JSM: Boston, MA, **August 2–7, 2014**

2015

IMS Annual Meeting @ JSM: Seattle, WA, **August 8–13, 2015**

2016

IMS Annual Meeting: Toronto, Canada, **July 11–15, 2016**

JSM: Chicago, IL, **July 30 – August 4, 2016**

2017

IMS Annual Meeting @ JSM: Baltimore, MD, **July 29 – August 3, 2017**

2018

IMS Annual Meeting: TBD

JSM: Vancouver, Canada, **July 28–August 2, 2018**

IMS co-sponsored meeting

16th IMS New Researchers Conference
Harvard University, Cambridge, Massachusetts
July 31–August 2, 2014

w http://www.stat.harvard.edu/NRC2014/

The 16th IMS New Researchers Conference is an annual meeting organized under the auspices of the IMS, and jointly sponsored this year by the National Science Foundation (NSF), the Office of Naval Research (ONR), and other federal agencies and industry sponsors. The conference is hosted by the Department of Statistics at Harvard and will be held just prior to the 2014 Joint Statistical Meetings in Boston. The purpose of the conference is to promote interaction and networking among new researchers in probability and statistics.

Confirmed participants include Edo Airoldi, Stephen Fienberg, Peter Hall, Michael Jordan, Alan Karr, Jun Liu, Xiao-Li Meng, Susan Murphy, Giovanni Parmigiani, Donald Rubin, Steven Scott and Bin Yu.

The application deadline was March 24, 2014.

Contact **e** symposia@stat.harvard.edu

IMS co-sponsored meeting

XIII CLAPEM: *Congreso Latino-americano de Probabilidad y Estadística Matemática*
September 22–26, 2014
Cartagena de Indias, Colombia

w http://www.clapem.unal.edu.co/

The Latin American Congress on Probability and Mathematical Statistics (CLAPEM, by its initials in Spanish) will be holding its 13th edition in Cartagena de Indias, Colombia, September 22–26, 2014. CLAPEM is the largest event in Probability and Statistics of the Latin American region and has been held every two/three years in different countries of the region since 1980.

The XIII CLAPEM will include three short courses, six plenary conferences, eighteen thematic sessions, contributed talk sessions and poster sessions. Short courses by Bin Yu, Department of Statistics, University of California, Berkeley, USA; Alison Etheridge, Department of Statistics, University of Oxford, UK; and Paul Embrechts, Department of Mathematics, ETH Zurich, Switzerland.

Plenary speakers: Gerard Biau, Université Pierre et Marie Curie, France; Sourav Chatterjee, Courant Institute of Mathematical Sciences, USA; Carenne Ludeña, Universidad Central de Venezuela; Thomas Mikosch, University of Copenhagen, Denmark; Roberto Imbuzeiro Oliveira, IMPA, Brazil; and Victor Rivero, CIMAT, Mexico. The Invited thematic session titles can be found at www.clapem.unal.edu.co

The deadlines for abstract submission for the contributed talk and poster sessions, and for applying for financial support, have passed.

IMS co-sponsored meeting NEW

9th International Conference on Extreme Value Analysis: EVA 2015
June 15–19, 2015
Ann Arbor, Michigan

w http://sites.lsa.umich.edu/eva2015

IMS Representative on Program Committees:
Liang Peng **e** peng@math.gatech.edu

The ninth international conference on Extreme Value Analysis will take place at the University of Michigan, Ann Arbor. It will feature recent research on the probability and statistics of extreme value phenomena and its important applications to climate and weather, finance, insurance, engineering and computer science. All students, researchers, practitioners, and scientists with interests in statistics of extremes are welcome to EVA in Ann Arbor!

IMS sponsored meeting

2015 IMS-China Conference on Statistics and Probability
July 1–4, 2015
Kunming, Yunnan, P. R. China

w http://www.2015imschina.com

Contact: Qiwei Yao **e** q.yao@lse.ac.uk

The fifth IMS-China International Conference on Statistics and Probability will be held in Kunming, China, from July 1–4, 2015. Its scientific program will cover a wide range of topics in probability, statistics and their related areas. The conference will also provide an excellent forum for scientific exchanges and for forging new research collaborations. The conference website contains updated information and contact details.

IMS co-sponsored meeting

2015 European Meeting of Statisticians
July 6–10, 2015
Amsterdam, The Netherlands

w http://ems2015.nl/

The European Meeting of Statisticians (EMS) is the main conference in statistics and probability in Europe. It is organized in a roughly two-yearly schedule and is sponsored by the European Regional Committee of the Bernoulli Society. The program consists of invited and contributed lectures, and posters, addressing a full range of subjects in statistics and its many applications.

The conference will be held at the campus of the VU University Amsterdam, from Monday, July 6 to Friday, July 10, 2015.

Program committee: Marc Hallin (Belgium, chair); Claudia Klüppelberg (Germany); Susanne Ditlevsen (Denmark); Dominique Picard (France); Daniel Hlubinka (Czech Republic); Luigi Augugliaro (Italy); Geurt Jongbloed (Netherlands); Niels Hansen (Denmark, ERC Bernoulli Society)

More IMS meetings around the world

IMS co-sponsored meeting

37th Conference on Stochastic Processes and their Applications
July 28–August 1, 2014
Buenos Aires, Argentina

w http://mate.dm.uba.ar/~probab/spa2014/

SPA 2014: Call for Contributed Sessions

The 37th Conference on Stochastic Processes and their Applications will take place at the University of Buenos Aires, Argentina, from July 28 to August 1, 2014. The meeting will consist of Plenary Lectures, Invited Sessions and Contributed Sessions conducted in parallel.

Plenary speakers: Anton Bovier, Ivan Corwin, Laszlo Erdös, Antonio Galves, Christophe Garban, Martin Hairer (Lévy Lecture), Milton Jara, Gady Kozma, Eyal Lubetzky, Sylvie Méléard, David Nualart (IMS Medallion Lecture), Felix Otto, Tomohiro Sasamoto, Scott Sheffield, Fabio Toninelli, and Balint Tóth, and a Doeblin Prize Lecture to be announced.

The Invited Sessions can be found at http://mate.dm.uba.ar/~probab/spa2014/program.html#invitedsessions

Organizing Committee: Inés Armendáriz, Pablo A. Ferrari, Pablo Groisman, Matthieu Jonckheere, Nora Muler, Leonardo T. Rolla. Contact **e** spa.conference.2014@gmail.com

IMS co-sponsored meeting

38th Conference on Stochastic Processes and their Applications
July 13–17, 2015, Oxford, United Kingdom

w TBC

IMS co-sponsored meeting

International Symposium in Statistics (ISS) 2015
Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familial-longitudinal Data
July 6–8, 2015
Memorial University, St. John's, Canada

w http://www.iss-2015-stjohns.ca/

The ISS-2015 is planned to discuss the methodological advances and challenges in the analysis of continuous and discrete correlated data both in parametric and semi-parametric setup.

The main topics of interest of this symposium are:

- Multivariate analysis in a wider non-normal elliptical distribution setup;
- Multivariate analysis for longitudinal categorical data;
- Time series volatility models;
- Spatial-temporal data analysis;
- Familial longitudinal data analysis in semi-parametric setup.

It is also of interest to discuss further challenges in analysis when data may contain measurement errors, missing values, and/or outliers, for example.

The scientific program will include keynote, special invited, invited, and contributed paper sessions.

ENAR, 2015–2017

IMS sponsored meeting

2015 ENAR/IMS Spring Meeting
March 15–18, 2015
Miami, Florida, USA

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

IMS sponsored meeting

2016 ENAR/IMS Spring Meeting
March 6–9, 2016
Austin, Texas

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

IMS sponsored meeting

2017 ENAR/IMS Spring Meeting
March 12–15, 2017
Washington DC

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

IMS co-sponsored meeting

INFORMS Applied Probability Society Conference 2015
July 5–8, 2015, Istanbul, Turkey

w TBC

IMS co-sponsored meeting

10th Cornell Probability Summer School
July 20–August 1, 2014
Cornell University, Ithaca, NY

w http://www.math.cornell.edu/~cpss/

Other meetings around the world

8th International Congress of Industrial and Applied Mathematics 2015: Call for Minisymposia

NEW

Beijing, China, August 10–14, 2015

w http://www.iciam2015.cn/

This congress is the main activity of the International Council of Industrial and Applied Mathematics (ICIAM), held every 4 years. In 2015 it will be in Beijing from August 10–14. IMS joined ICIAM as an associated member in 2012, in the conviction that both applied mathematics and probability and statistics can gain a lot from an intensified collaboration and exchange of ideas. Just a few topics of interest to both communities are biological models, mathematical finance, filtering and data assimilation, stochastic PDE's, uncertainty quantification in PDE models, compressed sensing or Monte Carlo methods.

The importance of probability and statistics is also reflected in the list of invited speakers which includes several IMS members and researchers who have published in IMS journals: Martin Hairer, Shige Peng, Nancy Reid and Simon Tavare.

In addition, there is the possibility to submit proposals for minsymposia at the conference. A minisymposium consists of four 25-minute presentations plus five minutes of discussions after each presentations. A minisymposium organizer is encouraged to make the first presentation and should find three other speakers on the same topic, preferably from different institutions. The deadline for submitting a proposal for a minisymposium is September 30, 2014. Such a proposal should contain a title, a description of the topic (not to exceed 100 words) and a list of speakers and titles of their presentations. Hopefully, many IMS members will take advantage of this occasion to foster interactions of probability and statistics with applied mathematics.

More details can be found at http://www.iciam2015.cn/Call%20for%20Minisymposia.html

Conference on Stochastic Asymptotics & Applications and Sixth Western Conference on Mathematical Finance

NEW

September 25–27, 2014

Santa Barbara, California, USA

w http://www.pstat.ucsb.edu/sa-wcmf6/index.html

Contact: Michael Ludkovski **e** ludkovski@pstat.ucsb.edu

The Conference will address topics in stochastic perturbation methods, primarily financial mathematics, but also large deviations theory, homogenization, and waves in random media. A special focus will be placed on novel applications of probability and stochastics for systemic risk in financial networks, mean field games, stochastic volatility modeling, analysis of high-frequency financial data and multi-scale stochastic models of interacting particle systems. The meeting also honors Jean-Pierre Fouque on occasion of his 60th birthday.

There are no registration fees but registration is required and the number of participants is limited.

Plenary Speakers: Adrian Banner, Rene Carmona, Jean-Francois Clouet, Bruno Dupire, Nicole El Karoui, Sean Han, Andre Nachbin, George Papanicolaou, Etienne Pardoux, Thaleia Zariphopoulou, Jorge Zubelli.

Travel Grants for US Participants: Funding is available from the National Science Foundation for partial travel support to help in defraying the travel costs of early career US-based participants. Further application instructions are on the website.

IX International Multiple Comparisons Procedures (MCP) Conference

NEW

January 4–7, 2015

Trident Hyderabad, India

w http://www.mcp-conference.org/hp/2015/

The IXth International Multiple Comparisons Procedures (MCP) Conference will be held in Trident Hyderabad, India from January 4, 2015 to January 7, 2015. The conference will cover the latest methodological and applied developments in the areas of multiple comparisons and adaptive designs in clinical trials. There will be pre-conference workshops on January 4 and the main conference will be from January 5 to January 7. For further details and submission of abstracts visit the website or write to Dr. Vishwanath (Mahesh) Iyer **e** vishwanath.iyer@novartis.com.

Colloquium of the International Actuarial Association

NEW

June 7–10, 2015

Oslo, Norway

w http://www.actuaries.org/oslo2015

Den norsk Aktuarforening invites you to attend the Colloquium of the International Actuarial Association to be held in Oslo, Norway, from the 7th to the 10th of June 2015. The colloquium is a joint collaboration of the two IAA sections Pension Benefits and Social Security (PBSS) and Life Insurance (LIFE).

More meetings around the world

Cincinnati Symposium on Probability Theory and Applications NEW
September 19–21, 2014
University of Cincinnati, Ohio, USA
w https://math.uc.edu/probability/

The Cincinnati Symposium on Probability Theory and Applications 2014 will focus on current research in limit theorems for dependent structures, specifically focusing on recent advances in martingale approximations, long-range dependence phenomena and infinite ergodic theory, and spectra of large random matrices. The Symposium will have seven hour-long talks and seven half-hour talks, as well as a poster session.

Registration for the symposium is mandatory, please register online at the website above. There will be no registration fee.

There will be a poster session and we are receiving applications. Please fill in accordingly during registration.

Invited Speakers: Antonio Auffinger, Northwestern University; Thomas Bothner, Concordia University; Paul Bourgade, University of Cambridge; Tiefeng Jiang, University of Minnesota; Paul Jung, University of Alabama, Birmingham; Jana Klicnarová, University of South Bohemia; Seung-Yeop Lee, University of South Florida; Abey Lopez-Garcia, University of South Alabama; Florence Merlevède, Université de Marne-la-Vallée; Cheng Ouyang, University of Illinois, Chicago; Gennady Samorodnitsky, Cornell University; Jack Silverstein, North Carolina State University; Stilian Stoev, University of Michigan; Dalibor Volný, Université de Rouen

12th Workshop on Stochastic Models, Statistics and Their Applications NEW
February 16–20, 2015
Wrocław University of Technology, Poland
w http://www.smsa2015.rwth-aachen.de

Following the successful previous workshops, the conference will put together recent advances and trends in areas related to stochastic modeling, statistical inference and their applications.

Confirmed Plenary Speakers: Lázló Györfi (Budapest University of Technology and Economics, Hungarian Academy of Sciences); Marie Hûsková (Charles University of Prague); Teresa Ledwina (Polish Academy of Sciences).

Invited sessions devoted to active research topics (see website) have been organized and renowned experts will give invited session talks. We also invite proposals for contributed sessions and talks. Please contact the organizers **e** prause@stochastik.rwth-aachen.de.

We also invite submissions of papers that will be published in a proceedings by Springer-Verlag. The deadline is September 3, 2014

In 2015 the workshop will be organized as—but not limited to—a German-Polish one and takes place at Wrocław. It is organized by the Institute of Mathematics of Wrocław UoT and the Institute of Statistics, RWTH Aachen University, and supported by the Polish Mathematical Society. For more information (including the Call for Papers and the deadlines for the registration and the abstract submission) visit http://www.smsa2015.rwth-aachen.de

International Statistical Institute Regional Statistics Conference 2014 NEW
November 16–19, 2014
Kuala Lumpur, Malaysia
w http://www.isi-rsc2014.my/

The conference aims to bring together statistical researchers and practitioners as well as users and policymakers from around the world to discuss new developments in statistical science. There will be plenary sessions as well as parallel sessions with invited and contributed papers. The topics will cover research, applications and best practices involved in knowledge discovery and innovation. There will be many opportunities for participants to share information and expertise while also learning from peers around the world.

The conference theme, "Statistical Science for a Better Tomorrow," is intentionally broad to allow for a diverse programme and attract participants with diverse interests. We encourage researchers and practitioners who are actively involved in statistical science in academia, industry, national statistical offices, national and international agencies, central banks, and other groups to participate in the conference.

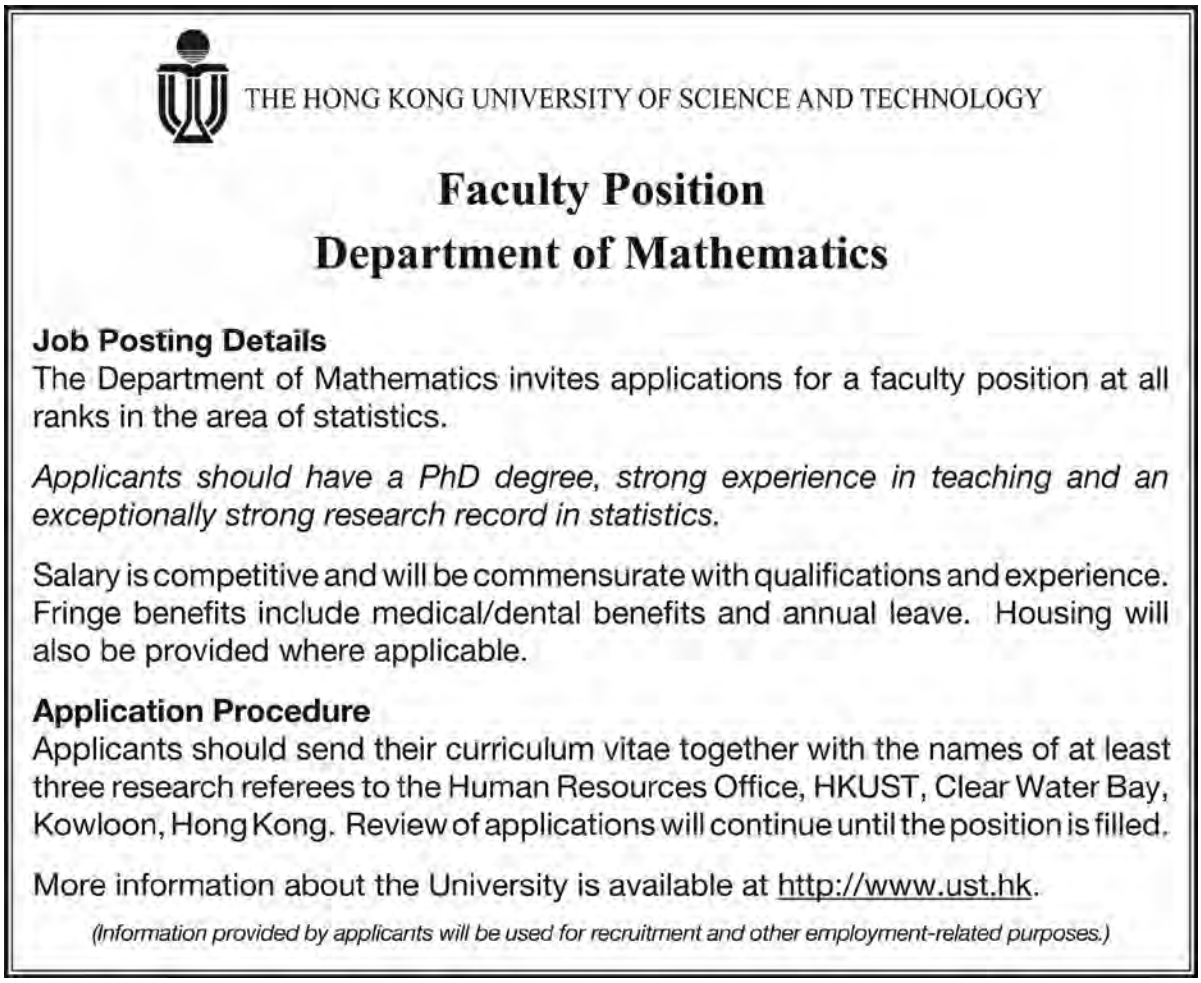
The conference will be preceded by workshops and a seminar of the Irving Fisher Committee on Central Bank Statistics.

NIMBioS Investigative Workshop: Heart Rhythm Disorders NEW
December 3–5, 2014
Knoxville, Tennessee, USA
w http://www.nimbios.org/workshops/WS_cardiac

The goal of this workshop is to unite researchers from different disciplines – clinicians, mathematicians, physicists, biomedical engineers, and industrial practitioners – in order to better understand the existing mathematical challenges and to explore new directions in modeling of cardiovascular dynamics. As a result of the workshop, we will identify challenges and frontiers in mathematical modeling, statistics and prediction, dynamics and control, stability analysis, as well as data acquisition and analysis for heart rhythm related diseases.

Employment Opportunities around the world

Hong Kong



THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Faculty Position

Department of Mathematics

Job Posting Details

The Department of Mathematics invites applications for a faculty position at all ranks in the area of statistics.

Applicants should have a PhD degree, strong experience in teaching and an exceptionally strong research record in statistics.

Salary is competitive and will be commensurate with qualifications and experience. Fringe benefits include medical/dental benefits and annual leave. Housing will also be provided where applicable.

Application Procedure

Applicants should send their curriculum vitae together with the names of at least three research referees to the Human Resources Office, HKUST, Clear Water Bay, Kowloon, Hong Kong. Review of applications will continue until the position is filled.

More information about the University is available at http://www.ust.hk.

(Information provided by applicants will be used for recruitment and other employment-related purposes.)

United Kingdom: Oxford

University of Oxford, Mathematical Institute

Senior Research Fellow in Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=18147066

United States: Baltimore, MD

Johns Hopkins University

Bloomberg Distinguished Professor: Mathematics & Applied Mathematics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16101447

United States: St. Louis, MO

Monsanto

Big Data Science: Emerging Leaders in Science Program

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=17968391

United States: Cleveland, OH

Case Western Reserve University,

Department of Mathematics, Applied Mathematics and Statistics

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=18708260

Continues on **page 24**

USA: Research
Triangle Park, NC

NISS | The Statistics Community Serving the Nation

NISS Seeks Director

The National Institute of Statistical Sciences (NISS) was established in 1990 by the national statistics societies and the Research Triangle universities and organizations, with the mission to identify, catalyze and foster high-impact, cross-disciplinary and cross-sector research involving the statistical sciences.

Today, NISS seeks a talented statistical scientist to serve as its director and chief executive officer. The director is appointed by the Board of Trustees and is responsible for every aspect of the institute's vision and operation. Central among these, the director:

- Develops and carries out the scientific program of NISS, ensuring the independence, quality, relevance and timeliness of NISS research.
- Generates resources to support NISS infrastructure and carry out NISS programs.
- Maintains the centrality of the affiliates program to NISS.
- Nurtures and strengthens community engagement in NISS, in particular by serving as its most articulate and persuasive advocate.
- Works to conserve and build the NISS-SAMSI relationship at every level.
- Safeguards the fiscal health of NISS.

The director also oversees the scientific staff of NISS, as well as the support staff. She or he leads the selection, mentoring and career advancement of postdoctoral fellows, and sets the tone and style of NISS as an employer.

The director plays a strong role in the ongoing development of NISS' sister institute, the Statistical and Applied Mathematical Sciences Institute (SAMSI). She or he may in addition hold a faculty appointment at one of the parent universities of NISS—Duke University, North Carolina State University and the University of North Carolina at Chapel Hill.

Criteria for the position include a Ph.D. in the statistical sciences or a related discipline; a strong record of scientific accomplishment; experience in assembling, securing resources for, and managing cross-disciplinary and multi-organization collaborations; superb communication skills; and commitment to the NISS mission.

Additional information about NISS and SAMSI is available on their web sites: **www.niss.org** and **www.samsi.info**.

The goal is to fill the position by July 1, 2015. Applications and nominations should be sent to **directorsearch2014@niss.org**. Board of Trustees chair Mary Batcher and search committee co-chairs Roger Hoerl and Robert Rodriguez may be contacted at this address with questions and inquiries. Applications should contain a letter of interest, CV and names of five references. Review of applications will begin at once, and will continue until the director is appointed. Women and members of under-represented minorities are strongly encouraged to apply.

NISS is an AA/EOE employer.

National Institute of Statistical Sciences
P.O. Box 14006, 19 T.W. Alexander Drive, RTP, NC 27709
919.685.9300 (phone), 919.685-9310 (fax), www.niss.org

::: Advertise current job opportunities for only $275 for 60 days ::: See http://jobs.imstat.org for details :::

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

August 2014

IMS August 2–7: Boston, MA. **JSM2014 and ASA's 175th Anniversary w** http://amstat.org/meetings/jsm/

August 4–9: Knoxville, Tennessee. **NIMBioS Tutorial: Evolutionary Quantitative Genetics w** http://www.nimbios.org/tutorials/TT_eqg

August 6–11: Seoul, Korea. **7th International Conference on Stochastic Analysis and its Applications 2014** (Satellite to ICM2014) **w** http://www.icm2014.org/en/program/satellite/satellites

August 12 & 14: Seoul, Korea. **International Congress of Women Mathematicians 2014 w** http://www.kwms.or.kr/icwm2014

August 13–21: Seoul, Korea. **International Congress of Mathematicians: ICM2014 w** http://www.icm2014.org

August 24–28: Linköping, Sweden. **LINSTAT2014 w** http://www.mai.liu.se/LinStat2014/

August 25–27: Kermanshah, Iran. **12th Iranian Statistical Conference w** http://isc12.razi.ac.ir/index.php?slc_lang=en&sid=1

August 25–29: Kansai University, Osaka, Japan. **Stochastic Processes, Analysis and Mathematical Physics w** http://stoc-proc.com/sympo/2014/SPAMP2014.htm

September 2014

September 7–10: Fort Collins, Colorado, USA. **2014 Graybill/ENVR Conference: Modern Statistical Methods for Ecology w** http://www.stat.colostate.edu/graybillconference/

September 10–11: Besançon, France. **Workshop on empirical processes and applications to statistics w** https://trimestres-lmb.univ-fcomte.fr/Workshop-on-empiricial-processes.html

September 11–13: Shymkent, Kazakhstan. **ICAAM 2014 Second International Conference on Analysis and Applied Mathematics w** http://www.icaam-online.org/index/

September 14–18: Nijmegen, The Netherlands. **The International Chemometrics Research Meeting 2014 w** www.icrm2014.org

NEW September 19–21: University of Cincinnati, Ohio, USA. **Cincinnati Symposium on Probability Theory and Applications w** https://math.uc.edu/probability/

IMS September 22–26: Cartagena de Indias, Colombia **XIII CLAPEM: Congreso Latino-americano de Probabilidad y Estadística Matemática w** http://www.clapem.unal.edu.co/

September 22–25: Leiden, The Netherlands. **Workshop on Statistical Inference for Lévy Processes w** http://tinyurl.com/ph86pbw

NEW September 25–27: Santa Barbara, California, USA. **Conference on Stochastic Asymptotics & Applications and Sixth Western Conference on Mathematical Finance w** http://www.pstat.ucsb.edu/sa-wcmf6/index.html

September 28–October 2: Oxford, UK. **Advances in Probability: Integrability, Universality and Beyond w** http://www.claymath.org/events/advances-probability-integrability-universality-and-beyond

October 2014

October 15–16: Göttingen, Germany. **Time Dynamic Change Point Models and its Applications w** http://www.stochastik.math.uni-goettingen.de/forschergruppe/index.php?id=651&language=en

November 2014

NEW November 16–19: Kuala Lumpur, Malaysia. **ISI Regional Statistics Conference 2014 w** http://www.isi-rsc2014.my/

December 2014

December 3–5: NIMBioS, Knoxville, Tennessee. **Heart Rhythm Disorders w** http://www.nimbios.org/workshops/WS_cardiac

December 18–21: Bogor, Indonesia. **13th Islamic Countries Conference on Statistical Sciences w** http://www.iccs13.isoss.net

January 2015

NEW January 4–7: Trident Hyderabad, India. **IX International Multiple Comparisons Procedures (MCP) Conference w** http://www.mcp-conference.org/hp/2015/

February 2015

NEW February 16–20: Wrocław University of Technology, Poland. **12th Workshop on Stochastic Models, Statistics and Their Applications w** http://www.smsa2015.rwth-aachen.de

International Calendar *continued*

March 2015

March 15–18: Miami, Florida. **2015 ENAR/IMS Spring Meeting. w** http://www.enar.org/meetings.cfm

May 2015

NEW May 18–29: Singapore. **Workshop on New Directions in Stein's Method w** http://www2.ims.nus.edu.sg/Programs/015wstein/

June 2015

June (exact dates TBC): Location TBC. **2015 WNAR/IMS Annual Meeting w** TBC

NEW June 7–10: Oslo, Norway. **Colloquium of the International Actuarial Association w** http://www.actuaries.org/oslo2015

NEW June 15–19: Ann Arbor, Michigan. **9th International Conference on Extreme Value Analysis: EVA 2015 w** http://sites.lsa.umich.edu/eva2015

July 2015

July 1–4: Kunming, Yunnan, P. R. China. **2015 IMS-China International Conference on Statistics and Probability w** http://www.2015imschina.com

July 5–8: Istanbul, Turkey. **INFORMS Applied Probability Society Conference 2015 w** TBC

July 6–8: Memorial University, St John's, Canada. **International Symposium in Statistics (ISS 2015)** *Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familial-longitudinal Data.* **w** http://www.iss-2015-stjohns.ca

July 6–10: Amsterdam, The Netherlands. **2015 European Meeting of Statisticians w** http://ems2015.nl/

July 13–17: Oxford, UK. **38th Conference on Stochastic Processes and Applications w** TBC

July 26–31: Rio de Janeiro, Brazil. **2015 ISI World Statistics Congress w** http://www.isi2015.ibge.gov.br/

August 2015

August 8–13: Seattle, WA. **IMS Annual Meeting at JSM2015. w** http://amstat.org/meetings/jsm/

NEW August 10–14: Beijing, China. **8th International Congress of Industrial and Applied Mathematics 2015 w** http://www.iciam2015.cn/

September 2015

September 21–25: Vienna, Austria. **8th International Workshop on Simulation w** http://iws.boku.ac.at/index.php

March 2016

March 6–9: Austin, Texas. **2016 ENAR/IMS Spring Meeting w** http://www.enar.org/meetings.cfm

June 2016

June 20–23: Geneva, Switzerland. **ICES-V, the 5th International Conference on Establishment Statistics w** TBC

July 2016

July 30 – August 4: Chicago, USA. **JSM 2016 w** http://amstat.org/meetings/jsm/

July 11–15: Toronto, ON, Canada. **IMS Annual Meeting at 9th World Congress in Probability and Statistics w** TBC

July 2017

July 29 – August 3: Baltimore, USA. **IMS Annual Meeting at JSM 2017 w** http://amstat.org/meetings/jsm/

July 2018

July 28 – August 2: Vancouver, Canada. **JSM 2018 w** TBC

July 2019

July 27–August 1: Denver, CO, USA. **IMS Annual Meeting at JSM 2019 w** http://amstat.org/meetings/jsm/

August 2020

August 1–6: Philadelphia, PA, USA. **JSM 2020 w** TBC

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

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