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December 2016

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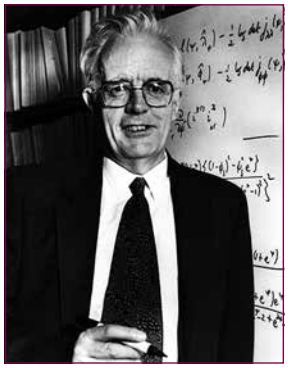
First International Prize in Statistics

IMS Fellow Sir David Cox has been named the inaugural recipient of the International Prize in Statistics. The Prize, considered the highest honor in statistics, will be bestowed every other year to an individual or team for major achievements using statistics to advance science, technology and human welfare.



Cox is a giant in the field of statistics, but the International Prize in Statistics Foundation is recognizing him specifically for his 1972 paper in which he developed the proportional hazards model that today bears his name. The Cox Model is widely used in the analysis of survival data and enables researchers to more easily identify the risks of specific factors for mortality or other survival outcomes among groups of patients with disparate characteristics. From disease risk assessment and treatment evaluation to product liability, school dropout, re-incarceration and AIDS surveillance systems, the Cox Model has been applied widely in science and engineering.

"Professor Cox changed how we analyze and understand the effect of natural or human-induced risk factors on survival outcomes, paving the way for powerful scientific inquiry and discoveries that have impacted human health worldwide," said Susan Ellenberg, chair of the International Prize in Statistics Foundation. "Use of the Cox Model in the physical, medical, life, earth, social and other sciences, as well as engineering fields, has yielded more robust and detailed information that has helped researchers and policymakers address some of society's most pressing challenges."

Successful application of the Cox Model has led to breakthroughs with far-reaching societal effects, including the areas of smoking cessation, particulate air pollution mortality, risk factors of coronary artery disease and analyzing treatments for lung cancer, cystic fibrosis, obesity, sleep apnea and septic shock.

In 2010, Cox received the Copley Medal, the Royal Society's highest award. Knighted in 1985, Cox is a Fellow of the Royal Society, an honorary fellow of the British Academy and a foreign associate of the US National Academy of Sciences. He has served as president of the Bernoulli Society, Royal Statistical Society and International Statistical Institute.

Cox's 50-year career included technical and research positions in the private and nonprofit sectors, as well as numerous academic appointments as professor or department chair at Birkbeck College, Imperial College London, Nuffield College and Oxford University. He earned his PhD from the University of Leeds in 1949. Though he retired in 1994, Cox remains active in the profession in Oxford, UK.

Together with a monetary award of $75,000, the International Prize in Statistics will be presented to Sir David Cox at the World Statistics Congress in Marrakech, Morocco, next July.

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Executive Committee

IMS Members' News

Alicia Carriquiry elected to National Academy of Medicine


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Among the 70 regular members and 9 international members elected this year to the US National Academy of Medicine (NAM) is IMS Fellow Alicia Carriquiry. Alicia is distinguished professor of liberal arts and sciences and professor of statistics at Iowa State University. Election to the Academy is considered one of the highest honors in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

During her 26-year career, Alicia Carriquiry has developed statistical methods to better measure food consumption, specifically, nutrient intake. Her work has also focused on mental health issues, which includes leading an ongoing effort by NAM to evaluate Veterans Affairs mental health services. Carriquiry says she was stunned to be recognized by the academy for her contributions to the field.

"I'm so honored, flattered and humbled. It's very rewarding," Carriquiry said. "In life you have successes and failures, and to receive a recognition like this makes you realize that all the hard work throughout your career was worth it."

Carriquiry has worked with various government and health agencies around the world to improve health and nutrition. She says nutrient and food consumption data is often collected over a period of a few days. Since our diet varies daily, it is challenging for statisticians to develop models that can make long-term health recommendations. Carriquiry says finding ways to overcome those statistical challenges is important for creating effective policy and programs.

"It's work that has a very direct impact on the well-being of various populations," Carriquiry said. "For example, low vitamin A levels are associated with high incidence of night blindness, which affects many people in the developing world. We want to identify those needs so that we can do something about it, and with this data we can target assistance, education and supplementation programs."

Carriquiry joined the Iowa State faculty in 1990, and leads the National Institute of Standards and Technology Forensic Science Center of Excellence based at Iowa State. She served as associate provost from 2000 to 2004. Carriquiry is also an elected member of the International Statistical Institute and a Fellow of the American Statistical Association.

COPSS leadership roles for Nicholas Horton and Wendy Lou

IMS members Nicholas Horton (Amherst College) and Wendy Lou (University of Toronto) have taken on new leadership roles as **Chair** and **Secretary/Treasurer**, respectively, of the Committee of Presidents of Statistical Societies. COPSS serves to foster connections between statistical societies and to organize a series of awards for outstanding work in the field. IMS is a founding member of COPSS.

As a reminder, the deadlines for nominations for the Fisher Award, are approaching. The nomination deadline for the 2017 Fisher Award and Lectureship is December 15, 2016. The deadline for the COPSS Presidents' Award, the F.N. David Award, and the George Snedecor Award is January 15, 2017.

Please see http://copss.org for more information.

More Members' News

Ruth Williams and Martin Reiman receive INFORMS 2016 John von Neumann Theory Prize

The Institute for Operations Research and the Management Sciences (INFORMS) has selected Ruth Williams and Martin Reiman to jointly receive the 2016 INFORMS Von Neumann Theory Prize.

The John von Neumann Theory Prize is awarded annually to a scholar (or scholars in the case of joint work) for fundamental, sustained contributions to theory in operations research and the management sciences. The award was presented at a ceremony on November 13 at the INFORMS Annual Meeting in Nashville, Tennessee.

Ruth and Marty were selected in recognition of their fundamental work on the theory and applications of stochastic networks and their diffusion approximations.

The Institute for Operations Research and the Management Sciences (INFORMS) is the largest society in the world for professionals in the field of operations research (O.R.), management science, and analytics. See https://www.informs.org/Recognize-Excellence/INFORMS-Prizes-Awards/John-von-Neumann-Theory-Prize.

American Statistical Association awards and prizes at JSM

The ASA awarded several prizes at the Joint Statistical Meetings in Chicago this year—and there are lots of IMS members and Fellows among them!

ASA Founders: James L. Rosenberger received an ASA Founders Award, along with John L. Czajka, Rod Little and Maura Stokes.

ASA Fellows: Among the 65 new ASA Fellows are: Alexander Aue, Veerabhadran Baladandayuthapani, Karl W. Broman, Peter Bühlmann, Ding-Geng Chen, Peter F. Craigmile, Wayne Stuart DeSarbo, Jan Hannig, Murali Haran, Hsin-Cheng Huang, Galin Jones, Liza Levina, Qi Long, Van L. Parsons, Luis Raul Pericchi Guerra, Ingo Ruczinski and Chunming Zhang.

Samuel S. Wilks Memorial Award: This award honors the memory and distinguished career of Sam Wilks by recognizing outstanding contributions to statisticians who carry on the spirit of his work. The 2016 honoree is David Donoho.

Gottfried E. Noether Awards: The **Noether Senior Scholar** Award was given to Jane-Ling Wang. The 2016 **Noether Young Researcher** Award honoree is Han Liu.

Outstanding Statistical Application Award: Each year, the ASA recognizes the author(s) of a paper that is an outstanding application of statistics in the physical, biological, or medical sciences. The 2016 honorees are Edoardo M. Airoldi and Jonathan M. Bischof of Harvard University. They were recognized for their novel development of a scalable topic modeling framework in their 2015 *JASA* paper, "A Regularization Scheme on Word Occurrence Rates That Improves Estimation and Interpretation of Topical Content."

Wray Jackson Smith Scholarship: The ASA's Government Statistics Section and Social Statistics Section presented this scholarship to Maria Cuellar of Carnegie Mellon University.

Statistics in Physical Engineering Sciences Award: This award recognizes outstanding collaborative endeavors between statisticians and scientists throughout the physical and engineering sciences. The honoree is Dennis K.J. Lin of Penn State University.

Mentoring Award: Fritz J. Scheuren, of NORC at the University of Chicago, received one of the 2016 Mentoring Awards for providing significant early-career support to statistics students, statisticians, or statistical researchers.

See the full list at http://magazine.amstat.org/blog/2016/10/01/jsm2016-highlights/

Profile: Yuval Peres

Russell Lyons writes this profile of IMS Fellow Yuval Peres, who was elected as a foreign associate of the US National Academy of Sciences in May 2016.

Yuval Peres, Principal Researcher in the Theory Group at Microsoft Research in Redmond, WA, was elected as a foreign associate of the US National Academy of Sciences in 2016. The requirements to be a foreign associate are even higher than those for US citizens to be elected.

Born in 1963 in Israel, Peres obtained his PhD at the Hebrew University of Jerusalem in 1990, directed by Hillel Furstenberg. After postdoctoral positions at Stanford and Yale Universities, he advanced through the ranks as faculty at both the Hebrew University and the University of California at Berkeley.

Peres joined Microsoft Research in 2006, where he leads the Theory Group. This group combines mathematicians and computer scientists working on probability and algorithms. It attracts many visitors from around the world for both long and short stays.

The broad categories of Peres' research are probability, ergodic theory and fractals, Markov chains and random walks, game theory, and Brownian motion. More particularly, he specializes in stochastic processes on graphs, such as random walks, percolation, and other topics from statistical physics; Bernoulli convolutions; the p-Laplacian; mixing times; combinatorics, especially random graphs; geometric group theory; martingales; and point processes. In computer science, he has posted papers to the arXiv in five different primary sections: game theory, information theory, learning, data structures and algorithms, and computational complexity. Peres is prolific and gregarious: He has close to 300 papers and 200 coauthors; he has more than ten joint works with each of multiple long-term collaborators; and he has co-authored three books on probability that have been quite popular and is working on other books in game theory and analysis. Several of his 21 PhD students have become very successful mathematicians in their own right.

Peres has accumulated several honors: the Rollo Davidson Prize in 1995 and the Loève Prize in 2001; invitations to speak at the International Congress of Mathematicians in 2002 and the European Congress of Mathematics in 2008; the David P. Robbins Prize (shared) in 2011; and fellowship of the IMS in 2008 and the American Mathematical Society in 2012. He has given distinguished lectures at UCLA, Tel Aviv University, the Rényi Institute, the University of British Columbia, Carnegie Mellon University (in Computer Science), Rice University, Indiana University, the University of North Carolina, and the University of Colorado. Peres has served on scientific boards of several organizations, including PIMS, AIM, and IPAM.

With his great technical acuity and encyclopedic knowledge, Peres has established a large number of fundamental and deep results. Many of these find new connections between different areas in probability, and sometimes analysis. For example, with Kenyon, he discovered how intersections of fractals are connected to growth of random matrix products; he related percolation on trees to intersections of Brownian motion; with Levine, he analyzed the rotor-router model via free boundary problems; with Ding and Lee, he related cover times for random walks to Talagrand's theory of maxima of Gaussian processes; with Sheffield, Schramm, and Wilson, he analyzed the p-Laplacian via random-turn games; with Solomyak and later Schlag, he connected Bernoulli convolutions to generalized random projections; with Austin and Naor, he bounded the compression of groups via random walks; and with Virág, he found that the zeros of a certain Gaussian analytic function form a determinantal point process.

There is space here to describe only a few of Peres' accomplishments in any detail. We focus on random walks. Random walks are fundamental in all of science, including computer science. Some of the deepest results known about them are due to Peres and his coauthors.

In a paper with Dembo, Rosen, and Zeitouni that appeared in *Acta Math.*, he considered simple random walk on $\mathbb{Z}^2$. This Markov chain is recurrent, so each point will be visited infinitely often a.s. How fast does the number of visits increase? Consider the most-often visited point after n steps. Solving a 40-year-old conjecture of Erdős and Taylor, Peres et al. proved that it is a.s. asymptotic to $(\log n)^2/\pi$. The proof is a tour-de-force, using a novel multiscale refinement of the classical second-moment method in order to handle high correlations of the local times at different sites.

Another paper with the same authors that appeared in *Ann. Math.* again concerned simple random walk on $\mathbb{Z}^2$. In the old days when screensavers actually had a practical purpose, one such program simply performed a random walk on the pixels of the screen, turning each one off when visited. A mathematician viewing such a display will be curious how long, on average, it will take until the entire screen is off. This is an example of the cover time of a random walk on a finite graph. In fact, this graph parameter has been studied intensively since about 1980 by probabilists,

combinatorialists, and computer scientists. It has applications to designing universal traversal sequences, testing graph connectivity, and protocol testing, among others. Peres et al. established a 15-year-old conjecture due to Aldous that the number of steps it takes to cover all points of the lattice torus $\mathbb{Z}_n^2$ is asymptotic to $4n^2(\log n)^2/\pi$. While the exact (asymptotic) value is elegant and satisfying, there is actually much more importance in simply knowing that such a limit exists, regardless of the actual constant ($4/\pi$ in this case). This is because as the random walk visits more and more nodes of the graph, the uncovered nodes form a fractal-type random object; this object itself had been studied by physicists via simulations and (non-rigorous) heuristic arguments. In order to make such study rigorous, the first step is to establish that such precise asymptotics for the cover time exist.

A paper with Ding and Lee that also appeared in *Ann. Math.* continued Peres' deep study of the cover time of graphs, but now for general finite graphs. He found a strong and surprising connection to Gaussian processes. This allowed him to resolve a number of open questions: Aldous and Fill asked in 1994 whether one can efficiently compute the cover time up to a bounded factor (where the bound does not depend on the graph). Peres et al. provided such an algorithm. A notion of cover time that takes longer is known as the blanket time; in 1996, Winkler and Zuckerman conjectured that the blanket time is actually no larger than a constant times the cover time; Peres et al. proved that this is true. Prior to this work, instead of a constant independent of all graphs, the best previous approximation factor (for both these problems) was $O(\log \log n)^2$ for n-vertex graphs; this was due to Kahn, Kim, Lovász, and Vu.

Peres is widely known for his sense of humor. His favorite quote is from his son Alon, who was overheard at age 6 asking a friend: "Leo, do you have a religion? You know, a religion, like Christian, or Jewish, or Mathematics ...?"

Profile: Nancy Reid

Our fourth profile of IMS Fellows who were elected in May to the US National Academy of Sciences is devoted to Nancy Reid. Christian Genest from McGill University, Montréal, Canada, writes about her:

Nancy Reid became in May the first Canadian-based statistician to be elected to membership in the US National Academy of Sciences, Division of Applied Mathematical Sciences. A former President of the IMS (1996–97) and the Statistical Society of Canada (2004–05), Nancy is a leading figure on the North American statistical scene whose broad and influential contributions to research, coupled with an exceptional record of service to the profession, have earned her many distinctions and made her an inspiring role model for young researchers in science.

Born in St. Catharines, Ontario, Nancy studied mathematics and statistics at the University of Waterloo (B.Math., 1974), the University of British Columbia (MSc, 1976), and Stanford University (PhD, 1979). Her thesis supervisor was R.G. Miller, Jr. After postdoctoral studies with David Cox at Imperial College London (1979–80), she returned to the University of British Columbia as an Assistant Professor of Statistics (1980–85). Following academic visits to Harvard and Austin (Texas) in 1985–86, she joined the Department of Statistics at the University of Toronto, where she was promoted Full Professor in 1988 and University Professor in 2003. She chaired the department from 1997 to 2002 and has held a distinguished Canada Research Chair in Statistical Theory and Applications since 2007. She made extended visits to the EPFL (Lausanne, 2002–03) and University College London (2012) during her sabbatical leaves.

Over the past 40 years, Nancy has published four books, authored over 100 research papers and nearly two scores of professional articles, book reviews, interviews, etc. Her 1987 paper with David Cox on parameter orthogonality and approximate conditional inference is a classic still well worth reading today with its discussion in the *Journal of the Royal Statistical Society*, *Series B* (*JRSS-B*). Together with her husband Don Fraser, she developed asymptotic theory through the use of tangent exponential models. The fundamental insight shed by this work on the structure of models led, among other things, to their critical paper on "Default priors for Bayesian and frequentist inference" (*JRSS-B* 2010, joint

Continues on **page 6**

Nancy Reid Profile

Continued from previous page

with E. Marras and G. Yun-Yi). The bases for this work were laid out in a long series of papers that appeared, e.g., in *Statistica Sinica* (1993), *Biometrika* (1999), and *The Annals of Statistics* (2003).

Throughout her career, Nancy has also produced many authoritative survey articles. In this and so many other ways, she has been exemplary at sharing unselfishly her broad knowledge and expertise. Her *Statistical Science* article on saddlepoint approximations, published in 1988, has been very influential. The 2011 overview of composite likelihood methods that she wrote with Cristiano Varin and David Firth for *Statistica Sinica* has also been highly cited.

For her contributions to research, Nancy received the Presidents' Award of the Committee of Presidents of Statistical Societies in 1992, and the Canadian Mathematical Society's inaugural Krieger-Nelson Prize Lectureship in 1995. Noteworthy in her long list of honors and awards are her election as a Fellow of the Royal Society of Canada (2001) and as a Fellow of the American Association for the Advancement of Science (2002), the Gold Medal for Research of the Statistical Society of Canada (2009), the Fisher Memorial Lectureship (2016), and the Guy Medal in Silver of the Royal Statistical Society (2016). In 2014, she was appointed to the rank of Officer of the Order of Canada and in 2015, she received an honorary degree from her alma mater, the University of Waterloo. Needless to say, she has long been a Fellow of the IMS, a Fellow of the ASA, and an elected member of the International Statistical Institute.

Nancy's leadership and dedication to the profession has been equally impressive. In addition to her terms as President of the IMS and the Statistical Society of Canada, she served on a large number of committees for various national and international bodies. She also devoted a great deal of energy to editorial work, including terms as Associate Editor for *Biometrika* (1983–93), *Statistical Science* (1992–94), *JRSS-B* (2003–07), *Bernoulli* (2007–13), and as Editor-in-Chief of *The Canadian Journal of Statistics* (1995–97). She organized numerous workshops and showed additional leadership in coordinating a highly successful Thematic Program on Big Data at Toronto's Fields Institute for Research in Mathematical Sciences in 2015. Her key role as Chair of the "Long Range Plan Steering Committee for Mathematics and Statistics" helped to shape the current Canadian national policy in the mathematical sciences and was instrumental in the creation in 2012 of the Canadian Statistical Sciences Institute (CANSSI). Since 2015, she is the Director of this crucial (albeit virtual) research facility.

In spite of her many achievements and accolades, Nancy has been and continues to be a very humble person. Shunning the spotlight, she is one of those quiet leaders who inspire, guide, and transform through their innovative, yet methodic and efficient work rather than with loud talk and bold strokes. Her election to the National Academy of Sciences recognizes these qualities in her, in addition to her innumerable contributions to science and our profession.

Electronic Journal of Statistics special section

The *Electronic Journal of Statistics,* Volume 10, number 2, contains a Special Section entitled "**Statistical Inference in Sparse High-Dimensional Models**". This special section has been co-edited by Florentina Bunea and Marloes Maathuis and contains invited papers that originated from the 2013–2014 SAMSI program on Low-Dimensional Structures in High-Dimensional Systems, and in particular from the mid-program workshop, "Statistical Inference in Sparse High-Dimensional Models: Theoretical and Computational Challenges". It includes the following papers with original contributions in the areas of empirical process theory, high-dimensional regularized regression (estimation and inference), matrix estimation, Bayesian nonparametric regression, and optimization:

You can read *EJS* Volume 10, number 2, via Project Euclid at http://projecteuclid.org/euclid.ejs/1468849960

Profile: David Hand

As we reported in the previous issue, the 2016 George Box Medal has been awarded to one of our contributing editors, **David Hand**. This medal is awarded by the European Network for Business and Industrial Statistics for outstanding contributions to industrial statistics (see http://www.enbis.org/awards/george_box_medal/?_ts=18012)

David Hand is well-known for his work in the personal banking and credit scoring domain, but has also worked extensively in the pharmaceutical and other sectors.

David Hand was Professor and Head of the Statistics Section from 1999 to 2010 at Imperial College London, where he is now Emeritus Professor of Mathematics and Senior Research Investigator. He is also Chief Scientific Advisor to Winton Capital Management, on the Board of the UK Statistics Authority, and chair of the Board of the UK's Administrative Data Research Network. He previously served two terms of office as President of the Royal Statistical Society—the first person to serve twice since Lord George Hamilton in 1915.

David's work in industry has been previously recognized, for example, by 2012 the Credit Collections and Risk Award for contributions to the credit industry—the first time that award had been made to an academic. The work of David and his group figured as an impact factor case study in the UK's most recent Research Excellence Framework. In 2013 he was made OBE by the Queen, for contributions "to research and innovation".

He has written over 300 scientific papers and published 29 books. His first book, *Discrimination and Classification*, appeared in 1981, a topic which continues to fascinate him. As the world rolls on and computer power advances, so new challenges of classification continue to arise, such as high dimensional problems in genomics, and streaming data classification problems using web data.

More recent books include *Principles of Data Mining; Measurement Theory and Practice: The World Through Quantification*; *Information Generation: How Data Rule Our World*; *The Wellbeing of Nations: Meaning, Motive, and Measurement*; and *Measurement: A Very Short Introduction*. His popular book *The Improbability Principle: Why Coincidences, Miracles and Rare Events Happen Every Day*, attracted a lot of attention—and many radio and television appearances.

David says that the range of his interests, from how to squeeze answers from data through to fundamental issues of what data actually are, is apparent in the range of these titles: from data mining to measurement, from applications to basic theory. In classification, for example, papers which have attracted particular interest include "Classifier technology and the illusion of progress, showing and presenting reasons why progress may be less rapid than it appears," and "Statistical fraud detection: a review," both of which appeared in *Statistical Science*, as well as a series of papers demonstrating that the very widely used measure of classifier performance—the area under the ROC curve—had a fundamental conceptual flaw. This, he says, was a very exciting discovery, since it showed that careful thought about even well-established concepts and methods can reveal unexpected properties.

While he is an enthusiast for data, he has the statistician's natural caution, and urges people to think twice before getting carried away by uncritical enthusiasm for big data. "Big promise, yes. But big challenges, too."

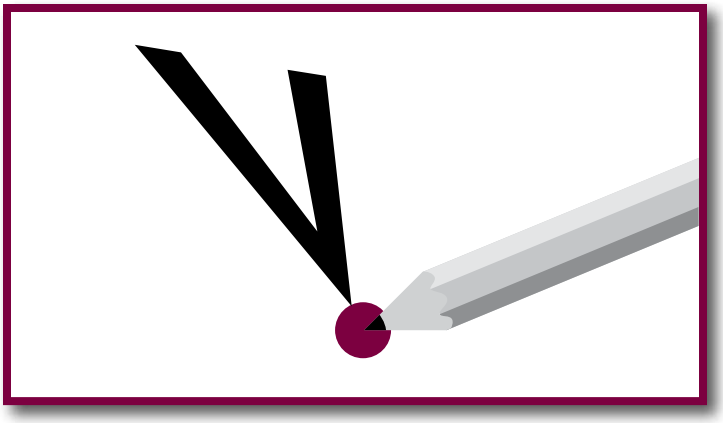
He served as joint editor of the Royal Statistical Society journal *Applied Statistics* and established the journal *Statistics and Computing,* serving as its Editor-in-chief for 11 years.

He believes that statistical research should be primarily driven by practical questions that matter—by problems that people want solved. And, he says, the history of the development of statistics shows that this has in large part been the case, with new methodological developments arising because of the challenges of new application domains and their new kinds of data.

He refuses to be pinned down as belonging to one of the many schools of statistical inference, believing that one should choose the tool which is most appropriate for the job.

He says that his view of statistics is summed up in the way he began his book *Statistics: A Very Short Introduction:* at last, he says, with the big data and data science revolution, people are beginning to understand what we have been telling them for decades, namely that "Statistics is the most exciting of disciplines".

Vlada's Point: Peer Review III — Web booth at your service

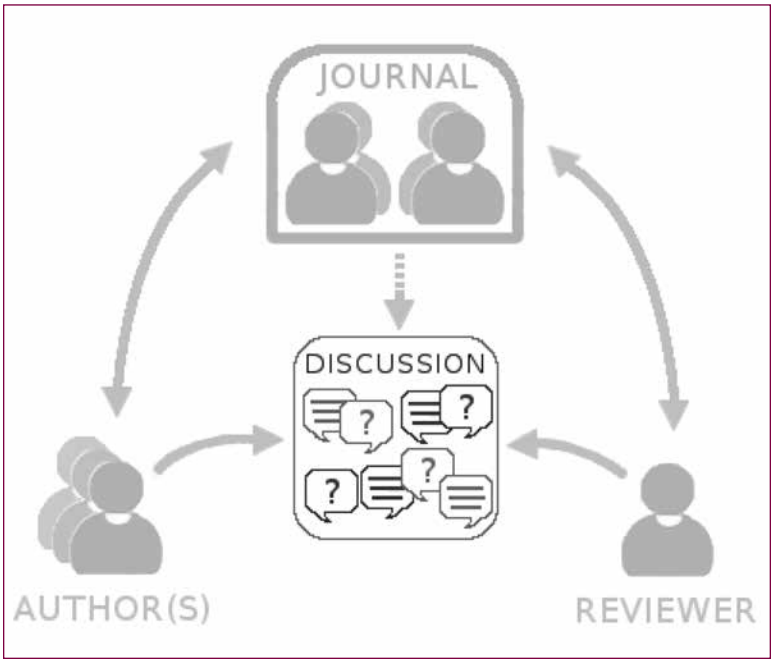


Vlada Limic closes her mini-series on ways to improve the peer review process. (Since she is taking over as Editor of the IMS Bulletin, Vlada is also ending her time as a contributing editor.) She writes:

Let me start by expanding on the concluding thought from Episode II [in the August 2016 issue: http://bulletin.imstat.org/2016/07/vladas-point-peer-review-ii-an-idea/].

You might already be aware of the fact that tens of thousands of our peers working in Astronomy and Space Sciences, Bioengineering and Biotechnology, Built Environment, Cardiovascular Medicine, or any of the other 34 research disciplines[1] have access to a version of the web booth tool, integrated in the Frontiers platform, as described at http://home.frontiersin.org/about/publishing-model.

A different group of open-access journals, this time exclusively in physics, constitutes the SciPost publishing platform. Their entire editorial process exchanges seem to be publicly available[2]. While this platform certainly has some of the features evoked last time, it is also significantly different: discussions consist of (only) few longer exchanges, which strongly resemble peer reviewer reports or response letters, typically sent to the AEs in charge during the usual scientific review.



Finally, to our peers working in Computer Science and Applied Mathematics in Africa, Discrete Mathematics and Theoretical Computer Science, Number Theory, Human-Machine Interaction, Data Mining and Digital Humanities, Interdisciplinary Methodologies and Issues in Science, or in Algebraic Geometry, it may be useful to know that a web booth tool is integrated in the EpiSciences [https://www.episciences.org/] platform. Indeed, their figure—provided the term "Copyreaders" gets replaced with "Peer reviewers"—and the accompanying explanations suggest an access to a communication tool that functions quite similarly to the web booth (as recalled below). In particular, the peer reviewers and AEs in charge seem to stay anonymous, there seems to be no public trace of the direct exchanges between authors and peer-reviewers, and (apart from a web booth tool, and an "overlay" publishing from HAL or arXiv) their editorial process seems to be standard.

I anticipate you asking if there are any other examples. There are at least two possible (correct) answers, the first of which I give immediately. I do not know of any other examples, but this does not mean that the above list is exhaustive.

For those who continue reading, I have a rhetorical question. Did you know that Timothy Gowers (Cambridge University), Richard Taylor (IAS Princeton), Ravi Vakil (Stanford University), and Wendelin Werner (ETH Zürich) each expressed an interest in having a web booth tool available to peer reviewers in their area? My second and longer answer will likely make more sense in view of this information.

While a considerable need for spontaneous and direct anonymous peer reviewer ⇔ author(s) communication seems to exist in various areas of mathematics, at present there are not all that many web booths available to mathematicians or statisticians. Our

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1 listed at http://home.frontiersin.org/about/research-topics.

2 see, for example, submissions https://scipost.org/submission/1607.01285v1/ or https://scipost.org/submission/1606.09516v1/

community could wait for the tool to become integrated in most of our manuscript-centrals or publishing platforms, and this might happen eventually.

As already discussed, my idea is about an alternative path. More precisely, a web booth tool could exist freely and independently, and could be used (at the option of each reviewer) as a complement to the standard editorial process, regardless of the journal or the platform handling the paper. The image on the previous page illustrates this.

In fact, I have some good news. As I write this, a prototype tool is being made. By the time you read this, it will hopefully already be available online for anyone interested to play with, comment on, and constructively criticize it. Let me recall its main features here: the peer reviewer of any paper for any journal can create a discussion; the author (team) is invited to participate, and the journal contact is invited as an observer (if needed they can confirm that the invitation was issued by a designated referee for that paper); each discussion is private (can only be accessed by the above mentioned users); the names and contact information of the non-author participants are concealed from the authors; posts are grouped into threads (that can be started either by the referee or by one of the authors); files in various common formats can be attached to posts; each thread separately or the whole discussion can be printed out by any participant; at some point the discussion becomes obsolete and eventually deleted…

There is a more personal part of this story, mentioned implicitly in Episode I, that should be clarified. Four years ago it was my sister Mirna, a computer scientist, who single-handedly made a toy web booth. That early version had most of the above listed functionalities, but it was never publicly available, and was seen by very few people, most of whom are mentioned in this article.

The prototype is a creation of WebToolWorks, a company that Mirna founded two years ago. The material resources currently available for this project are limited. Some time ago, I reserved an inexpensive domain name www.refereeinitiative.work for the tool. In order to avoid web hosting costs, there will however be (at least initially) an automatic redirection from refereeinitiative.work to webtoolworks.com.

Our prototype is, and will remain, free for everyone to use. State-of-the-art security measures are built into the platform, and a security audit will be made as soon as sufficient funds become available. The prototype should greatly benefit from community feedback, so please do not hesitate to send us comments on its functionalities, name, user-friendliness, anything that should be changed or improved. We would be happy to accommodate your requests, as long as they are pertinent to the project, not time-consuming to implement, and do not compromise the security of the platform. It remains to be seen if the prototype will turn into a full-scale web booth at the service of every interested peer. In the meantime, much can be learned from this experiment, which may bring us closer to a world of happy peers (see Episode I).

My time as contributing editor is up. I am happy to respond to comments or questions either online at http://bulletin.imstat.org/2016/11/vladas-point-peer-review-iii-web-booth-at-your-service or by email. While it will be difficult for the *IMS Bulletin* to give updates on this particular initiative in the next three years, I am counting on other channels.

Finally, I wish to express special thanks to Diana Gillooly at Cambridge University Press and to Ivar Martin of Knowen.org. Our exchanges during the last few months were very important for the writing of this column.

e vlada.limic@math.u-psud.fr

Current Index to Statistics opens up

Access to the *Current Index to Statistics* (*CIS*), <statindex.org> will become open to the public effective January 1, 2017. Subscription fees will no longer be charged for any user. *CIS* will remain open until December 31, 2019 and at that time will be shut down.

After much consideration, the IMS came to this decision for the following reasons:

* Most of the relevant scientific bibliography is now covered by Google Scholar, which is free and well resourced.
* The world of scientific bibliography is increasingly technical computationally. Modern tools make processing of bibliographic data from publishers more efficient but also require investment in tools and expertise that are less feasible for a small project like *CIS* than for larger scale ones like broader bibliographic databases.
* Similar issues arise for search interface and functionality.

The IMS will continue to auto-update bibliographical data from larger publishers, but any data that was previously manually entered will not be updated.

IMS Awards: nominate or apply now

Tweedie New Researcher Award

Richard Tweedie played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities. With funds donated by his friends and family, the IMS created the Tweedie New Researcher Award to finance the winner to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference. Next year's conference will be held at Johns Hopkins, immediately before JSM in Baltimore.

To be eligible for the 2017 award, the new researcher must have received their doctoral degree in 2011–16, and the nominee should be a member of the IMS at time of nomination. The nomination deadline is December 1, 2016.

For details and requirements of the nomination process, please visit http://www.imstat.org/awards/tweedie.html

Harry C. Carver Medal

Nominations are invited for the Carver Medal, created by the IMS in honor of Harry C. Carver, founding editor of the *Annals of Mathematical Statistics* and one of the founders of the IMS. The medal is for exceptional service specifically to the IMS and is open to any member of the IMS who has not previously been elected President. All nominations must be received by February 1, 2017. Please visit http://www.imstat.org/awards/carver.html

Previous recipients:

Krzysztof Burdzy (2016) [*pictured below*]; Patrick Kelly (2015); Edward Waymire (2014); Peter Jagers (2012); Ross Leadbetter (2011); Julia A. Norton (2010); Don Truax (2009); Richard A. Johnson (2008); William Harkness (2007); Robert V. Hogg (2006); Jessica Utts (2005); Paul Shaman (2004); George P.H. Styan (2003); Bruce Trumbo (2002).

Call for Nominations: COPSS Awards

The COPSS Awards are presented at the Joint Statistical Meetings each year. In 2017, four awards will be presented: the **Fisher Award and Lectureship**, the **Presidents' Award**, the **F. N. David Award** and the **Snedecor Award**.

The nomination deadline for the 2017 Fisher Award is December 15, 2016; the deadline for the other awards is January 15, 2017. Only the winner of the Fisher award is announced before the JSM award ceremony.

Detailed instructions on award criteria and nomination instructions can be found under the tab "Our Awards and Winners" for each award, at the COPSS website: http://copss.org

IMS Fellowship

The candidate for IMS Fellowship shall have demonstrated distinction in research in statistics or probability, by publication of independent work of merit. This qualification may be waived in the case of:

(1) a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or

(2) a candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas.

Candidates for Fellowship should be members of IMS on December 1 of the year preceding their nomination, and should have been members of the IMS for at least two years.

All nominations must be received by January 31, 2017.

For details and requirements of the nomination process, please visit http://www.imstat.org/awards/fellows.htm

IMS Travel Award

The purpose of the IMS Travel Award is to fund travel, and possibly other expenses, to present a paper or a poster at an IMS sponsored or co-sponsored meeting, for those who otherwise would not be able to attend the meeting. (Note: the Travel Award cannot be used to fund any part of travel to the IMS New Researcher's Conference, as that conference is already funded separately.)

The travel awards are available to IMS members who are New Researchers. This means any IMS member who was awarded a PhD within the 5 years immediately preceding the year of the application deadline or who has or will receive her/his PhD in the same year as the application deadline. For one third of the total available funds, New Researchers from countries with reduced membership dues will have first priority. For the remaining funds, first priority will go to New Researchers who already have their PhD at the application deadline and second priority will go to PhD students. Applicants must be members of IMS, though joining at the time of application is allowed (don't forget that student membership is free! See http://www.imstat.org/membership/student.htm for details) and New Researchers also qualify for substantially reduced rates. To become a member, please see http://www.imstat.org/orders/

Application deadline is February 1, 2017.

For more information on the application process, please visit http://www.imstat.org/awards/travel.html

XL-Files: A Nobel Prize in Statistics, finally…

Contributing Editor Xiao-Li Meng writes:

A Nobel Prize in Statistics? Well, almost. The launching of the International Prize for Statistics (IPS), with its explicit references to the Nobel Prize (NP) and other major awards [*see cover*], aims to establish IPS as "the highest honor in the field of Statistics." And its inaugural winner, Sir David Cox, is inarguably one of the two living statisticians who can instantly signify this intended status of IPS. However, many will argue about who are the *N* statisticians deserving this inaugural IPS, and indeed about the value of *N* itself. Whereas my *N*=2, I would not ruin your fun for imputing my other choice based on publicly available data, in case you are bored with your own list.

The data came from *Some Nobel-Prize (NP) Worthy i.i.d Ideas in Statistics*, a discussion I presented at JSM 2016. The "i.i.d." criterions refer to "Ingenious, Influential, and Defiable." The first two are obvious, and the third is necessary because any scientific idea must have demonstrable limitations, i.e., it can be "defied/defeated". Fisher's **likelihood** is an early example of an NP-worthy i.i.d idea. An ingenious flipping, from probability space to parameter space, created an exceedingly influential paradigm for statistical inference. Yet it is not almighty. A likelihood inference can lead to inadmissible or inconsistent estimators, and the "flipping" idea itself can result in complications, as revealed by the common description of how Fisher created his fiducial distributions.

The issue of inadmissibility naturally leads to Stein's **shrinkage estimation**. The shrinkage phenomenon was considered paradoxical when Stein discovered it, and indeed a (statistically fluent) neurobiologist colleague recently told me that he just cannot comprehend how such a phenomenon could occur. Its impact, via the more encompassing framework of hierarchical modeling, is tremendous. Yet its occurrence depends on the choice of loss function.

Cox's **proportional hazards model** is another unexpected finding: by using only the ranking information in the data, and hence a partial likelihood, one can eliminate entirely an infinite dimensional nuisance parameter, i.e., the baseline hazard. It is this work of Sir David that won him the inaugural IPS, and it is truly deserving by any measure. Practically, it has been applied virtually in every field requiring quantitative investigations of the risk factors in *survival time*. Academically, it opened up a new area of theoretical and methodological research, including on its limitations and generalizations (e.g., when the hazard is not proportional).

Bootstrap "literally changed my life," as declared by my neurobiologist colleague, and it certainly has made many researchers' lives much easier. Yet those who attended Efron's seminar at Stanford announcing it still recall how skeptical the audience was: "No one believed it, as it was just too good to be true," as one of them told me. And such skepticism was and still is healthy, because bootstrap does not always work. Indeed, Efron's 1979 article on bootstrap has literally generated an industry of research on proving when it works, when it doesn't, and how to make it work when its vanilla version fails. Intriguingly, the topic became so popular that for a while my thesis adviser Donald Rubin was more known in some circles for his paper on Bayesian bootstrap, than for his far more influential (earlier) work on missing data, causal inference, etc.

Incidentally, as I conveyed to Don, among his many contributions, I always regard his work with my eldest academic brother Paul Rosenbaum on **propensity score matching** (PSM) most unexpected. Controlling confounding factors in observational and other studies is of paramount importance, and matching methods are both intuitive and easy to implement. A common challenge with matching methods is that one quickly runs out of sample sizes as one tries to eliminate as many confounding factors as possible. The ingenuity of PSM is that we only need to match on one index, the propensity score, which has led to its enormous popularity. Of course, there is no free lunch here. Not only does the method require modeling assumptions, but also it cannot (directly) control for unmeasured confounding factors.

This leads to the most NP-worthy idea on my list, **randomization.** It controls for all confounding factors, known, unknown, and unknown-unknown. A simple random sample of 400 can easily produce the same mean squared error as a self-reported data set covering half of US population, that is, about 160,000,000, with a seemingly negligible self-selection bias; see proof in my recent RSS presentation at https://www.youtube.com/watch?v=8YLdIDO-MEZs (with apologies to those who hate self-referencing). Of course, the limitation of randomization is that often it is an unachievable dream.

"Xiao-Li, your talk is *dangerous*," said a friend who was worried that I might have hurt many people's egos for omitting their NP-worthy ideas. But I'd summarize these six ideas by a different d-word: *deceptive.* At the first glance, all six appear to be too good to be true or too simple to be useful. Yet years of research and applications have demonstrated that they are incredibly powerful statistical (IPS) ideas, ideas we all wish to bear our names.

So what's *your* IPS idea and/or IPS list?

Leave a comment at bulletin.imstat.org/2016/11/xl-files-a-nobel-prize-in-statistics-finally or email bulletin@imstat.org.

Recent papers: *Statistical Science*

Volume 31, number 3: August 2016. Access papers at http://projecteuclid.org/ss.

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Obituary: Lajos Takács

1924–2015

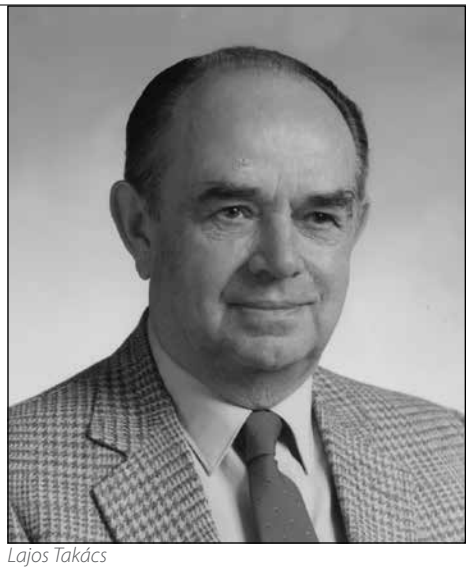


Photo: Case Western Reserve University

Lajos Takács

Lajos Takács was born on 21 August 1924 in Maglód, a small town 16 miles from Budapest in Hungary. He showed an early aptitude for mathematics, and an interest in numbers. He attended secondary school in Budapest. In 1943 he entered the Technical University of Budapest, and came second in the Eötvös Competition, a national mathematics competition in Hungary. He was taught by Charles (Károly) Jordan. In 1945 he became a student assistant to Professor Zoltán Bay, and his consultant in the Tungsram Research Laboratory, of which Bay was head. He participated in Bay's famous experiment of 1946 on microwave echoes from the Moon. He took his PhD in 1948 on Brownian motion, under Jordan.

The Research Institute for Mathematics of the Hungarian Academy of Sciences began in 1950, and Takács became a member. He joined the staff of the Lorand Eötvös University in 1953, where he taught probability. He stayed at the Tungsram laboratory until 1955. He visited Poland in 1955 and Austria in 1956; he was awarded the Doctorate of Mathematical Sciences by the Hungarian Academy of Sciences in 1957. He left Hungary in 1958, teaching at Imperial College London and the London School of Economics before becoming Assistant Professor at Columbia University, New York in 1959. He became a Professor at the Case Institute of Technology in Cleveland, Ohio (later Case Western Reserve University) in 1966, from where he retired in 1987. He died on 4 December 2015, aged 91.

Takács wrote over 200 papers, and several books. His early interests shifted to queueing theory, and he was one of the main contributors to the rapid development of the field in the 1950s. His 1955 paper treating waiting-time problems by reduction to Markov processes was very influential and has become a classic. His book *Introduction to the theory of queues* appeared in 1960. This was followed in 1967 by his book *Combinatorial methods in the theory of stochastic processes*, largely on applications of ballot theorems to queues, following his 1965 paper on this theme.

Takács introduced the idea of regeneration point in his 1955 paper, and this led him to his functional equation for the Laplace transform of the busy period in an $M/G/1$ queue. He also introduced the idea of the virtual waiting time in a queue (the time a customer joining at time t would have to wait to begin service, or service backlog). The analogy between service demand being stored in a queue and water being stored in a dam led Takács to his studies of dams in 1967–68.

The relevance of fluctuation theory of random walks to queues was realized by Lindley in 1952, and was taken much further by Spitzer in 1956–57, with his introduction of Spitzer's identity and the relevant Wiener-Hopf equation for the limiting waiting-time distribution. Takács worked extensively in this area in a series of studies in the period 1970-78.

Takács turned in 1979 to probability on groups. Part of his motivation was the Ehrenfest urn model, introduced to account for macroscopic irreversibility but microscopic reversibility in statistical mechanics. In addition to random walks on groups, he also worked on random walks on polytopes, regular graphs and other geometric objects. His research and expository writing in this area revealed a deep knowledge of group representation theory.

Other interests of Takács included, as well as Brownian motion, branching processes, enumerative combinatorics, empiricals in non-parametric statistics, and random graphs. He also had a lifelong interest in the history of mathematics, and his writings show an extensive knowledge and appreciation of the mathematical literature.

Takács was a founding member of the editorial boards of the Applied Probability Trust's journals *Journal of Applied Probability* and *Advances in Applied Probability*. He was elected to membership of the Hungarian Academy of Sciences in 1993. He was awarded the John von Neumann Theory Prize in 1994, and the Fellows Award of the Institute for Operations Research and Management Science in 2002. He supervised twelve PhDs, at Columbia and Case.

Lajos Takács was a very gifted, versatile and prolific mathematician, whose work has had a lasting impact on probability, particularly applied probability and queueing theory, but also on fluctuation theory and random walks on groups and other algebraic structures. He was greatly valued by his fellow probabilists, not only for his wide knowledge but also for his human qualities. He was a kind and friendly man – a scholar and a gentleman.

In 1959 Takács married Dalma Horváth; they had two daughters, Judith and Susan.

Written by N.H. Bingham, Imperial College London

IMS New Researchers Group

In the March 2016 issue, Alexander Volfovsky wrote about the recently formed New Researchers Group (NRG). You can read it at http://bulletin.imstat.org/2016/02/introducing-the-new-researchers-group/). We caught up with the other member of the NRG committee, Dan Sussman, to find out what has been happening more recently.

The New Researchers Group was founded following the 2014 New Researchers Conference, hosted that year by Harvard University. Many of the attendees at the conference were eager to continue the exciting conversations they had there and to foster collaborations and career development for young statisticians. Currently the New Researchers Committee focuses on ensuring the continuance of the New Researchers Conference, the establishment and enhancement of a robust web presence, and fostering new ways for young researchers to meet, collaborate, and share their experience. The committee members are Alexander Volfovsky, Duke University, Department of Statistical Science, and Daniel Sussman, Boston University, Department of Mathematics and Statistics.

New Researchers Conferences

This year's IMS New Researchers Conference (formally called the 18th Meeting of New Researchers in Statistics and Probability) was hosted by the University of Wisconsin–Madison from July 28–30, 2016 (immediately before JSM, as usual). Next year's will be at Johns Hopkins University in Baltimore, provisionally July 27-29, 2017—dates to be confirmed soon. The organizers are Elizabeth Ogburn, Department of Biostatistics, Bloomberg School of Public Health, and Vince Lyzinski, Department of Applied Math and Statistics, Whiting School of Engineering. We'll announce the details as soon as we have them.

New website

As part of the IMS New Researchers Group, Dan has been working on the new website. While there is still a lot to do and much of it is still under construction, he says he's proud to announce its launch to you: http://groups.imstat.org/newresearchers/

Help wanted

The New Researchers Group is looking for a little help from the new researchers themselves. Dan says, "The first and easiest thing you can do is send me your ArXiv info so that you can be included in our ArXiv feed on the front page of the website. To do this follow the directions at https://arxiv.org/help/author_identifiers. You'll need an Arxiv author identifier in order to get an atom2 feed like this one: https://arxiv.org/a/warner_s_1.atom2. You'll also want to make sure that you have claimed all of your articles on Arxiv. (You can do this by following the Claim Ownership link here https://arxiv.org/help/authority.) Once you've done this please send me your atom2 feed address and your name and I'll add it to the feed."

He adds, "We're looking to start a blog and we ask that as many of you as possible contribute a quick blog post that we can start posting regularly this spring. Your blog post could be about **your career experience, collaborations, a summary of your research, or really anything related to statistics, teaching, and your career**."

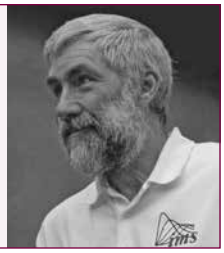
The New Researchers' Survival Guide is now part of the NR website. Dan also asks for assistance with this: "We're looking for help expanding our guide. Currently most of the guide features some relatively old information but we have made a few updates. If you have ideas for how we can improve things we're happy to hear them. Even better, you can help write part of the guide and we'll be sure to include your name on the pages you contributed to and proudly display your information on our Contributors page. One idea that I'd like to see implemented is to have a list of Funding Agencies and relevant grants that new researchers can look through. You can also post ideas on each page of the guide at the bottom in our Disqus forum."

Finally, Dan says, "The New Researchers Group is *new,* so we're looking for ideas in general to make this a lasting effort that will provide help for new researchers, whether they are just starting a project as an undergraduate or they are navigating the challenges of a tenure track job. If you have an idea that you think could make this better please let us know. Even better, go write a quick forum post on our Forum so we can start a discussion."

If you are a new researcher, stay tuned for the announcement of the New Researchers Conference, and get involved with your community of peers! Share your ideas, write a blog piece to help get the blog up and running, and work together to make statistics a great place to be a new researcher.

Terence's Stuff: Assumptions

Terry Speed knows that if you want to find something out (from your data), you should *ask*, rather than *assume*.



Many of us were brought up to think that we cannot do a statistical analysis without making assumptions. We were taught to pay attention to assumptions, to consider whether or not they are approximately satisfied with our data, and to reflect on the likely impact of a violation of our assumptions. Our assumptions might concern independence, identical distribution, normality, additivity, linearity or equality of variances. (Needless to say, we have some tests for all these assumptions.)

I see much of this concern with assumptions as coming from the desire to reduce statistics to something close to mathematics. A typical mathematical theorem starts with hypotheses (e.g. axioms), and proceeds through an accepted process of reasoning, to a conclusion. If your hypotheses are true, and your reasoning is correct, then your conclusions will be true. The statistical version of this is that we have data and a question about the real world. We take a statistical model involving statistical assumptions, we make use of it and some statistical methods with our data, and we draw statistical conclusions about the real world. Our hope is that if our statistical assumptions are true, and our statistical methods are correctly applied, then our statistical conclusions about the real world will be true.

This analogy between statistical and mathematical reasoning is flawed, and not just because statistics involves uncertainty. Mathematical truth and real world truth are very different things. Data cannot always be understood by making statistical assumptions; sometime we need to look at it and think hard about it in its context. Only rarely are all our assumptions testable, and often some will be implicit—we don't even notice we are making them. J.W. Tukey has highlighted one: a belief in omnicompetence, the ability of a methodology to handle any situation. Also, seeking real world truth with (near) certainty is just one goal; there are many other performance metrics for statistical analyses. Most of us will be familiar with the effective use of a statistical model or method, even though the standard assumptions that go with it are transparently violated. This would just be a paraphrase of George E.P. Box's aphorism on models and usefulness. Assumptions don't always matter. In this context, Tukey strikingly observed that, "In practice, *methodologies* have *no assumptions* and deliver *no certainties*." He goes on to say, "One has to take this statement as a *whole*. So long as one does *not* ask for certainties one can be carefully imprecise about assumptions."

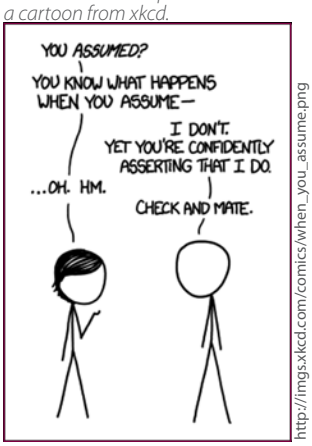
But sometimes assumptions really do matter. Many of you will know Nate Silver's *The Signal and the Noise*, in which he discusses the global financial crisis, among other topics. He explains how the financial services company Standard and Poor's calculated the chance that a collateralized debt obligation would fail over a five-year period to be 0.12%, whereas around 28% of them failed. As a result, Silver writes, "trillions of dollars in investments that were rated as being almost completely safe instead turned out to be almost completely unsafe." The problem was an inappropriate assumption of independence, one that could have been foreseen, had the matter been carefully considered.

Tukey is critical of talk of "checking the assumptions," saying that he suspects much of it is being used as an excuse for "looking to see what is happening," something that he applauds. He also gives four routes to understanding when a methodology functions well, and how well it functions, saying, "We dare not neglect any of them." On the other hand, Silver gives examples from weather forecasting, earthquake prediction, epidemic and climate modelling where assumptions have a big impact on the predictions. Where does that leave us?

I think we all know that (with Silver) sometimes particular assumptions matter a lot, and that (with Tukey) sometimes they don't matter much at all. Learning how to distinguish these times can be challenging, but Tukey's four routes certainly help. I get irritated when I explain what I did in some statistical analysis, and a listener says, "I see, you are assuming *blah blah*…." I reply tartly "No, I am *not* assuming *blah blah*… I am just doing what I did. Here's why I thought it might help, and here's why it did help."

I think behind Tukey's observations was an impatience with the mindless drive to automate what he called "routes to sanctification and certain truth." An emphasis on enumerating assumptions and their checking certainly looks like that. He gives the example of spectrum analysis, something usually associated only with stationary processes, as having its "greatest triumphs" with a non-stationary series. He would have welcomed Silver's book, and wholeheartedly agreed with his focus on assumptions. To channel Box, "All assumptions are wrong but some are critical."

Check those assumptions: a cartoon from xkcd.



http://imgs.xkcd.com/comics/when_you_assume.png

IMS meetings around the world

Joint Statistical Meetings: 2017–2022

IMS sponsored meeting

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

w https://www.amstat.org/meetings/jsm/2017/index.cfm

Join us in Baltimore, Maryland, for one of the biggest statistical events of the year: with more than 6,000 attendees (including over 1,000 students) from 52 countries, and over 600 sessions, it's a busy few days! The theme is *"Statistics: It's Essential."*

IMS sponsored meetings: JSM dates for 2018–2022

JSM 2018	**IMS Annual Meeting @ JSM 2019**	**JSM 2020**	**IMS Annual Meeting @ JSM 2021**	**2022 Joint Statistical Meetings**
July 28–August 2, 2018	**July 27–August 1, 2019, Denver, CO**	**August 1–6, 2020**	**August 7–12, 2021,**	**August 6–11, 2022**
Vancouver, Canada		**Philadelphia, PA**	**Seattle, WA**	**Washington, D.C.**

IMS sponsored meeting

Joint 2018 IMS Annual Meeting and 12th International Vilnius Conference on Probability Theory & Mathematical Statistics
July 2–6, 2018. Vilnius, Lithuania

w TBC

We are please to announce that the 2018 IMS Annual Meeting will be held in beautiful Vilnius, the capital of Lithuania, in conjunction with the 12th Vilnius Conference on Probability Theory and Mathematical Statistics. The Program Co-chairs are Peter Bühlmann (IMS) and Vygantas Paulauskas (Vilnius). The Local Chair is Remigijus Leipus. Details to follow.

IMS co-sponsored meeting

19th Meeting of New Researchers in Statistics and Probability
July 27–29, 2017 *(provisionally: check the website)*
Johns Hopkins University, Baltimore, MD

w http://groups.imstat.org/newresearchers/conferences/nrc.html

The 19th Meeting of New Researchers in Statistics and Probability will be happening in Baltimore this year during its usual time right before JSM. Please check the website for more details and information about applying to attend the meeting.

Organizers: Elizabeth Ogburn, Bloomberg School of Public Health; Vince Lyzinski, Whiting School of Engineering, JHU.

The purpose of the conference is to promote interaction and networking among new researchers in statistics and probability. Anyone who has received a PhD in or after 2012, or expects to by the end of 2017, is eligible to apply.

IMS co-sponsored meeting

Bernoulli/IMS 10th World Congress
August 17–21, 2020
Seoul, South Korea

w TBC

The next World Congress in Probability and Statistics will be in Seoul, South Korea.

IMS co-sponsored meeting

39th Conference on Stochastic Processes and their Applications (SPA)
July 24–28, 2017. Moscow, Russia

w TBC

The 39th Conference on Stochastic Processes and their Applications (SPA 2018) will be held July 24–28, 2017, in Moscow.

IMS co-sponsored meeting

40th Conference on Stochastic Processes and their Applications (SPA)
June 11–15, 2018. Gothenburg, Sweden

w TBC

The 40th Conference on Stochastic Processes and their Applications (SPA 2018) will be held June 11–15, 2018, at the Chalmers University of Technology in Gothenburg, Sweden. Details to follow.

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2017

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

2018

IMS Annual Meeting: Vilnius, Lithuania, **July 2–6, 2018**

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

2019

IMS Annual Meeting @ JSM: Denver, CO, **July 27–August 1, 2019**

2020

IMS Annual Meeting/ 10th World Congress: Seoul, South Korea, **August 17–21, 2020**

JSM: Philadelphia, **August 1–6, 2020**

2021

IMS Annual Meeting @ JSM: Seattle, WA, **August 7–12, 2021**

More IMS meetings around the world

IMS co-sponsored meeting

Bayesian Nonparametrics

NEW

June 26–30, 2017

Ecole Normale Supérieur, Paris, France

w https://www.ceremade.dauphine.fr/~salomond/BNP11/index.html

The 11th Bayesian nonparametrics (BNP) meeting will be held in Paris from the 26th to the 30th of June at Ecole Normale Supérieure. The Bayesian nonparametrics conference is a bi-annual international meeting bringing together leading experts and talented young researchers working on applications and theory of nonparametric Bayesian statistics. It is an official section meeting of the Bayesian Nonparametrics section of the International Society for Bayesian Analysis (ISBA). Details to follow.

IMS co-sponsored meeting

The 10th ICSA International Conference

December 19–22, 2016. Shanghai, China

w http://www.math.sjtu.edu.cn/conference/2016icsa/

The conference will be held at Xuhui campus of Shanghai Jiao Tong University in China. The theme is *Global Growth of Modern Statistics in the 21st Century*. The plenary speakers are Jim Berger, Tony Cai, Kai-Tai Fang, Zhiming Ma, Marc A. Suchard, Lee-Jen Wei and C.F. Jeff Wu.

IMS co-sponsored meeting

6th Workshop on Stochastic Methods in Game Theory

May 5–13, 2017. Erice, Sicily, Italy

w https://sites.google.com/site/ericegame-theory2017

Many decision problems involve elements of uncertainty and of strategy. Most often the two elements cannot be easily disentangled. The aim of this workshop is to examine several aspects of the interaction between strategy and stochastics. Various game theoretic models will be presented, where stochastic elements are particularly relevant either in the formulation of the model itself or in the computation of its solutions. The speakers are scholars in stochastics, economics, operations research, computer science, mathematics, control engineering. See website for details.

IMS sponsored meeting

WNAR/IMS Meeting

June 24–28, 2017

Santa Fe, New Mexico, USA

The WNAR/IMS 2017 Meeting will be in Santa Fe, New Mexico, at the Eldorado Hotel & Spa. The social program includes a Welcome Reception on Sunday June 25, the Reception after Presidential Invited Speaker on Monday June 26, and Banquet dinner on Tuesday June 27.

IMS co-sponsored meeting

Reproducibility of Research: Issues and Proposed Remedies

March 8–10, 2017. Washington DC, USA

w http://www.nasonline.org/programs/sackler-colloquia/upcoming-colloquia/

This meeting is one of the Arthur M. Sackler Colloquia, which address scientific topics of broad and current interest that cut across the boundaries of traditional disciplines.

IMS co-sponsored meeting

2017 IMS-China International Conference on Statistics and Probability

June 28–July 1, 2017

Nanning, Guangxi Province, China

w TBC

LOC chair: Zijia Peng **e** pengzijia@126.com. Scientific program chair: Ming Yuan **e** myuan@stat.wisc.edu.

ENAR 2017 Spring Meeting

March 12–15, 2017, Washington DC

The 2017 ENAR Spring Meeting will be held at the Washington Hilton in Washington, DC from March 12–15, 2017. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry.

Take advantage of the scientific program which will cover a wide range of topics of great interest to both researchers and practitioners, such as, data sciences (big data), genomics, clinical trials, neuroimaging, biomarkers, health policy, electronic health records, ecology, and epidemiology.

The 2017 ENAR Spring Meeting offers a program of short courses, tutorials and roundtables. Presented by well-known experts, the short courses and tutorials will cover a variety of topics including: Bayesian methods in drug development, personalized medicine trial designs, analysis of brain imaging data, data sciences and high performance statistical computing, early phase clinical trials, statistical leadership and influence, graphics for clinical trial data, and software applications for group sequential and adaptive designs, Bayesian modeling and analysis, and multiplicity problems.

ENAR 2017–2019 dates

IMS sponsored meetings

March 12–15, 2017: in Washington DC

March 25–28, 2018: in Atlanta, GA

March 24–27, 2019: in Philadelphia, PA

March 22–25, 2020: in Nashville, TN

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

Other meetings and events around the world

Second Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI)^{2}
August 12–14, 2017. St. Louis, MO, USA
w http://www.math.wustl.edu/~kuffner/WHOA-PSI-2.html
A three-day workshop about accurate post-selection inference, with emphasis on foundations, theory and methods, and important applications. Topics include: selective and simultaneous inference, high-dimensional inference, and Bayesian post-selection inference. Also considered are tools from higher-order asymptotics, including analytic and simulation-based refinements, to improve accuracy and power for post-selection inference procedures. More than 20 invited talks, and two poster sessions. Registration opens in early 2017.

Dynamics, aging and universality in complex systems
June 19–23, 2017. New York University, New York, USA
w http://cims.nyu.edu/conferences/gba60/
This conference will bring together probabilists studying the evolution of complex random systems such as spin glasses, random matrices, growth process, and stochastic PDEs. It will also include a celebration of the 60th birthday of Gerard Ben Arous.

Random Matrix Theory Summer Session, Park City Mathematics Institute
June 25–July 15, 2017
Park City, Utah, USA
w https://pcmi.ias.edu/upcoming
This program includes a graduate summer school (with courses given by Percy Deift, Ioana Dumitriu, Laszlo Erdos, Yan Fyodorov, Jeremy Quastel, Mark Rudelson, Sylvia Serfaty, Dimitri Shlyakhtenko, Terance Tao, and Balint Virag), a research program (with roughly 60 participants including Clay Senior Scholars Craig Tracy and H.T. Yau), an undergraduate summer school (with courses given by Antonio Auffinger, and Mihai Stoiciu), an undergraduate faculty program (run by Victor Moll), a teacher leadership program, and a workshop on increasing minority participation in undergraduate mathematics.

Dyson–Schwinger equations, topological expansions, and random matrices
August 28–September 1, 2017. Columbia University, New York, USA
w http://www.math.columbia.edu/department/probability/seminar/guionnet.html
This one-week school will feature 10 lectures by Alice Guionnet, with supplementary lectures by Charles Bordenave, Gaetan Borot, Paul Bourgade, Vadim Gorin and Sylvia Serfaty.

2017 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop
September 25–27, 2017. Washington DC
w http://ww2.amstat.org/meetings/biopharmworkshop/2017/
The three-day workshop is sponsored by the ASA Biopharmaceutical Section, bringing together speakers from industry, academia and the FDA for open discussion of mutual interests.

Short courses are held on the first day, followed by two days of sessions about the science and statistics associated with the development of new medical products, including pharmaceuticals, biologics, and devices. For statistical practitioners in the biopharmaceutical arena, this is a valuable opportunity to share or showcase your ideas.

Submit a proposal for a concurrent session, short course, or town hall at the 2017 workshop! Poster and roundtable proposal submissions will open January 4.

4th International Conference on Control, Decision and Information Technologies (CoDIT17)
April 5–7, 2017
Barcelona, Spain
w http://codit2017.com
The CoDIT'17 conference is the 4th in the series of the International Conference on Control, Decision and Information Technologies, organized annually since 2013. CoDIT'17 will be held April 5–7, 2017 in Barcelona. Its purpose is to be a forum for technical exchange amongst scientists having interests in Control, Optimization, Decision, all areas of Engineering, Computer Science and Information Technologies. This conference will provide a remarkable opportunity for the academic and industrial communities to address new challenges, share solutions and discuss future research directions. The technical program will include plenary lectures, regular technical sessions, and special sessions.

Call for Contributed Papers: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format). Topics of interest include, but are not limited to: TRACK 1: Control and Automation; TRACK 2: Decision and Optimization; TRACK 3: Information Technologies and Computer Science.

The complete list of Scope and Topics is available at the website here: http://codit2017.com/index.php/scope-and-topics

Deadline for submission of papers: December 4, 2016.

Notification: February 2, 2017.

NSF INCLUDES Conference on Multi-Scale Evaluation in STEM Education

NEW

February 23–24, 2017
Knoxville, TN, USA

w http://www.nimbios.org/IncludesConf/

Effective program evaluation is an essential component of STEM education and workforce development. The conference and associated events will enhance participants' abilities to develop an evaluation plan that meets the needs of an INCLUDES Alliance Project. Participants will include individuals involved in current INCLUDES projects, those considering collaborating in such projects and STEM educators considering inclusion of formal evaluation in their projects. Examples of program evaluation developed by the program organizers are available at http://www.nimbios.org/NISER.

Webinar: Program Evaluation 101, 2 p.m. EST, Feb. 9 (Location: Online)

Pre-Conference Tutorial: Modern Methods in Program Evaluation, Feb. 22 (NIMBioS)

Conference: Multi-Scale Evaluation in STEM Education, Feb. 23–24 (University of Tennessee Conference Center, Knoxville)

Co-hosts: The National Institute for Mathematical and Biological Synthesis (NIMBioS) and the National Institute for STEM Education and Research (NISER)

Travel and local expenses support are available for those traveling from institutions in the United States and its territories. Those from non-U.S. institutions may apply to attend but no financial support is available. Application deadline: November 21. Selected participants will be notified by December 9. More details, including speakers, topics and the online application, at the website above.

PIMS-CRM Summer School in Probability

NEW

June 5–30, 2017
Vancouver, BC, Canada

w http://www.math.ubc.ca/Links/ssprob17/

The 2017 Summer School in Probability will take place at UBC, Vancouver, Canada, in June 5–30, 2017. There will be two 4-week courses, by:

Marek Biskup: *Level sets and extreme points of the Discrete Gaussian Free Field and related processes.*

Hugo Duminil-Copin: *Graphical approach to lattice spin models.*

There will also be three short (three-lecture) courses by **Sandra Cerrai**, **Christina Goldschmidt** and **Martin Hairer**.

Funding for local expenses will be provided for some participants, including housing and some incidental support. Applications for financial support are accepted at the webpage above. The deadline has been extended to December 31, 2016.

The school is intended primarily for graduate students and postdoctoral fellows in Probability. There will also be opportunities for interested participants to present their own research.

Questions can be directed to any of the local organisers:

Omer Angel **e** angel@math.ubc.ca

Mathav Murugan **e** mathav@math.ubc.ca

Ed Perkins **e** perkins@math.ubc.ca

Gordon Slade **e** slade@math.ubc.ca

6th UAB Short Course on Next Generation Sequencing: Technology and Statistical Methods

NEW

December 12–15, 2016. Birmingham, AL, USA

w http://www.soph.uab.edu/ssg/nhgri_r25/sixthshortcourse

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

Open Data Science Symposium

NEW

December 1, 2016. North Bethesda, MD, USA

w http://event.capconcorp.com/wp/bd2k-odss/

The Associate Director for Data Science (ADDS) and the Big Data to Knowledge (BD2K) initiative at the National Institutes of Health (NIH) invite you to attend the Open Data Science Symposium on December 1, 2016. The goal of the symposium is to engage the public with data science at NIH, now and in the future. Highlights of the meeting include: a dialogue on open science with NIH Director, Dr. Francis Collins and former NIH director, Dr. Harold Varmus; demonstrations of the six prototypes for the Open Science Prize, a worldwide competition to leverage Open Data for biomedical discovery (https://www.opensciencеprize.org/); and a keynote lecture from John Wilbanks, head commons officer at Sage Bionetworks.

The meeting is open to the public and free to attend (although registration is required).

If you have any questions about the event, please contact Elizabeth Kittrie at elizabeth.kittrie@nih.gov

More meetings and events around the world

Second International Conference on Statistics for Twenty-First Century (ICSTC 2016)

December 21–23, 2016
Trivandrum, India
w http://icstckerala.com/index.php

The conference aims to bring forth recent developments in the field of Statistics and related areas, with an objective of formulating statistical strategies to solve the newly emerging problems of the twenty-first century. The main theme of the Conference is "Statistics as a Key Technology for the Well-being of a Society".

8th European Congress of Mathematics NEW

July 5–11, 2020
Portoroz, Slovenia
w http://www.8ecm.si/

Slovenia will host the European Congress of Mathematics (ECM) in 2020. ECM is the quadrennial congress of the European Mathematical Society. Charming Piran, lively Portorož, and mathematicians from Slovenia and the region await you in 2020, when we are planning the 8th European Congress of Mathematics (ECM).

Are you organizing a meeting? It's free, and easy, to get it listed here, and also at the online calendar, www.imstat.org/meetings/. Submit the details at imstat.org/submit-meeting.html

InSPiRe Conference: Methodology for Clinical Trials in Small Populations and Rare Diseases NEW

April 26–28, 2017
University of Warwick, Warwick Medical School, UK
w http://warwick.ac.uk/inspireconference

As part of the InSPiRe (Innovative methodology in small populations research) project, this conference will bring together international experts in innovative clinical trial design and analysis to present recent advances in the methodology for clinical trials in small populations and rare diseases. In addition to a series of plenary invited talks, the conference will include two pre-conference courses and poster presentations. All conference delegates are invited to submit an abstract for a poster presentation.

Bursaries waiving the conference registration fee will be awarded to the students submitting the best poster abstracts as judged by the conference organising committee.

The abstract submission deadline is 31 December 2016. Winning abstracts selected/winners notified: Mid February 2017. Early bird registration closes: 26 March 2017. Final registration closes: 21 April 2017.

Registration fee: £300* (before 27 March 2017); £325* (from 27 March 2017); £50 additional cost to attend one of the courses. *Covers the 2½ day conference, inc. catering and dinner on the Thursday evening. Course fee & accommodation are not included. Students who submit an abstract, if successfully chosen by the panel to present their poster, will receive a bursary to waive the conference registration fee.

Register to attend the conference: http://warwick.ac.uk/inspireconference

ISBIS 2017: Statistics in Business Analytics NEW

June 6–9, 2017
IBM T. J. Watson Research Center, Yorktown Heights, NY
w www.isbis2017.org

To keep up in today's competitive marketplace, enterprise business entities must be able to constantly transform and improve their business. In order to improve, enterprise business entities have started to integrate sophisticated business analytics and big data, internal and external, in their internal operational processes for sales, marketing, finance, management, procurement, etc. Statistical methodology can play a powerful role in developing such an effective business transformation. In this conference, we explore how businesses increase efficiency, support decision-making under uncertainty, improve business operations and ultimately transform their business by using statistics.

Multiple Comparisons Procedures 2017

June 20–23, 2017
University of California, Riverside, USA
w http://www.mcp-conference.org/

The 10th International Multiple Comparisons Procedures (MCP) Conference will be held during June 20–23, 2017 on the campus of the University of California, Riverside, USA.

The conference will cover the latest methodological and applied developments in the areas of multiple comparisons, adaptive designs in clinical trials, post selection inference and data mining methods under multiplicity control. There will be pre-conference workshops on June 20 and the main conference will be from June 21 to June 23. The keynote speech will be delivered by Prof. Jason Hsu. Abstract submission is now open. For further details and submission of abstracts visit the website or write an email to Professor Xinping Cui (Co-chair)
e xinping.cui@ucr.edu

Employment Opportunities around the world

Australia: Sydney, NSW

The University of Sydney

Lecturer / Senior Lecturer in Statistics or Financial Mathematics and Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30667285

Canada: Toronto, Ontario

University of Toronto, Department of Statistical Sciences

Assistant Professor, Teaching Stream - Statistical Computation

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30757150

Canada: Toronto, Ontario

University of Toronto, Department of Statistical Sciences

Assistant Professor, Spatial Temporal Modelling

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31026325

Canada: Waterloo, Ontario

University of Waterloo, Department of Statistics & Actuarial Science

Tenure-track or tenured faculty positions in Statistics or Biostatistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30377912

Canada: Waterloo, Ontario

University of Waterloo, Department of Statistics & Actuarial Science

Tenure-track or tenured faculty positions in Actuarial Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30377426

Canada: Montreal, Quebec

McGill University, Department of Mathematics and Statistics

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30560997

Canada: Montréal, Quebec

Université de Montréal, Département de mathématiques et de statistique

Tenure-Track Assistant Professor in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30735207

France: Cergy

ESSEC Business School

Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31017654

Israel: Jerusalem

Department of Statistics, Hebrew University

Tenure-Track Faculty Position

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=29992814

Lebanon: Beirut

The American University of Beirut

Assistant professors in mathematics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30651205

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Position

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30570613

United Kingdom: Cambridge

University of Cambridge

University Lecturer in the Statistics and Mathematics of Information

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31096723

Taiwan: Taipei

Academia Sinica, Institute of Statistical Science

Regular Research Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30570613

The Institute of Statistical Science, Academia Sinica, is seeking candidates for tenure-track or tenured research positions at the level of assistant, associate or full research fellow available in 2017. Candidates should have a Ph.D. degree in statistics or areas related to data science. Application materials must include (1) a curriculum vita, (2) three letters of recommendation, and (3) representative publications and/or technical reports. Additional supporting materials such as transcripts for new Ph.D. degree recipients may also be included. Except for the letters of recommendation, electronic submissions are encouraged. Applications should be submitted to

Dr. Jing-Shiang Hwang,
Chair of the Search Committee
Institute of Statistical Science, Academia Sinica
128 Sec. 2 Academia Road, Taipei 11529, Taiwan, R.O.C.
Fax: +886-2-27831523
E-mail: recruit@stat.sinica.edu.tw

Application materials should be received by December 29, 2016 for consideration, but early submissions are encouraged.

Employment Opportunities around the world

Hong Kong: Shatin

香港中文大學
The Chinese University of Hong Kong

Applications are invited for:-

Department of Statistics
Professor
(Ref. 160001YJ)

Applications and nominations are invited for a faculty post at Professor level in the Department of Statistics. The post targets senior and prominent scholar with outstanding research achievements and teaching track record in all areas of statistics. A Ph.D. in statistics or a related field is required.

Appointment will be normally be made on contract basis for up to three years initially commencing August 2017, which, subject to mutual agreement, may lead to longer-term appointment or substantiation later. Outstanding candidates with substantial experience may be considered for substantive appointment forthwith.

Application review will commence in January 2017, and will continue until the post is filled.

Application Procedure
The University only accepts and considers applications submitted online for the post above. For more information and to apply online, please visit http://career.cuhk.edu.hk.

Applicants should complete the online application form and upload a cover letter, a full curriculum vitae, a statement of research and teaching interests, and copies of up to five recent publications by January 15, 2017.

United Kingdom: Cambridge

University of Cambridge, Department of Pure Mathematics & Mathematical Statistics and the Institute of Astronomy
University Lecturer in Astrostatistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30968491

United States: Berkeley, CA

UC Berkeley Statistics Department
Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30411930

United States: Berkeley, CA

UC Berkeley
Neyman Visiting Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30667129

United States: Berkeley, CA

UC Berkeley
Lecturer
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30782008

United States: Davis, CA

University of California, Department of Statistics
Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30121134

United States: La Jolla, CA

UC San Diego, Department of Mathematics
Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30685576

United States: La Jolla, CA

UC San Diego, Department of Mathematics

Assistant Professor - Excellence

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30685513

United States: Los Angeles, CA

University of Southern California

(Open Rank) Professor of Data Sciences and Operations (TT)-Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30860807

United States: Riverside, CA

University of California, Riverside

Cluster Hire in Mathematical Modeling of Complex Bio-Systems

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31253511

United States: Santa Barbara, CA

University of California, Statistics & Applied Probability Department

Assistant Professor, Statistics, Tenure Track

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30747874

USA: Storrs, CT

University of Connecticut

Assistant Professor of Statistics

Two tenure track assistant professors begin in Fall 2017 at the University of Connecticut, located in Storrs, CT. Ph.D. in Statistics or Biostatistics is required. Postdoctoral experience or prior assistant professorship is preferred. Candidates must demonstrate a superior research record and potential in at least one area among big data science, high-dimensional data, applied probability, financial/time series and panel data, image and functional data, spatial and temporal statistics, design of clinical trials, and network data analysis. Evidence for strong potential for grant support is needed. The positions will involve conducting research, teaching undergraduate and graduate level courses and directing Ph.D. students. Visit http://hr.uconn.edu/faculty/ to view the complete job posting. Select "Apply Now" to be redirected to Academic Jobs Online to complete your application, which must include a cover letter, curriculum vita, statements of research and teaching, and copy of transcript. Additionally, please follow the instructions in Academic Jobs Online to direct three reference writers to submit letters of reference on your behalf. Complete application materials must be received by Friday, January 13, 2017 to be considered. Inquiries to Lynn Kuo, Search Committee Chair, at lynn.kuo@uconn.edu. Search# 2017119.

United States: Stanford, CA

Stanford University, Department of Statistics

Assistant Professor of Statistics or Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30411514

United States: Stanford, CA

Stanford University, Department of Statistics

Stein Fellow in Statistics or Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30411442

United States: Fort Collins, CO

Colorado State University-Department of Statistics

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30834333

United States: Golden, CO

Colorado School of Mines

Open Rank Professor- Applied Mathematics and Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30924991

United States: Stamford, CT

University of Connecticut

Assistant/Associate Professor, Operations and Information Management, Stamford Campus

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30747981

United States: Stamford, CT

University of Connecticut

Instructor/Assistant Professor In-Residence, Operations and Information Management, Stamford Campus

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30747973

United States: Champaign, IL

University of Illinois at Urbana-Champaign, College of Liberal Arts & Sciences, Department of Statistics

College of Liberal Arts & Sciences: Open Rank Faculty - Department of Statistics (F1600086)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30614344

United States: Chicago, IL

University of Illinois at Chicago

Assistant Professor in Statistics - Tenure Track

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30667225

Employment Opportunities around the world

United States: Chicago, IL

The University of Chicago Booth School of Business

Assistant/Associate Professor of Econometrics and Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30614076

United States: Evanston, IL

Northwestern University

Assistant or Associate Professor of Computer Science & Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31136736

United States: Normal, IL

Illinois State University, Department of Mathematics

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30684795

United States: West Lafayette, IN

Purdue University, Department of Statistics

Professor of Statistics - Bioinformatics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31234467

United States: Lawrence, KS

Department of Mathematics, University of Kansas

Visiting Assistant Professor of Probability and Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30614037

United States: Boston, MA

Boston University

Associate Professor in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30766653

United States: Boston, MA

Boston University

Professor in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30766430

United States: Boston, MA

Boston University

Asst. Professor Probability and Stochastic Processes

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30783603

United States: New York, NY

Department of Statistics

Columbia University

Faculty Positions Starting Fall 2017

The Department of Statistics invites applications for a faculty position in applied/interdisciplinary statistics to begin July 1, 2017. The position may be filled at any rank from tenure-track assistant professor through full professor with tenure. A Ph.D. in statistics or a related field and commitment to high quality research and teaching in statistics and/or probability are required. Candidate will be expected to sustain an active research and publication agenda and to teach in the departmental undergraduate and graduate programs. Candidate interested in an affiliation with the Data Science Institute are strongly encouraged to apply.

The Department currently consists of 30 faculty members, 50 PhD students, and over 300 MA students. The Department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. For further information about the Department and our activities, centers, research areas, and curricular programs, please go to our webpage at: http://www.stat.columbia.edu

For information about the Data Science Institute, please see web page at: http://datascience.columbia.edu

Applicants at all ranks are required to create an applicant profile and upload a CV through Columbia's online Recruitment of Academic Personnel System (RAPS). To begin the application process, please go to: https://academicjobs.columbia.edu/applicants/Central?quickFind=63544

Inquiries may be made to dk@stat.columbia.edu

Review of applications begins on December 2, 2016, and will continue until the position is filled.

Columbia University is an Equal Opportunity/Affirmative Action employer.

United States: Boston, MA

Dana Farber Cancer Institute

Chair, Department of Biostatistics and Computational Biology

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30833725

United States: Bridgewater, MA

Bridgewater State University

Department of Mathematics, Assistant Professor, Statistics and Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30862886

United States: Cambridge, MA

Massachusetts Institute of Technology

Assistant Professor Brain and Cognitive Sciences

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30781392

United States: Cambridge, MA

Massachusetts Institute of Technology

Statistician Faculty Position

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30934941

United States: Cambridge, MA

Harvard University Statistics Department

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30934412

United States: Ann Arbor, MI

The University of Michigan

Tenure-track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=18619140

United States: East Lansing, MI

Michigan State University, Department of Statistics & Probability

Faculty Positions in Statistics and in Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31100569

United States: Minneapolis, MN

University of Minnesota - School of Statistics

Tenure Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30536715

United States: Bethlehem, PA

Applied/Computational Stochastic Analysis & Stochastic Analytics

Department of Mathematics

Lehigh University, Bethlehem, PA 18015

Lehigh University's Department of Mathematics is seeking to fill a tenure-track Assistant Professor position in an area of Applied or Computational Stochastic Analysis, beginning fall 2017. We seek individuals with a specialization in an area of Applied/Computational Stochastic Analysis (or Stochastic Analysis/Stochastic Analytics) which includes connections to some area of application or development of computational tools for applications of stochastic analysis and stochastic modeling. Areas include but are not limited to, applied stochastic analysis, computational stochastic analysis, stochastic modeling, stochastic decision making, and complicated data analytics using stochastic models. Ability in teaching stochastic calculus for finance and some intermediate level courses in statistics is strongly desired. Candidates with interdisciplinary research interests are particularly encouraged to apply.

A successful candidate is expected to pursue a vigorous research program, deliver high quality teaching and mentoring to undergraduate, masters and doctoral students, and contribute to the activities of the department and the university. Postdoctoral experience is desirable, but not required.

Review of Applications - Applications received by November 30, 2016 will be assured of full consideration. Applications should be submitted on-line at https://www.mathjobs.org/jobs. A candidate's application should include: (a) an AMS cover sheet; (b) a complete vita, including a list of publications; (c) a research statement; (d) a statement of teaching philosophy; and (e) at least four letters of recommendation, at least one of which addresses the candidate's qualifications as a teacher.

Lehigh offers excellent comprehensive benefits including domestic partner benefits. Click here http://www.lehigh.edu/~inprv/faculty/worklifebalance.html for information on Lehigh's work/life balance initiatives.

Lehigh University is an affirmative action/equal opportunity employer and does not discriminate on the basis of age, color, disability, gender, gender identity, genetic information, marital status, national or ethnic origin, race, religion, sexual orientation, or veteran status.

Employment Opportunities around the world

United States: Durham, NC

Duke University Statistical Science

Tenure Track, Open Rank Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30747056

United States: New Brunswick, NJ

Rutgers, The State University of New Jersey

Open Rank Tenure-Track Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30533756

United States: Princeton, NJ

Princeton University, Operations Research & Financial Engineering

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30857146

United States: Ithaca, NY

Cornell University, Department of Statistical Science

Faculty Position - All Ranks

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30103998

United States: Eugene, OR

University of Oregon

Three tenure track positions in Genomics, Bioinformatics or Statistical Genetics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31053613

United States: Philadelphia, PA

University of Pennsylvania, Wharton Department of Statistics

Assistant, Associate, or Full Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31026726

United States: Philadelphia, PA

Fox School of Business
TEMPLE UNIVERSITY®

Department of Statistical Science, Temple University, Philadelphia, PA

The Department of Statistical Science in the Fox School of Business at Temple University invites applications to fill multiple positions anticipated to start in fall 2017, beginning in July or August 2017.

Tenure-Track Faculty Positions

The search is open at all ranks, including Tenure-Track Assistant and Tenured Associate/Full Professor. The department encourages applications from candidates in any field within statistics or in any cross-disciplinary area where innovative use of statistics is of critical importance. For the Associate/Full Professor positions, we seek internationally renowned scholars with excellent track records in research, teaching, grant funding and dissertation advising.

Candidates must be ABD or hold a Ph.D. degree or foreign equivalent Candidates are expected to maintain an active and rigorous research program in statistics. A research focus in Statistical Data Science with interdisciplinary applications and collaborations is highly desirable. The preferred qualifications for the Assistant Professor position include post-doctoral or previous faculty experience with a strong potential to publish in the top journals in Statistics and associated fields.

Non-Tenure Track and Adjunct Faculty Positions in Statistical Science/Business Analytics

The Department also invites applications for Non-Tenure Research Track, Non-Tenure Teaching Track, and Adjunct faculty positions to begin in July or August 2017. Candidates must be ABD or hold a Ph.D. degree or foreign equivalent for the Research Track or a master's degree for the Teaching Track/Adjunct, and must have a strong background in data analytics, statistics, or a closely related field. Teaching responsibilities include introductory as well as advanced level statistics courses, visualization, and data mining.

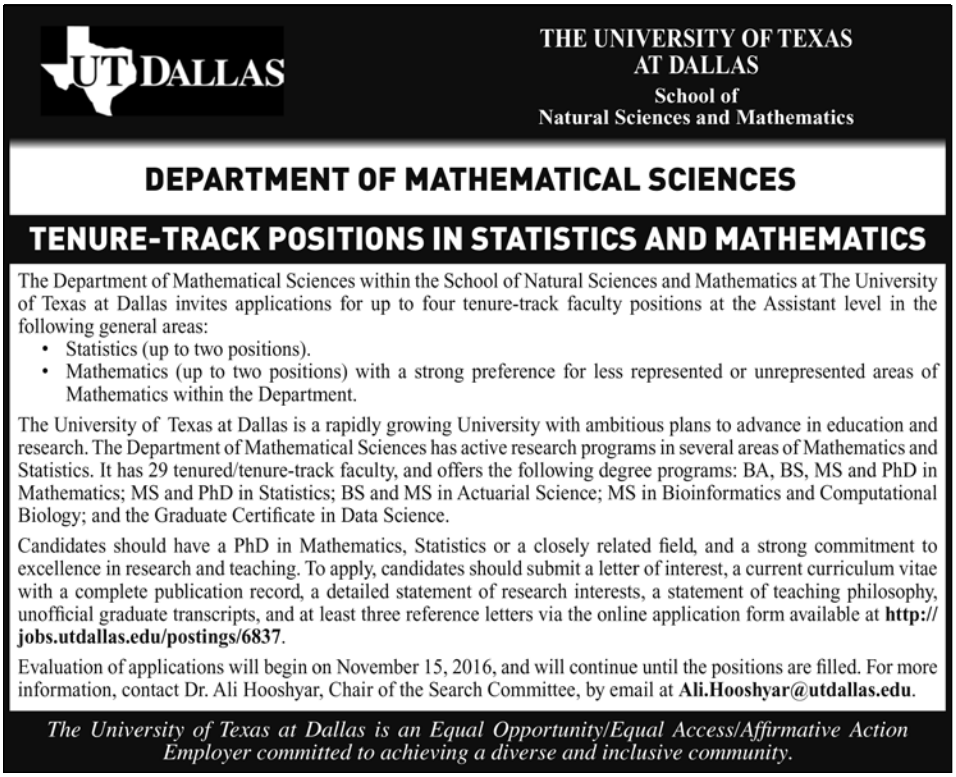
Postdoctoral positions are available for recent Ph.D. graduates in statistics with a strong potential to publish high quality research. Salary is highly competitive and commensurate with qualifications. Applications will be accepted until the positions are filled.

Applications should include (a) cover letter, (b) full curriculum vitae, (c) evidence of excellence in teaching (i.e., evaluations), and (d) the names and contact information for three references. Kindly submit the above items electronically to stat.recruiting@temple.edu

For more information on the department and the application process, please visit:
www.fox.temple.edu/cms_academics/dept/statistics/recruiting

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

United States: Dallas, TX



United States: Pittsburgh, PA

University of Pittsburgh
Department of Statistics
Chair
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=31101102

United States: Pittsburgh, PA

Carnegie Mellon University
Tenure Track Position
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30757723

United States: Brookings, SD

South Dakota State University
Assistant Professor of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30611711

United States: Salt Lake City, UT

University of Utah, Mathematics Department
Assistant / Associate / Full Professor of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30685457

United States: Blacksburg, VA

Virginia Tech — Virginia Polytechnic Institute
Faculty Positions in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30973339

United States: Charlottesville, VA

University of Virginia, Department of Statistics
Faculty Positions
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30872113

United States: Norfolk, VA

Old Dominion University
Statistics - Associate or Full Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30685490

United States: Seattle, WA

Fred Hutchinson Cancer Research Center
Assistant or Associate Member - Biostatistics and Biomathematics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30642327

United States: Seattle, WA

Fred Hutchinson Cancer Research Institute
Senior Staff Scientist, VISC
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30833806

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.
Please submit your meeting details and any corrections to Elyse Gustafson: erg@imstat.org

December 2016

NEW December 1: North Bethesda, MD, USA. **Open Data Science Symposium** w http://event.capconcorp.com/wp/bd2k-odss/

December 4–9: Atlantic City, NJ, USA. **72nd Annual Deming Conference on Applied Statistics** w www.demingconference.com

December 5–9: San José, Costa Rica. **XIV CLAPEM** w http://www.clapem.emate.ucr.ac.cr/

December 5–9: Canberra, Australia. **Australian Statistical Conference, 14th Australasian Data Mining Conference, 9th Conference on Teaching Statistics** w www.asc2016.com.au

December 10–12: Parkville, Australia. ACEMS Workshop in Honour of Peter Gavin Hall w http://acems.org.au/news-events/events/acems-workshop-in-honour-of-peter-gavin-hall/

NEW December 12–15: Birmingham, AL, USA. **6th UAB Short Course on Next Generation Sequencing: Technology and Statistical Methods** w http://www.soph.uab.edu/ssg/nhgri_r25/sixthshortcourse

December 12–15: Multan, Pakistan. 14th International Conference on Statistical and Allied Sciences (ICCS-14)

December 15–17: Taipei, Taiwan. **Conference on Experimental Designs and Analysis (CEDA) 2016** w http://www3.stat.sinica.edu.tw/ceda2016/

December 19–21: College of Engineering Pune, Maharashtra, India. **IEEE International Conference on Computing, Analytics and Security Trends** w http://cast2016.coep.org.in/

December 19–22: Chennai, India. **Statistical Methods in Finance 2016** w http://www.cmi.ac.in/~sourish/StatFin2016/

IMS December 19–22: Shanghai, China. **10th ICSA International Conference** w http://www.math.sjtu.edu.cn/conference/2016icsa/

December 21–23: Kerala, India. **ICSTC-2016: Second International Conference on Statistics for Twenty-First Century** w http://icstckerala.com/

December 21–23: Kolkata, India. **Platinum Jubilee International Conference on Applications of Statistics** w http://stat.caluniv.in/platinum/

January 2017

January 5: Atlanta, GA, USA. **Data, Information, Knowledge using Annual Survey of Math Science & CBMS Survey** w http://jointmathematicsmeetings.org/meetings/national/jmm2017/2180_progfull.html

January 23–25: Eindhoven, The Netherlands. **Young European Statistician (YES VIII)** w http://www.eurandom.nl/events/workshops/2017/YES_VIII/

January 23–25: Lunteren, The Netherlands. **16th Winter school on Mathematical Finance** w https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html

January 26–27: Utrecht, The Netherlands. **Third STAR workshop on Random Graphs** w http://www.math.uu.nl/stochsem/WorkshopRGs2017/

January 30–February 3: Bangkok, Thailand. Bangkok Workshop on Discrete Geometry and Statistics w http://thaihep.phys.sc.chula.ac.th/BKK2017DSCR/

February 2017

February 20–24: Berlin, Germany. **13th Workshop on Stochastic Models, Statistics and Their Applications** w http://agzqs.stochastik.rwth-aachen.de/

NEW February 23–24: Knoxville, TN, USA. **NSF INCLUDES Conference on Multi-Scale Evaluation in STEM Education** w http://www.nimbios.org/IncludesConf/

March 2017

March 6–10: CIRM-Luminy, France. **Random Structures in Statistical Mathematical Physics** w http://khanin-shlosman.weebly.com/research-school.html

IMS March 8–10: Washington DC, USA. **Reproducibility of Research: Issues and Proposed Remedies** w http://www.nasonline.org/programs/sackler-colloquia/upcoming-colloquia/

IMS March 12–15: Washington DC, USA. **ENAR Spring Meeting** w http://www.enar.org/meetings/future.cfm

April 2017

NEW April 5–7: Barcelona, Spain. **4th Control, Decision and Information Technologies (CoDIT17)** **w** http://codit2017.com

April 17–21: Yulara (Ayers Rock), NT, Australia. **Applied Probability @ The Rock** **w** http://www.maths.adelaide.edu.au/APatR/

April 20–22: Fort Lauderdale, Florida, USA. **20th Artificial Intelligence and Statistics (AISTATS)** **w** www.aistats.org

April 24–27: CIRM-Luminy, France. **Qualitative Methods in KPZ Universality** **w** http://khanin-shlosman.weebly.com/conference.html

NEW April 26–28: Warwick, UK. **InSPiRe Conference: Methodology for Clinical Trials in Small Populations and Rare Diseases** **w** http://warwick.ac.uk/inspireconference

April 30–May 5: Ascona, Switzerland. Statistical Challenges in Single-Cell Biology **w** https://www.bsse.ethz.ch/cbg/cbg-news/ascona-2017.html

May 2017

ims May 5–13: Erice, Sicily, Italy. **Stochastic Methods in Game Theory** **w** https://sites.google.com/site/ericegametheory2017

May 31–June 2: Santorini, Greece. **Thera Stochastics: A Mathematics Conference in Honor of Ioannis Karatzas** **w** http://www.math.columbia.edu/department/thera/

June 2017

NEW June 5–30: Vancouver, BC, Canada. **PIMS-CRM Summer School in Probability** **w** http://www.math.ubc.ca/Links/ssprob17/

June 6–9: London, UK. **17th Applied Stochastic Models and Data Analysis (ASMDA)** **w** www.asmda.es

NEW June 6–9: Yorktown Heights, NY, USA. **ISBIS 2017: Statistics in Business Analytics** **w** www.isbis2017.org

NEW June 19–23: New York, USA. **Dynamics, aging and universality in complex systems** **w** http://cims.nyu.edu/conferences/gba60/

June 20–23: Riverside, CA, USA. **10th International Conference on Multiple Comparison Procedures** **w** http://www.mcp-conference.org/hp/2017

ims June 24–28: Santa Fe, NM, USA. **2017 WNAR/IMS Meeting** **w** TBC

June 25–28: Cairns, QLD, Australia. **37th International Symposium on Forecasting** **w** https://forecasters.org/isf/

NEW June 25–July 15: Park City, Utah, USA. **Random Matrix Theory Summer Session** **w** https://pcmi.ias.edu/upcoming

NEW ims June 26–30: Paris, France. **Bayesian Nonparametrics** **w** https://www.ceremade.dauphine.fr/~salomond/BNP11/index.html

June 26–30: Delft, The Netherlands. **10th Conference on Extreme Value Analysis: EVA 2017** **w** www.eva2017.nl

ims June 28–July 1: Nanning, Guangxi Province, China. **2017 IMS-China International Conference on Statistics and Probability** **w** TBC

July 2017

July 2–7: Groningen, The Netherlands. **IWSM 2017** **w** http://iwsm2017.webhosting.rug.nl/

July 3–7: Wollongong, NSW, Australia. **ICORS 2017** **w** http://niasra.uow.edu.au/icors2017/index.html

July 9–13: Vigo, Spain. **38th Annual Conference of the International Society for Clinical Biostatistics** **w** TBC

July 16–21: Marrakech, Morocco. **61st ISI World Statistics Congress 2017** **w** http://www.isi2017.org/

ims July 24–28: Moscow, Russia. **39th Conference on Stochastic Processes and their Applications (SPA)** **w** TBC

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

Come to JSM 2017: this is Baltimore Inner Harbor at night (photo by Mitch Lebovic)

Continues on **page 30**

International Calendar *continued*

August 2017

NEW August 12–14: St Louis, MO, USA: **Second Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI)^{2}** w http://www.math.wustl.edu/~kuffner/WHOA-PSI-2.html

August 25–29: Debrecen, Hungary. **XXXIV International Seminar on Stability Problems for Stochastic Models** w https://arato.inf.unideb.hu/isspsm2017/index.php

NEW August 28–September 1: New York, USA. **Dyson–Schwinger equations, topological expansions, and random matrices** w http://www.math.columbia.edu/department/probability/seminar/guionnet.html

August 28–September 1: Vienna, Austria. **CEN-ISBS Vienna 2017 Joint Conference on Biometrics & Biopharmaceutical Statistics** w www.cenisbs2017.org

September 2017

NEW September 25–27: Washington DC. **2017 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop** w http://ww2.amstat.org/meetings/biopharmworkshop/2017/

March 2018

ims March 25–28: Atlanta, GA, USA. **ENAR Spring Meeting** w http://www.enar.org/meetings/future.cfm

July 2018

ims July 2–6: Vilnius, Lithuania. **Joint 2018 IMS Annual Meeting and 12th International Vilnius Conference on Probability Theory & Mathematical Statistics** w TBC

July 9–13: Edinburgh, UK. **ISBA 2018 World Meeting** w TBC

July 16–20: Bristol, UK. 33rd International Workshop on Statistical Modelling w http://www.statmod.org/workshops.htm

ims July 28 – August 2: Vancouver, Canada. **JSM 2018** w http://amstat.org/meetings/jsm/

March 2019

ims March 24–27: Philadelphia, PA, USA. **ENAR Spring Meeting** w http://www.enar.org/meetings/future.cfm

July 2019

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

March 2020

ims March 22–25: Nashville, TN, USA. **ENAR Spring Meeting** w http://www.enar.org/meetings/future.cfm

July 2020

NEW July 5–11: Portoroz, Slovenia. **8th European Congress of Mathematics.** w http://www.8ecm.si/

August 2020

ims August 1–6: Philadelphia, PA, USA. **JSM 2020** w http://amstat.org/meetings/jsm/

ims August 17–21: Seoul, Korea. **Bernoulli/IMS World Congress on Probability and Statistics** w TBC

August 2021

ims August 7–12: Seattle, WA, USA. **IMS Annual Meeting at JSM 2021** w http://amstat.org/meetings/jsm/

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know. You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at http://www.imstat.org/submit-meeting.html We'll list them here in the Bulletin, and on the IMS website too, at www.imstat.org/meetings

Membership and Subscription Information

Journals

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

Individual Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of $115. An additional $74 is added to the dues of members for each scientific journal selected ($49 for *Stat Sci*). **Reduced membership** dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members.

Individual and General Subscriptions

Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2016 are available to *The Annals of Applied Probability* ($199), *The Annals of Applied Statistics* ($199), *The Annals of Probability* ($199), *The Annals of Statistics* ($199), *Statistical Science* ($174), and *IMS Bulletin* ($125). **General subscriptions** are for libraries, institutions, and any multiple-readership use. Institutional subscriptions for 2016 are available to *The Annals of Applied Probability* ($475), *The Annals of Applied Statistics* ($475), *The Annals of Probability* ($475), *The Annals of Statistics* ($475), *Statistical Science* ($270), and *IMS Bulletin* ($118). Airmail rates for delivery outside North America are $135 per title.

IMS Bulletin

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

The *IMS Bulletin* (ISSN 1544-1881) is published eight times per year in January/February, March, April/May, June/July, August, September, October/November and December, by the Institute of Mathematical Statistics, 3163 Somerset Dr, Cleveland, Ohio 44122, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to Institute of Mathematical Statistics, 9650 Rockville Pike, Suite L3503A, Bethesda, MD 20814-3998.

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Advertising job vacancies

A single 60-day online job posting costs just $285.00. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See http://jobs.imstat.org

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

Rates and requirements for display advertising

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Deadlines and Mail Dates for *IMS Bulletin*

Issue	Deadline	Online by	Mailed
1: January/February	**December 1**	December 15	January 1
2: March	**February 1**	February 15	March 1
3: April/May	**March 15**	April 1	April 15
4: June/July	**May 1**	May 15	June 1
5: August	**July 1**	July 15	August 1
6: September	**August 15**	September 1	September 15
7: Oct/Nov	**September 15**	October 1	October 15
8: December	**November 1**	November 15	December 1

Volume 45 · Issue 8

the next issue is

January/ February 2017

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http://bulletin.imstat.org

DEADLINES for submissions

December 1,
then **February 1**

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

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THE ANNALS of PROBABILITY

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Institute of Mathematical Statistics

Articles

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