

October/November 2015

CONTENTS

- 1 **COPSS Awards at JSM**
- 2 **Members' News:** Nell Sedransk, Bradley Efron, David L Banks, Peter Gaenssler, Samantha Tyner
- 4 **ASA Fellows; Schramm lecturer**
- 5 **Alan Turing Institute; Loève Prize**
- 6 **Noether Lecture; Statistics "best job"; New book**
- 7 **Canadian Stat Institute**
- 8 **Statisticians on Ice; Student Puzzle Corner**
- 9 **XL-Files:** More Joy of Statistics, not (merely) Job of Statistics
- 10 **World Statistics Day; ENAR; Recent papers:** *Annals of Statistics*; *Annals of Applied Statistics*
- 12 **Financial Statements**
- 18 **Terence's Stuff:** Mentoring
- 19 **IMS meetings**
- 22 **Other meetings**
- 25 **Employment Opportunities**
- 29 **International Calendar**
- 31 **Information for Advertisers**

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



COPSS Awards at JSM

The Committee of Presidents of Statistical Societies (COPSS) conferred their 2015 awards at JSM in Seattle in August. **John D. Storey**, Princeton University's William R. Harman '63 and Mary-Love Harman Professor in Genomics and professor in the Lewis-Sigler Institute for Integrative Genomics, received the 2015 COPSS Presidents' Award, which recognizes outstanding contributions to statistics by a researcher aged 40 or younger.

Photos: Eric Sampson/ASA



The 2015 COPSS Presidents' Award winner, John Storey

In 2012 John Storey was elected an IMS Fellow, "for contributions to the theory and methods of large-scale statistical inference, and its applications to genomics." John was also awarded this year's Mortimer Spiegelman Award by the American Public Health Association (APHA). The award was created in 1970 to honor a statistician 40 years or younger who has made outstanding contributions to health statistics, especially public health statistics.

The F.N. David Award, recognizing a female statistician who exemplifies the contributions of Florence Nightingale David, went to **Francesca Dominici**. Francesca is Professor of Biostatistics, Senior Associate Dean for Research, and Associate Dean of Information Technology at the Harvard T.H. Chan School of Public Health.



Francesca Dominici received the F.N. David Award

The George W. Snedecor Award, which honors an individual who was instrumental in the development of statistical theory in biometry, was presented to **Danyu Lin**, the Dennis Gillings Distinguished Professor of Biostatistics at the University of North Carolina at Chapel Hill.



Danyu Lin, Snedecor Award winner (center), with Jane Pendergast and Carl Schwarz

COPSS established the R. A. Fisher Lectureship in 1963 to honor the contributions of Sir Ronald Aylmer Fisher and the work of a present-day statistician. The Fisher Lectureship recognizes the importance of statistical methods for scientific investigations.

Continues on page 3

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IMS Members' News

Nell Sedransk named as new director of NISS

NISS, the USA's National Institute of Statistical Sciences, announced that its new Director is Dr. **Nell Sedransk**. The announcement was made by Chairwoman Mary Batcher, pictured below with Nell.

"The search committee felt that Nell was the best person for this position. She brings a wealth of experience and expertise to the role of Director and has done a tremendous job restructuring the organization this past year to help ensure its future success," noted Batcher.

In her new role, Nell Sedransk will lead the institute into its second quarter-century with its current foundation of statistical research and of service to the NISS Affiliate organizations

from academia, government and industry. "I am very pleased to have this opportunity to help NISS continue to grow and thrive," said Nell. "I look forward to the coming months as we begin to focus on increasing research activities, expanding the postdoctoral fellowship program and engaging with new collaborators and clients for NISS."

Nell Sedransk has served as Acting Director of NISS since September 2014, having been Associate Director since 2005. She came to NISS from the National Institute



New NISS Director Nell Sedransk (left) with NISS Chair Mary Batcher

of Standards and Technology (NIST) where she was Chief of the Statistical Engineering Division. Since receiving her PhD from Iowa State University, she has spent much of her career in academia where she directed five MS and seven PhD students. Her research contributions in the areas of statistical theory and application of statistics to medicine, immunology, engineering, social science and education include more than 100 primary research publications and co-authorship of four books. At NISS she has continued to mentor postdoctoral fellows (10 at NISS, one at SAMSI and one prior to NISS) and to engage in statistical methodological research. Nell also serves as Associate Director of SAMSI, the Statistical and Applied Mathematical Sciences Institute. As NISS Director she will be based in the Washington DC office.

AOAS Founding Editor Brad Efron interviewed

Bradley Efron is the Max H. Stein Professor of Humanities and Sciences, professor of statistics at Stanford University, and professor of biostatistics with the department of health research and policy in the school of medicine. He was founding editor of the *Annals of Applied Statistics* from 2006–2012. In an interview in *Amstat News*, he says, "My editorial masterstroke was to recruit three world-class 'area editors': Steve Fienberg for social science, Mike Newton for biostatistics, and Mike Stein for physical sciences. It's hard to define 'applied statistics.' Lining up topics from right (pure math stat) to left (direct applications), we took as our remit anything in the line's left half. The hardest thing about starting a new journal is getting enough good papers, or, sometimes, enough papers period. I kept nervous graphs of our submissions, agonizing over random fluctuations downward. After a couple of years, the graphs took a sudden lurch upward, and the rest is history..." You can read the rest of the interview here: http://magazine.amstat.org/blog/2015/09/01/bradefron_2015/

More Members' News

COPSS Awards: continued from cover

The 2015 Fisher Lecturer was **Stephen Fienberg**. The lecture was titled, "R.A. Fisher and the Statistical ABCs".

Steve's lecture, and the COPSS Awards ceremony, was recorded: you can view it at <https://www.amstat.org/meetings/jsm/2015/webcasts/index.cfm>. You can also view:

- ASA Presidential Address by David Morganstein
- ASA President's Invited Address, Christine H. Fox
- ASA Deming Lecture: **William Q. Meeker** speaking on *Reliability: The Other Dimension of Quality*.



The 2015 COPSS Fisher lecturer, Stephen Fienberg

ASA Founders Award for David L. Banks

The American Statistical Association (ASA) presented its prestigious Founders Award to IMS member **David L. Banks**, professor of the practice of statistics at Duke University. Also honored at JSM were James H. Albert and Sally C. Morton. The honor is bestowed annually to ASA members who have rendered distinguished and long-term service to the association and its membership. David's citation read, "for outstanding leadership in the discipline, in its interfaces, and in the ASA; for consistent and varied professional contributions in areas of particular public interest, such as human rights, counterterrorism, immigration and public health; for editorial work and a commitment to modernizing our publications, including as a founding editor of *Statistics and Public Policy*, as editor of the *Journal of the American Statistical Association* and as publications representative on the ASA Board; for service in multiple sections, local chapters and committees; and for significant contributions on National Academies committees, to federal agencies and to the National Institute of Statistical Sciences and Statistical and Applied Mathematical Sciences Institute."

Peter Gaenssler, 1937–2015

We regret to announce that Peter Gaenssler (Gänßler) passed away on June 17, 2015. An obituary will follow.

Young Statisticians Writing Competition

Student IMS member **Samantha Tyner** was named runner up in the 2015 Young Statisticians Writing Competition organized by the UK Royal Statistical Society (RSS) and *Significance* magazine. Samantha's article, "The Joy of Clustering (with Bob Ross)" — and the other runner-up Annie Herbert's "The Great British Bayes-off: How much difference (statistically) does a soggy bottom make?" — will be published on the *Significance* website later this year.

James Skeffington was named the competition winner with his article, "Warren Buffett: Oracle or Orangutan," which sets out to answer a question many in the world of stocks and shares and investments have long asked themselves: is Warren Buffett extremely brilliant or extremely lucky?

Details of the 2016 competition will be announced early next year.

= access published papers online

IMS Journals and Publications

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

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

Annals of Probability: Maria Eulalia Vares
<http://imstat.org/aop>
<http://projecteuclid.org/aop>

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

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

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

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

IMS Co-sponsored Journals and Publications

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

Electronic Journal of Probability: Brian Rider
<http://ejp.ejpecp.org>

Electronic Communications in Probability: Sandrine Péché
<http://ecp.ejpecp.org>

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

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

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

Probability Surveys: Ben Hambly
<http://imstat.org/ps>
<http://www.i-journals.org/ps/>

IMS-Supported Journals

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

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

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

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

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

IMS-Affiliated Journals

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

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

More IMS Members' News

ASA named 62 new Fellows

The American Statistical Association (ASA) named 62 of its members as Fellows this year. Among them are 18 IMS members.

The IMS members who are new ASA Fellows are: **John Aston**, University of Cambridge, UK; **Peter M. Bentler**, University of California, Los Angeles; **Vanja Dukic**, University of Colorado at Boulder; **Duncan K.H. Fong**, The Pennsylvania State University; **Ofer Harel**, University of Connecticut, Storrs; **David R. Hunter**, The Pennsylvania State University; **Yoonkyung Lee**, The Ohio State University; **Daniel John Nordman**, Iowa State University; **Art B. Owen**, Stanford University; **Fernando Quintana**, Pontificia Universidad Católica de Chile; **Richard J. Samworth**, University of Cambridge, UK; **Victor Solo**, University

of New South Wales, Australia; **Catherine A. Sugar**, University of California at Los Angeles; **Fengzhu Sun**, University of Southern California; **Ying Wei**, Columbia University; **Hadley Wickham**, RStudio, Houston, TX; **Keying Ye**, The University of Texas at San Antonio; and **Grace Y. Yi**, University of Waterloo, Canada

Honorees are recognized for their outstanding professional contributions to and leadership in the field of statistical science. The 62 new fellows hail from 24 US states, the District of Columbia and six other countries. They were presented with certificates at a ceremony at JSM in Seattle.

"I commend each new ASA fellow for being recognized with this prestigious honor," said the ASA President, David R. Morganstein. "Each newly designated fellow

has distinguished him or herself through the advancement of statistical theory, methodology and applications as well as service to the ASA and now rightfully is recognized as a preeminent contributor to the field of statistical science. They truly are among the foremost members of our field."

The designation of ASA Fellow has been a significant honor for nearly 100 years. To be honored, nominees must have an established reputation in the profession and have made outstanding contributions to statistical science.

You can read the complete announcement at <https://www.amstat.org/newsroom/pressreleases/2015-ASANames62NewFellows.pdf>

Stochastic Processes conference featured Schramm lecture

The 2015 Schramm Lecture at the 38th Conference on Stochastic Processes and their Applications meeting in Oxford, UK, in July, was presented by Michel Ledoux, University of Toulouse. Michel's lecture was on "Stein's method, logarithmic Sobolev and transport inequalities."

This year's Stochastic Processes and their Applications conference welcomed over 400 speakers and delegates from 39 countries, who represented 198 institutions and organizations.

Martin Barlow, who was chair of the Scientific Committee, commented, "Over the last four decades both the mathematical depth and the scope of the SPA has broadened greatly. Early meetings were concentrated on traditional applied probability, with much attention given

to (mainly one-dimensional) branching processes and queues. The talks this year show how far the field has developed; we are able to study complicated stochastic systems, in high dimensions, and with many kinds of interactions. The development of many new areas of application of probability and stochastic processes is well reflected. One example is the number of talks on mathematical finance. The common theme of several of the sessions is the development of mathematical tools to model and understand the high dimensional data sets which the computer revolution has created."

More photos are on the conference website: <http://spa2015.oxford-man.ox.ac.uk/>



Michel Ledoux, 2015 Schramm lecturer, pictured with session chair Andrew Barbour.

Alan Turing Institute

Workshop series kick-starts operations of new UK Data Science Institute

The new UK national data science institute has opened its doors for business. The Alan Turing Institute was established in response to a letter by Sir Mark Walport to the UK prime minister outlining the need for a national institute. The letter was entitled the 'Age of Algorithms', and explained the growing need for expertise in algorithms and analytics.

In March 2014 in rapid response to the letter, the UK chancellor of the exchequer George Osborne announced the government's intent to establish the Institute. An international peer review process selected five joint venture partners of Cambridge, Edinburgh, Oxford, UCL and Warwick, to which a sixth partner of the UK Engineering and Physical Sciences Research Council has been added. The Institute has a budget with a current level of funding of £77 million GBP, and its headquarters have been announced as the British Library near King's Cross in London, a major transportation hub with easy access to the five academic partners.

US developments are also rapidly taking

place in this space: the Simons Center for Data Analysis is a recent addition to the international landscape, and the Gordon and Betty Moore Foundation and the Alfred P. Sloan Foundation have resourced activities at The University of Washington, the University of California, Berkeley, and New York University. Other recent European additions include the Paris-Saclay Center for Data Science.

The focus of the Institute will be core research in data science, spanning statistics, mathematics and computer science. Its director elect is currently working at Microsoft Research Cambridge, Andrew Blake. Many of the researchers involved in the endeavor are from a more theoretical background, including Terry Lyons, the London Mathematical Society's president, and past IMA president Peter Grindrod, and IMS members of Aston, Olhede and Wolfe. Its board chair is simultaneously chairman of the Isaac Newton Institute for Mathematical Sciences Management Committee.

As a first stage in activities the Institute is

holding a **series of workshops** (see <https://turing.ac.uk/#data-summits-workshops>) to map out the current state of the art of data science. Between September and late December 2015, 17 workshops have already been scheduled, and a number more will be organized before the end of the year. Common to the events is forging new links between the mathematical sciences and computer science, and a focus spanning theoretical developments to very applied problems. The science is driven by real practical problems, but requiring new theoretical questions to be posed.

The Institute has also issued a call for **expressions of interest** from research fellows, posts aimed at finishing PhD students, and more experienced postdoctoral researchers, see <https://turing.ac.uk/#research-positions>. The Institute is recruiting broadly across the remit of data science, starting to staff up to the 200 researchers who will be based at the British Library.

Loève Prize

Alexei Borodin awarded 2015 Loève Prize

The 2015 Line and Michel Loève International Prize in Probability has been awarded to Alexei Borodin of MIT. The prize, which carries a monetary award of \$30,000, will be presented at a ceremony in Berkeley to be held in November 2015.

Alexei Borodin received his PhD in 2001, advised by Alexandre Kirillov at University of Pennsylvania. His 2000 papers "Distributions on partitions, point processes, and the hypergeometric kernel" (with Olshanski) and "Asymptotics of Plancherel measures for symmetric groups" (with Okounkov and Olshanski) spotlighted and named the notion of determinantal point process in which correlations are given by a determinant based on some specific kernel. Originating in the study of specific random matrices, these have subsequently been shown to arise in a huge variety of contexts both within random matrix theory and in superficially quite different contexts, such as uniform random spanning trees, random dimer covers of planar

graphs, non-intersecting random walks, and zeroes of random analytic functions. Amongst Borodin's own major contributions to this field was the 2007 paper "Fluctuation properties of the TASEP with periodic initial configuration" (with Ferrari, Prähofer and Sasamoto). More recently, the 2014, 175-page paper "Macdonald processes" (with Corwin) provides a unified framework for various probability measures arising in the study of models within the KPZ universality class, for which surprisingly explicit results can be obtained. Overall his work touches an unusually broad collection of mathematical areas: representation theory, combinatorics, Lie theory, probability and hard analysis. His writing is marked by amazing clarity, perspective and attention to history.

The Prize commemorates Michel Loève, Professor at Berkeley from 1948 until his death in 1979. Awarded every two years, it is intended to recognize outstanding contributions by researchers in probability who are under 45 years old.

Other news

Call for nominations: 2017 AWM-AMS Noether Lecture

Nomination deadline: **October 15, 2015**

The Association for Women in Mathematics (AWM) established the Noether Lecture to honor women who have made fundamental and sustained contributions to the mathematical sciences. These one-hour



expository lectures are presented at the Joint Mathematics Meetings each January. Emmy Noether was one of the great mathematicians of her time, someone who worked and struggled for what she loved and believed in. Her life and work

remain a tremendous inspiration. Starting in 2015 the lecture is jointly sponsored by the American Mathematical Society and the AWM and has been renamed the AWM-AMS Noether Lecture.

The letter of nomination should include a one page outline of the nominee's contribution to mathematics, giving four of her most important papers and other relevant information. The selection committee will take into account nominations for a three-year period after they are received; the committee may seek out and consider other excellent candidates. Nominations should be submitted as one PDF file via MathPrograms.org at <https://www.mathprograms.org/db/programs/379>.

Surveys reveal statistician among top jobs in USA

Two surveys carried out in America highlight that being a statistician is a great career move.

A survey carried out by CareerCast.com reveals "*The Best Jobs for Women in 2015*." Among those top 11 jobs is Statistician.

CareerCast reports that the annual median wage for statisticians (in the US) is \$75,560, and the field has a projected growth outlook of 27%. They report at <http://www.careercast.com/slide/best-jobs-women-2015-statistician>, "The high growth outlook for statisticians and a strong 40% of new graduates being women makes this one of the top mathematical fields for women in 2015."

In related news, **Young Invincibles**, an advocacy group focused on economic issues facing young adults aged 18–34 in the US (<http://younginvincibles.org/>), recently published a report on "*The Best Jobs for Millennials*," highlighting careers that set up young adults for economic security. To develop the ranking, Young Invincibles analyzed 400 occupations, considering three key criteria: their median salaries, projected future growth, and percent of positions held by Millennials. The authors, Konrad Mugglestone and Tom Allison, analyzed over 400 occupations by their salaries, projected future growth, and access for young adults. Tied in third place? Statistician. The report is online at http://younginvincibles.org/wp-content/uploads/2015/08/8.27_Young-Invincibles_Best-Jobs-for-Millennials.pdf

Leadership and Women in Statistics



Edited by
Amanda L. Golbeck
Ingram Olkin
Yulia R. Gel

CRC Press
Taylor & Francis Group
A CHAPMAN & HALL BOOK

Announcing a new book: *Leadership and Women in Statistics*

Edited by Amanda L. Golbeck, Ingram Olkin and Yulia R. Gel

Chapman & Hall Press, ISBN 13: 978-1-4822-3644-6; xvi + 456 pages

This is an edited volume of 27 chapters on a broad range of topics relating to leadership, with special emphasis on women. With the growth of data science in almost every field of application, statisticians need to take a leadership role. This should not come as a surprise because statisticians have a long history of leadership in agriculture (design of experiments), in engineering (acceptance sampling), in medicine (random clinical trials), in education (tests and measurement) and many more fields. How can women participate in this growth? This book provides guidelines that will be helpful for both women and men in their professional path. The editors Amanda Golbeck, Ingram Olkin, and Yulia Gel have succeeded in obtaining thoughtful—and, at times, personal—discussions by leaders in different work environments: government, industrial, and academic, from multi-cultural perspectives, and from different work priorities. This is a book you will want to keep on your shelf and refer to over and over again as you develop your leadership in the course of your career.

You can order a copy from <https://www.crcpress.com/Leadership-and-Women-in-Statistics/Golbeck-Olkin-Gel/9781482236446>

Canadian Statistical Sciences Institute



Nancy Reid, University of Toronto, is the Director of the Canadian Statistical Sciences Institute. She writes: The Canadian Statistical Sciences Institute, CANSSI (Institut canadien des sciences statistiques, INCASS), www.canssi.ca, was established in 2012 by the Statistical Society of Canada. Professor Mary Thompson of the University of Waterloo served as Scientific Director until June 2015, successfully obtaining funding from the Natural Sciences and Engineering Research Council for the period 2014–19. I followed her as Director in June 2015, and John Braun, University of British Columbia, became the inaugural Deputy Director in July 2015.

The purpose of CANSSI is to advance research in the statistical sciences in Canada by attracting new researchers to the field, increasing the points of contact among researchers nationally and internationally, and developing scientific collaborations with other disciplines and organizations.

CANSSI is a virtual institute, building research capacity across the country, and relying on Canada's three mathematical sciences institutes for infrastructure and logistical support: the Fields Institute for Research in the Mathematical Sciences, the Pacific Institute for the Mathematical Sciences (PIMS), and the Centre de recherches mathématiques (CRM). Institutional members—Departments of Mathematics and of Statistics across the country—generously provide additional funding that is used to support the operations of CANSSI.

Scientific Activities

The overriding scientific goals of CANSSI are to develop encourage scientific innovation through collaborations between statistical scientists and researchers in other disciplines, to foster research excellence by increasing international points of contact, and to help train the next generation of statistical scientists. We do this through three main programs: Collaborative Research Teams, Workshops and Conferences, and Postdoctoral Fellowships.

The currently funded Collaborative Research Team projects are:

- *Advancements to State-Space Models for Fisheries Science*
- *Copula Dependence Modeling: Theory and Applications*
- *Statistical Modeling of the World: Computer and Physical Models in Earth, Ocean and Atmospheric Sciences*
- *Evolved Marked Point Processes with Applications to Wildland Fire Regimes*
- *Statistical Inference for Complex Surveys with Missing Observations*
- *Modern Spectrum Methods in Time Series Analysis: Applications in Physical Science, Environmental Science and Computer Modeling.*

CANSSI also funds two CANSSI

post-doctoral fellowships, joint initiatives with SAMSI, and provides partial funding for several workshops each year. Most recently, CANSSI supported the International Symposium in Statistics (ISS 2015), a workshop on Advancing Innovation and Scholarship in Statistics Education at Western University, the Canadian Human and Statistical Genetics Meeting, and a conference on Statistical and Computational Analytics for Big Data. This last meeting was the closing conference of a six-month thematic program on Statistical Inference, Learning and Models for Big Data: CANSSI leverages its funding by promoting thematic programs at the mathematical sciences institutes.

Governance and Management

CANSSI has a Board of Directors, chaired by Richard Smith of the University of North Carolina, and an international Scientific Advisory Committee. The membership of CANSSI consists of institutional members, which are universities supporting CANSSI through a financial contribution. CANSSI holds an annual general meeting in June, and the Board of Directors meets in June and December.

CANSSI is managed by the Director, Deputy Director, the Scientific Coordinator, the Financial Coordinator and a team of five regional Associate Directors.

International Ties

Scientifically, the future for statistical sciences seems very bright: undergraduate enrollments are skyrocketing, and the topics of Data Science and Big Data seem to have alerted both students and researchers to the many opportunities for statistical sciences to grow beyond its traditional borders. This involves developing new training models for students, forging new collaborations, especially with computer science, and positioning statistical scientists in leadership roles in these efforts. At the same time it is very important to continue emphasizing the relevance of traditional aspects of statistical science in the big data world.

These challenges are of course global challenges, and being faced by departments, schools, universities, institutes, centres and research

grants agencies around the world. CANSSI will be working hard in the coming months to build and strengthen international ties, through formal and informal agreements, student exchanges, reciprocal advertising, and so on.

Please don't hesitate to contact me directly, reid@utstat.utoronto.ca, for further information about CANSSI, or to discuss how we might collaborate with your unit.



Former CANSSI Director Mary Thompson (left) with current Director Nancy Reid

Statisticians on Ice

Two IMS members have been signed to major ice hockey teams in the US—not as players but as part of the growing number of statistical analysts in professional sports.

Sam Ventura, a visiting faculty member at Carnegie Mellon University (CMU), has been signed by the Pittsburgh Penguins as a consultant, and **Andrew Thomas** has a similar position with the Minnesota Wild hockey club, though he now is on the faculty of the University of Florida.

“In any field, if you can objectively back up your decision with data, you’re doing yourself a favor,” said Ventura. A Pittsburgh native and lifelong hockey player and enthusiast, Ventura’s appointment as a consultant with the Penguins stems from his senior year at CMU, when he took a class about applying statistical methods to the sporting world taught by Andrew Thomas.

Ventura said he and Thomas, a native of Toronto, had a mutual interest in hockey. They put their heads together on a project rating players in the National Hockey League, which incorporated statistical properties that went beyond the standard plus-minus rating, where a player is assigned a value based on the total number of goals his team and the opposing team scores while that player is on the ice. The project led to a paper that was published in *The Annals of Applied Statistics* and a panel discussion, “Advances in



Sam Ventura is one of the growing breed of statistical analysts in professional sports.

Methods for the Analysis of Ice Hockey,” at the Joint Statistical Meetings.

Ventura said, “It was a good discussion, with a big Q&A with the audience. The conclusion was we thought our work was very good, but the common and advanced fans didn’t have access to it. There was no public presentation of our results.”

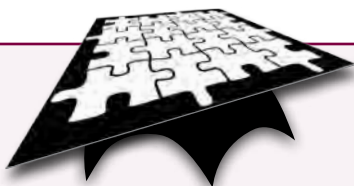
Enter War-on-Ice.com, a comprehensive, visually appealing website that Ventura and Thomas co-developed to introduce fans to more statistical metrics. WAR stands for *Wins Above Replacement*, which measures how many wins a player helps a team achieve over someone who would be his replacement. While fans can go to NHL.com for player and team statistics, Ventura says War-on-Ice.com is different in two ways. “War-on-Ice is geared to the more advanced fan, who is interested in stats that are good descriptors of what happened in the past but also good predictors of what will happen in the future,”

Ventura explained. “That’s what’s behind the core tenet of modern hockey stats. We like to present the metrics that are predictors, like WAR.” Ventura said another big predictor is the total number of shots a team takes during a game, even the ones that are blocked and not officially logged as shots on goal. “The idea is that the more shots a team takes, the more puck possession time they have. That’s a good predictor of wins and losses and future success,” Ventura said.

Ventura feels the website and the Pittsburgh Hockey Analytics Workshop, hosted by War-on-Ice and the Statistics Department at CMU last November, piqued the Penguins’ interest in him.

“We’re excited to add someone of Sam’s talent to our organization,” said Jason Karmanos, the Penguins’ vice president of hockey operations. “Advance stats data continues to emerge and evolve daily, and Sam will be instrumental in helping us interpret new findings in that area.” Ventura said areas in which quantitative analysis could provide value include research about which players play well with each other and against each other, and if it’s advantageous to play your starting goaltender in games on consecutive days.

This article is based on an article in *The Piper*, Carnegie Mellon’s online newspaper: <http://www.cmu.edu/piper/stories/2015/september/penguins-analytics.html>



Student Puzzle 11 still time to enter

The **deadline** for the Student Puzzle printed in the last issue is October 20, so there is still time to enter! The puzzle appears in the September 2015 issue (you can download the whole issue as a PDF from <http://bulletin.imstat.org>) and also at <http://bulletin.imstat.org/2015/08/student-puzzle-corner-11/>

The Student Puzzle Corner contains one or two problems in statistics or probability. Sometimes, solving the problems may require a literature search. Current student IMS members are invited to submit solutions electronically (to bulletin@imstat.org with subject “Student Puzzle Corner”). The deadline is **October 20, 2014**.

Authors of correct solutions, and the answer to the problem, will be published in the next issue of the Bulletin. The Editor’s decision is final.

XL-Files: More *Joy of Statistics*, not (merely) Job of Statistics



Xiao-Li Meng writes:

"I keep saying that the sexy job in the next 10 years will be statisticians." This prediction by Professor Hal Varian in January 2009 (in *The McKinsey Quarterly*) has been quoted so frequently that if I were him, I'd have been worried whether I'd be remembered for anything else that I said or did! Later that year, an *NY Times* headline was even more enticing: "For Today's Graduate, Just One Word: Statistics" (August 5, 2009). Any reputable statistician would be quick to point out the potential for self-fulfilling prophecy in such predictions; yet few statisticians would not rejoice at the exponential growth in the number of students entering statistics. As an example, for the past decade (2005–2014), the number of Harvard college students concentrating in statistics has grown steadily from 8 to 175.

And indeed "Statistics—the science of learning data—is the fastest-growing STEM undergraduate degree in the United States over the last four years" (*Amstat News online*, March 1, 2015), with a 95.2% growth since 2010. Much of this growth of course is due to "Big Data", no matter how the term is (un-) defined. Many more jobs now are out there for statisticians. Another local example: graduates from my department now can be found in almost all major internet-based firms (Google, Yahoo, eBay, Facebook, Dropbox, etc), as well as in Wall Street firms (e.g., the hedge fund Two-Sigma alone has hired six of our graduates in recent years).

Responding to such demand, the

most recent ASA *Curriculum Guidelines for Undergraduate Programs in Statistical Science* (CGUPSS: <http://www.amstat.org/education/pdfs/guidelines2014-11-15.pdf>) emphasize much more equipping students with skills for employment: "The main goal of our recommendations is to ensure undergraduate statistics students remain useful in a world with increasingly more complex data. If we don't prepare them to learn new techniques and work with various forms of data, it will be difficult for them to compete for jobs." In contrast, the 2005 GAISE (*Guidelines for Assessment and Instruction in Statistics Education*) College Report (http://www.amstat.org/education/gaise/GaiseCollege_full.pdf) never mentioned the word "employment", and the word "job" appeared only in sentences such as "Your job is to sketch a graph..." (assuming, of course, that I did a perfect job of text mining).

Speaking of jobs, I was given the job of being a "provocative" discussant in the session on "Undergraduate Curriculum: The Pathway to Sustainable Growth in Our Discipline" at JSM 2015, where CGUPSS was featured, and its comparison to GAISE was made. Obligated to be provocative, I noted the absence of any emphasis on the "Joy of Statistics" in CGUPSS. Responding to the job market of course is important, but in order to sustain a healthy supply indefinitely, we will need to make engaging in statistical thinking and activities an innate pleasure. Our Mother Nature ensures the survival of the human species not by making us aware of our existence's essential role in the survival of the ecosystem (we are not), but by biologically wiring us to engage in eating and mating with physical pleasure. If we consider *Eating* and *Mating* as the E-step and M-step of the life-cycle EM algorithm to sustain us as biological beings in the stone age, then it's time to encode the S-step, "*Statisticking*", with the intellectual pleasure

to sustain us as thoughtful beings in the digital age. Here "statisticking" encompasses all the necessary statistical thinking to survive the data tsunami, with its joy derived from an ultimate intellectual game: to guess wisely and to guess meaningfully the errors in our guesses.

Speaking of guessing, Hal Varian continued: "People think I'm joking, but who would've guessed that computer engineers would've been the sexy job of the 1990s?"—which hints that what is sexy this decade is not guaranteed to be sexy the next. Indeed, the number of CS concentrators at Harvard dropped steadily from 223 in 2000 to 74 in 2007, and then went up from 94 in 2008 to 316 in 2014, essentially tracing the CS job market going through tech-bubble bust, increased job outsourcing, and then the arrival of big data. Such large volatility awaits Statistics as well, if we put all our eggs in the "*Job of Statistics*" basket, without instilling the *Joy of Statistics* in our students. Given its emphasis on deep intellectual pursuits, IMS seems well positioned to take on the task of promoting the *Joy of Statistics* as a critical step in sustaining the pipelines for our beloved profession.

The book covers are used for illustration purposes only; Xiao-Li says, "I have not read any of the books."



World Statistics Day 2015

The World Statistics Day (<https://worldstatisticsday.org>) was proclaimed by the United Nations General Assembly in 2010 to recognize the importance of statistics in shaping our societies. The holding of national and regional statistical days was already a tradition in more than 100 countries, but the General Assembly's adoption of this international day as 20 October brought new light to this important observance. The first World Statistics Day was commemorated on 20 October 2010 in over 130 countries and areas.

The year of 2015 marks an important cornerstone for official statistics, with the conclusion of the Millennium Development Goals, the post-2015 development agenda, the data revolution, the preparations for the 2020 World Population and Housing Census Programme and so much more.

We hope that the statistical community worldwide will embrace this international observance and showcase their achievements and their ongoing work towards *Better Data—Better Lives*.



Abstract submission deadline

Submit your abstract by **October 15** for the 2016 ENAR Spring Meeting (March 6–9, 2016, in Austin, Texas). October 15 is also the submission deadline for the Distinguished Student Paper Awards. The ENAR scientific program will cover topics of interest to researchers and practitioners, such as data science (big data), genomics, clinical trials, neuroimaging, biomarkers, health policy, electronic health records, ecology, and epidemiology.
<http://www.enar.org/meetings/spring2016/index.cfm>

Recent papers: *Annals of Statistics*

Volume 43, number 5: October 2015

The *Annals of Statistics* aims to publish research papers of the highest quality reflecting the many facets of contemporary statistics.

Primary emphasis is placed on importance and originality. The Co-editors (2013–15) are Peter Hall and Runze Li.

Access papers at <http://projecteuclid.org/aos>

Optimal detection of multi-sample aligned sparse signals	HOCK PENG CHAN AND GUENTHER WALTHER 1865
Asymptotic theory for density ridges	YEN-CHI CHEN, CHRISTOPHER R. GENOVESE AND LARRY WASSERMAN 1896
Fused kernel-spline smoothing for repeatedly measured outcomes in a generalized partially linear model with functional single index	FEI JIANG, YANYUAN MA AND YUANJIA WANG 1929
Bayesian T-optimal discriminating designs	HOLGER DETTE, VIATCHESLAV B. MELAS AND ROMAN GUCHENKO 1959
Bayesian linear regression with sparse priors	ISMAËL CASTILLO, JOHANNES SCHMIDT-HIEBER AND AAD VAN DER VAART 1986
Nonparametric confidence intervals for monotone functions	PIET GROENEBOOM AND GEURT JONGBLOED 2019
Controlling the false discovery rate via knockoffs	RINA FOYGEL BARBER AND EMMANUEL J. CANDÈS 2055
Adaptive testing on a regression function at a point	TIMOTHY ARMSTRONG 2086
Estimation and inference in generalized additive coefficient models for nonlinear interactions with high-dimensional covariates	SHUIJIE MA, RAYMOND J. CARROLL, HUA LIANG AND SHIZHONG XU 2102
Fully adaptive density-based clustering	INGO STEINWART 2132
Minimax estimation in sparse canonical correlation analysis	CHAO GAO, ZONGMING MA, ZHAO REN AND HARRISON H. ZHOU 2168
Computing exact D-optimal designs by mixed integer second-order cone programming	GUILLAUME SAGNOL AND RADOSLAV HARMAN 2198
Globally adaptive quantile regression with ultra-high dimensional data	QI ZHENG, LIMIN PENG AND XUMING HE 2225
On adaptive posterior concentration rates	MARC HOFFMANN, JUDITH ROUSSEAU AND JOHANNES SCHMIDT-HIEBER 2259
Functional additive regression	YINGYING FAN, GARETH M. JAMES AND PETER RADCHENKO 2296
Correction: Inverse regression for longitudinal data	CI-REN JIANG AND JANE-LING WANG 2326

Recent Papers: *Annals of Applied Statistics*

Volume 9, no 2: June 2015

Statistical research spans an enormous range from direct subject-matter collaborations to pure mathematical theory. The *Annals of Applied Statistics* is aimed at papers in the applied half of this range. Published quarterly in both print and electronic form, our goal is to provide a timely and unified forum for all areas of applied statistics.

Access papers at <http://projecteuclid.org/aoas>

Modeling sea-level change using errors-in-variables integrated

Gaussian processes NIAMH CAHILL, ANDREW C. KEMP, BENJAMIN P. HORTON AND ANDREW C. PARNELL 547

Sex, lies and self-reported counts:

Bayesian mixture models for heaping in longitudinal count data via birth–death processes FORREST W. CRAWFORD, ROBERT E. WEISS AND MARC A. SUCHARD 572

Regression based principal component analysis for sparse functional data with applications to screening growth paths WENFEI ZHANG AND YING WEI 597

A Bayesian feature allocation model for tumor heterogeneity. JUHEE LEE, PETER MÜLLER, KAMALAKAR GULUKOTA AND YUAN JI 621

Bayesian group Lasso for nonparametric varying-coefficient models with application to functional genome-wide association studies JIAHAN LI, ZHONG WANG, RUNZE LI AND RONGLING WU 640

Wavelet-based genetic association analysis of functional phenotypes arising from high-throughput sequencing assays HEEJUNG SHIM AND MATTHEW STEPHENS 665

Spatial Bayesian variable selection and grouping

for high-dimensional scalar-on-image regression FAN LI, TINGTING ZHANG, QUANLI WANG, MARLEN Z. GONZALEZ, ERIN L. MARESH AND JAMES A. COAN 687

Semiparametric time to event models in the presence of error-prone, self-reported outcomes

—With application to the women's health initiative. XIANGDONG GU, YUNSHENG MA AND RAJI BALASUBRAMANIAN 714

Biased sampling designs to improve research efficiency: Factors influencing pulmonary function over time

in children with asthma JONATHAN S. SCHILDCROUT, PAUL J. RATHOUZ, LEILA R. ZELNICK, SHAWN P. GARBETT AND PATRICK J. HEAGERTY 731

Goodness of fit in nonlinear dynamics: Misspecified rates or misspecified states? GILES HOOKER AND STEPHEN P. ELLNER 754

Covariance pattern mixture models for the analysis of multivariate heterogeneous longitudinal data LAURA ANDERLUCCI AND CINZIA VIROLI 777

Weakly supervised clustering: Learning fine-grained signals from coarse labels. STEFAN WAGER, ALEXANDER BLOCKER AND NIAL CARDIN 801

Estimating heterogeneous graphical models for discrete data with an application to roll call voting. JIAN GUO, JIE CHENG, ELIZAVETA LEVINA, GEORGE MICHAILIDIS AND JI ZHU 821

A two-state mixed hidden Markov model for risky teenage driving behavior JOHN C. JACKSON, PAUL S. ALBERT AND ZHIWEI ZHANG 849

Multi-species distribution modeling using penalized mixture of regressions. FRANCIS K. C. HUI, DAVID I. WARTON AND SCOTT D. FOSTER 866

Jump detection in generalized error-in-variables regression with an application to Australian health tax policies YICHENG KANG, XIAODONG GONG, JITI GAO AND PEIHUA QIU 883

hmmSeq: A hidden Markov model for detecting differentially expressed genes from RNA-seq data. SHIQI CUI, SUBHARUP GUHA, MARCO A. R. FERREIRA AND ALLISON N. TEGGE 901

Tracking rapid intracellular movements: A Bayesian random set approach VASILEIOS MAROULAS AND ANDREAS NEBENFÜHR 926

Bayesian detection of embryonic gene expression onset in *C. elegans* JIE HU, ZHONGYING ZHAO, HARI KRISHNA YALAMANCHILI, JUNWEN WANG, KENNY YE AND XIAODAN FAN 950

Assessing phenotypic correlation through the multivariate phylogenetic

latent liability model GABRIELA B. CYBIS, JANET S. SINSHEIMER, TREVOR BEDFORD, ALISON E. MATHER, PHILIPPE LEMEY AND MARC A. SUCHARD 969

Examining socioeconomic health disparities using a rank-dependent Rényi index MAKRAM TALIH 992

Bayesian structured additive distributional regression with an application to regional income inequality in Germany NADJA KLEIN, THOMAS KNEIB, STEFAN LANG AND ALEXANDER SOHN 1024

Sample size determination for training cancer classifiers from microarray and RNA-seq data. SANDRA SAFO, XIAO SONG AND KEVIN K. DOBBIN 1053

Wavelet-domain regression and predictive inference in psychiatric neuroimaging PHILIP T. REISS, LAN HUO, YIHONG ZHAO, CLARE KELLY AND R. TODD OGDEN 1076

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Independent Auditor's Report

The Council
Institute of Mathematical Statistics

Report on the Financial Statements

We have audited the accompanying financial statements of Institute of Mathematical Statistics (the "Institute," a nonprofit organization), which comprise the statement of financial position as of December 31, 2014, and the related statements of activities and cash flows for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



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The Council
Institute of Mathematical Statistics

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Institute of Mathematical Statistics as of December 31, 2014, and the changes in its net assets and its cash flows for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the Institute's 2013 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated September 12, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2013, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Ciuni + Panichi, Inc.

Cleveland, Ohio
July 15, 2015

The Treasurer's Report was printed in the June/July issue. The Financial Statements are printed over the next four pages...

Institute of Mathematical Statistics

Statement of Financial Position

December 31, 2014 (with comparative totals for 2013)

	<u>Assets</u>	
	2014	2013
Cash and cash equivalents	\$ 261,733	\$ 313,438
Accounts receivable, net	154,778	118,411
Interest receivable	2,012	1,470
Investments	4,303,033	3,537,237
Prepaid expenses	60,761	40,505
Certificates of deposit	1,400,308	1,364,341
Promises to give receivable	9,000	-
Investments restricted for endowment	<u>76,840</u>	<u>76,685</u>
Total assets	\$ <u>6,268,465</u>	\$ <u>5,452,087</u>
<u>Liabilities and Net Assets</u>		
Liabilities:		
Accounts payable and accrued expenses	\$ 133,998	\$ 146,468
Unearned memberships, subscriptions, and meeting revenues	<u>1,166,107</u>	<u>1,193,407</u>
Total liabilities	1,300,105	1,339,875
Net assets:		
Unrestricted:		
Undesignated	4,765,405	3,922,348
Council-designated	<u>62,268</u>	<u>65,331</u>
Total unrestricted	4,827,673	3,987,679
Temporarily restricted	63,847	47,848
Permanently restricted	<u>76,840</u>	<u>76,685</u>
Total net assets	<u>4,968,360</u>	<u>4,112,212</u>
Total liabilities and net assets	\$ <u>6,268,465</u>	\$ <u>5,452,087</u>

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Statement of Cash Flows

For the year ended December 31, 2014 (with comparative totals for 2013)

	2014	2013
Cash flows from operating activities:		
Changes in net assets	\$ 856,148	\$ 967,962
Adjustments to reconcile changes in net assets to net cash provided by operating activities:		
Write-off of uncollectible accounts receivable	-	4,470
Net realized and unrealized gains	(166,263)	(451,649)
Contributions restricted for long-term purposes	(155)	(715)
Changes in operating assets and liabilities:		
Accounts receivable	(36,367)	(27,338)
Interest receivable	(542)	677
Prepaid expenses	(20,256)	9,319
Promise to give receivable	(9,000)	-
Accounts payable and accrued expenses	(12,470)	(184,463)
Unearned memberships, subscriptions, and meeting revenues	<u>(27,300)</u>	<u>242,242</u>
Net cash provided by operating activities	583,795	560,505
Cash flows from investing activities:		
Purchases of investments, net	(598,655)	(774,905)
Purchases of certificates of deposit	(1,402,000)	(1,265,000)
Proceeds at maturity of certificates of deposit	<u>1,365,000</u>	<u>1,325,000</u>
Net cash used by investing activities	(635,655)	(714,905)
Cash flows from financing activities:		
Proceeds from contributions restricted for long-term purposes	<u>155</u>	<u>715</u>
Net cash provided by financing activities	<u>155</u>	<u>715</u>
Decrease in cash and cash equivalents	(51,705)	(153,685)
Cash and cash equivalents, beginning of year	<u>313,438</u>	<u>467,123</u>
Cash and cash equivalents, end of year	\$ <u>261,733</u>	\$ <u>313,438</u>

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Statement of Activities

For the year ended December 31, 2014 (with comparative totals for 2013)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total 2014	Total 2013
Revenues, gains, and support:					
Membership dues and journal subscriptions	\$ 279,927	\$ -	\$ -	\$ 279,927	\$ 278,037
Non-member subscriptions	1,768,094	-	-	1,768,094	1,762,386
Sales of back issues	5,689	-	-	5,689	1,899
Page charges	38,226	-	-	38,226	29,156
Sales of books	7,067	-	-	7,067	983
Scientific meetings	15,738	-	-	15,738	12,200
Managed meetings	871	-	-	871	4,083
Advertising	40,431	-	-	40,431	58,825
Offprints, royalties, and other	104,071	-	-	104,071	103,278
Contributions	25	13,589	155	13,769	11,108
Net realized and unrealized gains	166,263	-	-	166,263	451,649
Interest and dividends	<u>96,465</u>	<u>2,410</u>	<u>-</u>	<u>98,875</u>	<u>80,107</u>
Total revenues, gains, and support	2,522,867	15,999	155	2,539,021	2,793,711
Expenses:					
Program	1,519,838	-	-	1,519,838	1,659,411
General and administrative	<u>163,035</u>	<u>-</u>	<u>-</u>	<u>163,035</u>	<u>166,338</u>
Total expenses	<u>1,682,873</u>	<u>-</u>	<u>-</u>	<u>1,682,873</u>	<u>1,825,749</u>
Changes in net assets	839,994	15,999	155	856,148	967,962
Net assets, beginning of year	<u>3,987,679</u>	<u>47,848</u>	<u>76,685</u>	<u>4,112,212</u>	<u>3,144,250</u>
Net assets, end of year	\$ <u>4,827,673</u>	\$ <u>63,847</u>	\$ <u>76,840</u>	\$ <u>4,968,360</u>	\$ <u>4,112,212</u>

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 1: Description of Organization

The Institute of Mathematical Statistics (the "Institute") is an international professional and scholarly society devoted to the development and dissemination of the theory and applications of statistics and probability. Its activities include sponsorship of journals and other scholarly publications, organization of scientific meetings, presentation of awards, and cooperation with other scientific organizations.

The scientific journals are The Annals of Applied Probability, The Annals of Applied Statistics, The Annals of Probability, The Annals of Statistics, and Statistical Science. The IMS Bulletin is the news organ of the Institute. In addition, the Institute publishes IMS Collections. Jointly with other organizations, the Institute publishes the Electronic Journal of Probability, Electronic Communications in Probability, Electronic Journal of Statistics, IMS Monographs, IMS Textbooks, Journal of Computational and Graphical Statistics, Probability Surveys, Statistics Surveys, Current Index to Statistics, and NSF-CBMS Regional Conference Series in Probability and Statistics. On behalf of other organizations, the Institute produces Annales de l'Institut Henri Poincaré (B) Probabilités et Statistiques, Bernoulli, Bernoulli News, Brazilian Journal of Probability and Statistics, and Stochastic Systems.

The Institute is an international organization of approximately 3,800 statisticians, probabilists, epidemiologists, and econometricians from industry, academia, and government.

Note 2: Summary of Significant Accounting Policies

Basis of Presentation

The Institute follows authoritative guidance issued by the Financial Accounting Standards Board ("FASB") which established the FASB Accounting Standards Codification ("ASC") as the single source of authoritative accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared on the accrual basis of accounting. Net assets and revenues, expenses, gains, and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of the Institute and changes therein are classified and reported as follows:

Unrestricted Net Assets – Net assets that are not subject to donor-imposed stipulations. Unrestricted net assets are expendable resources used to support the Institute's core activities. These net assets may be designated for specific purposes by action of the governing body of the Institute (the "Council") to be used for future periods (Council-designated).

Temporarily Restricted Net Assets – Net assets subject to donor-imposed stipulations that may or will be met, either by actions of the Institute and/or the passage of time. When a restriction expires, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restrictions. If donor-imposed restrictions are met in the same year as they are imposed, the net assets are reported as unrestricted.

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 2: Summary of Significant Accounting Policies (continued)

Basis of Presentation (continued)

Permanently Restricted Net Assets – Net assets subject to donor-imposed stipulations that they be maintained by the Institute in perpetuity. Generally, the donors of these assets permit the Institute to use all or part of the income earned on any related investments for general or specific purposes.

Functional Allocation of Expenses

The costs of providing the program and supporting activities of the Institute have been summarized on a functional basis in the statement of activities. Accordingly, certain costs have been allocated to the appropriate programs and supporting activities.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Institute considers all unrestricted cash and highly liquid debt instruments with initial maturities of three months or less to be cash equivalents.

Investments

Investments in marketable securities with readily determinable fair values and all investments in debt securities are reported at their fair values in the accompanying statement of financial position. Interest and dividend income, and realized and unrealized gains and losses are included in the change in unrestricted net assets in the accompanying statement of activities, unless donor-imposed restrictions over specific investment earnings exist, in which case, the investment earnings are classified as either changes in temporarily or permanently restricted net assets in accordance with such donor-imposed restrictions. Temporarily restricted investment income is reported as unrestricted if such restrictions are met in the same fiscal year as the investment income is generated.

Receivables and Credit Policies

Accounts receivable includes uncollateralized obligations due primarily from the Institute's customers. Payments of receivables are allocated to the specific invoices identified on the remittance advice or, if unspecified, are applied to the earliest unpaid invoices.

7

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 2: Summary of Significant Accounting Policies (continued)

Concentrations of Credit Risk

Financial instruments which potentially subject the Institute to concentrations of credit risk consist of cash and cash equivalents and investments.

The Institute has significant investments in equity and debt securities and is, therefore, subject to concentrations of credit risk. Though the market value of investments is subject to fluctuations on a year-to-year basis, the Institute believes that the investment policy is prudent for its long-term welfare.

At various times during the year ended December 31, 2014, the Institute's cash in bank balances may have exceeded federally insured limits.

Production Costs of Publications

The Institute's policy is to expense the production costs of its publications as incurred rather than capitalize these costs as inventory. The Institute follows this policy as there is no discernible market for the publications after the initial distribution.

Shipping and Handling Costs

Shipping and handling costs are recorded as incurred. These expenses are included within "Postage and shipping from office" in the functional expenses presented in Note 8.

Income Taxes

The Institute is a Section 501(c)(3) organization exempt from income taxes on activities related to its exempt purpose under Section 501(a) of the Internal Revenue Code and Section 23701d of the California Revenue and Taxation Code. No provision for federal or state income taxes has been reported in its financial statements.

Income taxes are accounted for under the provisions of the "Income Taxes" topic of the FASB ASC. Uncertain income tax positions are evaluated at least annually by management. The Institute classifies interest and penalties related to income tax matters as income tax expense in the accompanying financial statements. As of December 31, 2014 and 2013, the Institute has identified no uncertain income tax positions and has incurred no amounts for income tax penalties and interest for the years then ended.

The Institute files its Federal Form 990 in the U.S. federal jurisdiction and a state registration at the office of the state's attorney general for the states of Ohio and California. The Institute is generally no longer subject to examination by the Internal Revenue Service for fiscal years/periods before 2011.

9

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 2: Summary of Significant Accounting Policies (continued)

Receivables and Credit Policies (continued)

The carrying amount of accounts receivable is reduced by a valuation allowance that reflects management's best estimate of the amounts that will not be collected. Management individually reviews all receivable balances that exceed 90 days from invoice date and estimates the portion, if any, of the balance that will not be collected. An additional factor management uses when estimating an allowance for the aggregate remaining receivables is historical collectability. Management estimates the allowance for doubtful accounts at December 31, 2014 as \$2,300.

Revenue and Support Recognition

Membership dues and subscription fees are recognized as revenue on a straight-line basis over the term of the applicable membership and subscription period. Membership and subscription periods run from January 1 to December 31. Any time a member or non-member subscribes, he/she is entitled to all issues of the journal(s) published during the subscription period. The unearned portion of the revenue is recorded as a liability under the unearned memberships, subscription, and meeting revenues in the statement of financial position.

Lifetime membership fees are recognized as revenue over an amortization period of 12 to 15 years. Membership and subscriptions periods for lifetime members run from the first day of the calendar year a member subscribes through the member's death. The unearned portion of the revenue is recorded as a liability under the unearned memberships, subscription, and meeting revenues in the statement of financial position.

Contributions

Contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support depending on the existence and/or nature of any donor restrictions. Unconditional promises to give are recognized as revenues in the period the promise is received. Conditional promises to give are recognized when the conditions upon which they depend are substantially met. The promises are initially recorded at their estimated fair value.

Unconditional promises to give receivable at December 31, 2014 are scheduled to be collected as follows:

Payable within one year	\$ 3,000
Payable in one to five years	<u>6,000</u>
Total unconditional promises to give receivable	<u>\$ 9,000</u>

The Institute has evaluated the need to discount the unconditional promises to give receivable over a period of years to fair value. Management estimates any such discount at December 31, 2014 would be immaterial.

The Institute uses the allowance method to record their estimate of uncollectible promises to give receivable. The allowance is based on prior years' experience and management's analysis of specific promises made. Management estimates no allowance for doubtful accounts was required at December 31, 2014.

8

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 2: Summary of Significant Accounting Policies (continued)

Advertising

Advertising costs are expensed as incurred. Advertising expense amounted to \$8,479 and \$5,914 for the years ended December 31, 2014 and 2013, respectively.

Subsequent Events

In preparing these financial statements, the Institute has evaluated events and transactions for potential recognition or disclosure through July 15, 2015, the date the financial statements were available to be issued.

Note 3: Investments

The Institute is committed to a policy of low-cost long-term indexed investing with minimal intervention. The Institute's investment funds (that is, the funds other than the operating funds or the operating reserve) are to be invested as follows:

- 70% in domestic and international equities
- 30% in fixed-income instruments

The allocation of funds held within the investment portfolio is reviewed quarterly and is rebalanced if the actual allocations differ from the targets stated above by more than five percent.

At December 31, 2014, investments are reported at fair value and consisted of the following:

	<u>2014</u>
Mutual funds – equities	\$ 3,073,994
Mutual funds – fixed-income	<u>1,305,879</u>
Total investments	<u>\$ 4,379,873</u>

10

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 4: Fair Value Measurements

In accordance with the "Fair Value Measurements" topic of the FASB ASC, the Institute uses a three-level fair value hierarchy that categorizes assets and liabilities measured at fair value based on the observability of the inputs utilized in the valuation. This hierarchy prioritizes the inputs into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs for which little or no market data exists, therefore, requiring an entity to develop its own valuation assumptions. These inputs reflect management's judgment about the assumptions that a market participant would use in pricing the asset or liability and are based on the best available information, which has been internally developed.

The Institute's Level 2 investments in certificates of deposit are valued based on the last trade that occurred prior to period-end.

Financial assets consisted of the following at December 31, 2014:

	Level 1	Level 2	Level 3	Total
Certificates of deposit	\$ -	\$ 1,400,308	\$ -	\$ 1,400,308
Investments (\$76,840 included in investments restricted for endowment):				
Mutual funds – international equity	911,209	-	-	911,209
Mutual funds – domestic equity	2,162,785	-	-	2,162,785
Mutual funds – fixed-income	1,305,879	-	-	1,305,879
	\$ 4,379,873	\$ 1,400,308	\$ -	\$ 5,780,181

The Institute maintains an account with Vanguard Group for operating, operating reserve, and reserve funds. Financial assets include a money market fund and several mutual funds carried at their fair market value and certificates of deposit maturing at various dates. The certificates of deposit are immediately convertible to cash with initial maturities ranging from approximately three months to eighteen months.

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 5: Unearned Memberships, Subscriptions, and Meeting Revenues

Unearned memberships, subscriptions, and meeting revenues consist of the following at December 31, 2014 and 2013:

	2014	2013
Member dues and subscription fees	\$ 151,229	\$ 173,114
Non-member subscription fees	814,057	804,600
Lifetime and lifetime retired membership dues and subscription fees	199,421	215,693
Meeting fees	1,400	-
Total unearned memberships, subscriptions, and meeting revenues	\$ 1,166,107	\$ 1,193,407

Note 6: Net Asset Classification of Endowment Funds

The Institute's endowment consists of two donor-restricted endowment funds, the Le Cam Endowment and the Blackwell Lecture Endowment (see Note 10), established in order to fund professional lectures. As required by GAAP, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

The Institute has interpreted the State Prudent Management of Institutional Fund Act ("SPMIFA") as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, the Institute classifies as permanently restricted net assets (a) the original value of gifts donated, (b) the original value of subsequent gifts, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the Institute in a manner consistent with the standard prudence prescribed by SPMIFA. In accordance with SPMIFA, the Institute considers the following factors in making a determination to appropriate or accumulate donor restricted endowment funds:

- 1) the duration and preservation of the fund;
- 2) the purposes of the donor-restricted endowment fund;
- 3) general economic conditions; and
- 4) the expected total return.

Endowment net asset composition by type of fund as of December 31, 2014:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment	\$ -	\$ 12,025	\$ 76,840	\$ 88,865

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 6: Net Asset Classification of Endowment Funds (continued)

Changes in endowment net assets for the year ended December 31, 2014:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets, December 31, 2013	\$ -	\$ 9,775	\$ 76,685	\$ 86,460
Investment return		2,250	-	2,250
Contributions to perpetual endowment	-	-	155	155
Endowment net assets, December 31, 2014	\$ -	\$ 12,025	\$ 76,840	\$ 88,865

Permanently Restricted Net Assets:

The portion of perpetual endowment funds that is required to be retained permanently either by explicit donor stipulation or by SPMIFA	\$ 76,840
Total endowment funds classified as permanently restricted net assets	\$ 76,840

Return Objectives and Risk Parameters

The Institute has adopted investment and spending policies for the endowment funds that attempt to grow at a rate at least equal to the rate of inflation over time, net of annual payouts. Endowment assets include those assets of donor-restricted funds that the Institute must hold in perpetuity. Currently, the endowment assets are invested in mutual funds.

Strategies Employed for Achieving Objectives

To satisfy its long-term rate-of-return objectives, the Institute relies on a total return strategy in which investment returns are achieved through current yield (interest income, dividends, realized/unrealized gains). The Institute targets low-cost, indexed investments to achieve its long-term return objectives within prudent risk constraints.

Spending Policy

Any investment income earned on endowment assets is temporarily restricted to be appropriated for expenditure to fund the cost of a lecturer once every three years for the Le Cam Endowment and once every three to four years for the Blackwell Lecture Endowment.

Institute of Mathematical Statistics

Notes to the Financial Statements

December 31, 2014

Note 7: Retirement Plan

The Institute participates in an employer matching 403(b) retirement annuity plan. The Institute matches 200% of the contributions of eligible employees up to 10% of the employee's gross salary. Employees who have completed three years of service are eligible to participate. The Institute contributed \$11,777 and \$12,409 for the years ended December 31, 2014 and 2013, respectively.

Note 8: Functional Expenses

Program and general and administrative expenses for the year ended December 31, 2014 were as follows:

	Program	General and Administrative	Total
Production expenses (see Note 9)	\$ 822,438	\$ -	\$ 822,438
Editorial expenses (see Note 9)	298,176	-	298,176
Mailing and shipping at press	73,228	-	73,228
Salaries, payroll taxes, and employee benefits	75,326	75,325	150,651
Management fee	57,520	57,519	115,039
Scientific meetings	64,981	-	64,981
Managed meetings	-	-	-
Supported journal royalty	43,466	-	43,466
Postage and shipping from office	8,802	3,772	12,574
Insurance	14,957	6,410	21,367
Credit card fees	14,813	-	14,813
Professional fees	-	13,546	13,546
Business meetings	5,002	-	5,002
Membership drives and publicity	8,479	-	8,479
Information technology service	6,655	-	6,655
Storage	6,599	-	6,599
Contributions to other organizations	7,589	-	7,589
Rent and utilities	1,650	1,650	3,300
Administrative services	-	2,555	2,555
Printing, non-journal	2,209	-	2,209
Computer equipment and software	1,517	650	2,167
Supplies	435	435	870
Office expense and other	2,283	979	3,262
Telephone	454	195	649
Scientific legacy	3,258	-	3,258
Bad debt expense	-	-	-
	\$ 1,519,837	\$ 163,036	\$ 1,682,873

December 31, 2014

Note 8: Functional Expenses (continued)

Program and general and administrative expenses for the year ended December 31, 2013 were as follows:

	Program	General and Administrative	Total
Production expenses (see Note 9)	\$ 950,027	\$ -	\$ 950,027
Editorial expenses (see Note 9)	278,615	-	278,615
Mailing and shipping at press	89,115	-	89,115
Salaries, payroll taxes, and employee benefits	74,415	74,415	148,830
Management fee	56,630	56,629	113,259
Scientific meetings	80,473	-	80,473
Managed meetings	3,000	-	3,000
Supported journal royalty	45,720	-	45,720
Postage and shipping from office	9,357	4,010	13,367
Insurance	14,965	6,414	21,379
Credit card fees	16,357	-	16,357
Professional fees	-	12,246	12,246
Business meetings	2,985	-	2,985
Membership drives and publicity	5,914	-	5,914
Information technology service	6,591	-	6,591
Storage	8,517	-	8,517
Contributions to other organizations	5,210	-	5,210
Rent and utilities	2,475	2,475	4,950
Administrative services	-	3,098	3,098
Printing, non-journal	836	-	836
Computer equipment and software	1,560	669	2,229
Supplies	470	469	939
Office expense and other	2,850	1,221	4,071
Telephone	517	222	739
Scientific legacy	2,812	-	2,812
Bad debt expense	-	4,470	4,470
	<u>\$ 1,659,411</u>	<u>\$ 166,338</u>	<u>\$ 1,825,749</u>

15

December 31, 2014

Note 9: Production and Editorial Expenses

Production and editorial expenses incurred were as follows:

	2014	2013
Production expenses:		
Core publications:		
The Annals of Applied Probability	\$ 116,905	\$ 110,196
The Annals of Applied Statistics	114,918	133,389
The Annals of Probability	110,869	186,759
The Annals of Statistics	134,063	141,852
Statistical Science	60,796	62,231
IMS Bulletin	19,640	22,094
IMS Collections	162	3,799
NSF-CBMS Regional Conference Series	76	2,562
Web page	<u>13,612</u>	<u>14,184</u>
Total core publications	571,041	677,066
Supported publications:		
Annales de l'Institut Henri Poincaré	53,051	53,481
Bayesian Analysis	-	126
Bernoulli	82,236	107,996
Bernoulli News	2,847	2,728
Brazilian Journal of Probability and Statistics	18,657	17,615
Stochastic Systems	-	2,881
Total supported publications	156,791	184,827
Co-sponsored publications:		
Probability Surveys	692	1,395
Statistics Surveys	428	1,458
Current Index to Statistics	8,288	955
IMS Monographs	-	3,627
Electronic Journal of Probability/ Electronic Communications in Probability	3,549	396
Electronic Journal of Statistics	<u>5,859</u>	<u>13,138</u>
Total co-sponsored publications	18,816	20,969
General publication expenses:		
Electronic operations for all publications	<u>75,790</u>	<u>67,165</u>
Total general publication expenses	<u>75,790</u>	<u>67,165</u>
Total production expenses	<u>\$ 822,438</u>	<u>\$ 950,027</u>

16

December 31, 2014

Note 9: Production and Editorial Expenses (continued)

	2014	2013
Editorial expenses:		
Current Index to Statistics	27,116	32,912
IMS Bulletin	79,015	73,160
WWW editor	63,958	47,716
Managing and production editors	104,087	103,827
Central editorial office	<u>24,000</u>	<u>21,000</u>
Total editorial expenses	<u>\$ 298,176</u>	<u>\$ 278,615</u>

Note 10: Net Assets

The following are net assets available at December 31:

	2014	2013
Unrestricted:		
Undesignated	\$ 4,765,405	\$ 3,922,348
Council-designated:		
New Researchers Meeting Fund	31,933	31,799
Development Fund	25,000	25,000
Scientific Legacy Fund	<u>5,335</u>	<u>8,532</u>
Total Council-designated	<u>62,268</u>	<u>65,331</u>
Total unrestricted	4,827,673	3,987,679
Temporarily restricted:		
Schramm Lecture Fund	34,834	22,347
Tweedie Memorial Fund	11,980	11,173
Open Access Fund	5,008	4,553
Le Cam Earnings Fund	9,270	8,199
Blackwell Earnings Fund	<u>2,755</u>	<u>1,576</u>
Total temporarily restricted	63,847	47,848
Permanently restricted:		
Blackwell Lecture Endowment	43,800	43,740
Le Cam Endowment	<u>33,040</u>	<u>32,945</u>
Total permanently restricted	<u>76,840</u>	<u>76,685</u>
Total net assets	<u>\$ 4,968,360</u>	<u>\$ 4,112,212</u>

17



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Terence's Stuff: Mentoring

Traditionally mentoring is an older person imparting wisdom, but Terry Speed points out that it can be a two-way process. So how should we mentor?



What is mentoring, and why is it a good thing? Previously in this column I've written briefly about women mentoring other women, highlighted mentoring as important for achieving gender equity, mentioned the possibility of choosing the wrong mentor, said that mentors can help you improve your speaking and writing, and that they should support you if you want to quit. I've assumed that readers know the answer to my opening question, but I now realize that was a bad assumption. Mentoring is an activity that has many forms, and people do not automatically appreciate its diversity or its potential for doing good.

Recently I participated in the 2015 JSM mentoring program as a mentor, and I also attended a mentoring workshop for new and seasoned mentors and mentees, both organized by the ASA Committee on Applied Statisticians as part of the ASA President's Initiative on Mentoring. This committee has been tackling mentoring for about three years. They have implemented several mentoring programs for applied statisticians, helped ASA sections and chapters implement their own mentoring programs, and have produced a number of valuable resources, available to ASA members at the ASA Mentoring Clearinghouse. Among other things, they have a single sheet entitled *DIY Mentorship*, and a 40-page set of tools for developing a mentorship program for applied statisticians called *Mentoring in a Box*. There is more available on their website, and of course more still on the wider web.

Traditional mentoring has been defined as "a relationship between an older, more

experienced mentor and a younger, less experienced protégé (mentee) for the purpose of helping and developing the protégé's career." This is frequently thought of as a one-way transfer of information and advice from the mentor to the mentee. Called the *instrumental view* of mentoring, the unidirectional approach is the one many people automatically adopt when asked to be mentors. However, there is also the *developmental view*, where the personal growth and self-esteem of the mentee are addressed, at the same time as helping them understand and meet their institutional expectations for career development.

The one-way view is too limited, for in a good mentoring relationship there are clear benefits to the mentor as well as the mentee. Mentors increase their understanding of the challenges facing their younger colleagues, they can get a sense of satisfaction and fulfilment from mentoring, and may even experience greater career success themselves as a result. Furthermore, there is no need for the relationship to be simply instrumental or developmental. Perhaps the best view is that the mentor-mentee relationship is one of reciprocal growth and development, located at the position on the instrumental–developmental continuum that best suits the current needs of the mentee.

The developmental view raises another important aspect of mentoring: working towards *institutional change*. It's fine for a senior colleague to use their knowledge and experience to help a younger one meet the requirements for achieving some career goal, such as tenure, within a given institutional context. But what if that context is inhospitable, the requirements outdated or the goal unachievable? Think of a woman in an otherwise all-male department, or a person of colour in an otherwise all-white department, or an applied statistician in a highly theoretical department that values only

papers in the *Annals* or *JASA*. Good mentors don't content themselves with helping their mentees fit into the existing framework, but instead recognize the need for change in the way things are done, and push for it. It can also be valuable to collect the experiences of groups of mentors and mentees after a period of interaction in the same institution, to learn where it might be failing its younger people. In this way mentoring can be an important catalyst for change.

Mentoring comes in many forms, and need not be one-on-one face-to-face interaction. Mentoring can be *remote* (email, Skype). *Group mentoring*, with one mentor and several mentees, can be very fruitful. *Peer mentoring*, where individuals at a similar stage in their careers meet in a group, can be extraordinarily rewarding. There's nothing quite as liberating as finding out that others share your hopes and fears, and will discuss their strategies for career development or career change. It is fine to have *more than one mentor*, for example, one with whom to discuss teaching, another to help you with your research, and a third for helping you get tenure. What matters, as all the guides will tell you, is having a clear and mutual understanding about the goals of your mentoring relationship and the time commitment involved. The *DIY Mentorship* document I mentioned earlier tells us that mentoring has a finite life cycle, roughly this: *Establish rapport* → *Identify directions* → *Make progress* → *Move on*.

How should mentoring look in the IMS?

Mentoring doesn't need to be a one-way process: both parties can benefit



IMS meetings around the world

Joint Statistical Meetings: 2016–2020

IMS sponsored meeting

JSM 2016

July 30–August 4, 2016

Chicago, IL

<http://amstat.org/meetings/jsm/2016>

The 2016 Joint Statistical Meetings will be held July 30 to August 4 at McCormick Place, 2301 South Lake Shore Drive, Chicago, IL 60616. The theme of JSM 2016 is “The Extraordinary Power of Statistics.”

The IMS program chair for invited sessions is Jan Hannig, University of North Carolina [e jan.hannig@unc.edu](mailto:jan.hannig@unc.edu). The contributed program chair is Alexander Aue, University of California, Davis [e aaue@ucdavis.edu](mailto:aaue@ucdavis.edu)

Make a note of these important dates. Online submission of invited session abstracts is open October 8–29, 2015. Online submission of the rest of the abstracts (all those except invited papers and panels) is open December 1, 2015–February 1, 2016. Topic-contributed session proposals must be submitted online by January 14, 2016, and Computer Technology Workshop (CTW) proposals by the following day. Submitted abstracts can be edited between March 31 and April 18, 2016. **Registration and housing open May 2, 2016**, and the early registration deadline is June 1. The 2015 JSM housing reservations went very quickly, so if you are planning to attend, be sure to book your accommodation via the JSM website as soon after May 2 as possible.



IMS sponsored meetings: JSM dates for 2017–2021

IMS Annual Meeting @ JSM 2017: July 29–August 3, 2017, Baltimore, MD	JSM 2018 July 28–August 2, 2018 Vancouver, Canada	IMS Annual Meeting @ JSM 2019 July 27–August 1, 2019, Denver, CO	JSM 2020 August 1–6, 2020 Philadelphia, PA	IMS Annual Meeting @ JSM 2021 August 7–12, 2021, Seattle, WA
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IMS co-sponsored meeting

The 10th ICSA International Conference

December 19–22, 2016

Shanghai Jiao Tong University, Shanghai, China

IMS Rep: Ming Yuan, University of Wisconsin–Madison

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

The tenth ICSA international 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 International Chinese Statistical Association (ICSA) is a non-profit organization, established in 1987, with the aim of promoting the theory and applications of statistical disciplines through scholarly activities, including publication of journals in statistics and probability, scientific meetings, and other educational programs. The plenary speakers are: Jim Berger, Tony Cai, Kai-Tai Fang, Zhiming Ma, Marc A. Suchard, Lee-Jen Wei and C.F. Jeff Wu.

The submission deadline for invited session proposals from the public is January 5, 2016. See the website for details.



At a glance:
forthcoming
IMS Annual
Meeting and
JSM dates

2016

IMS Annual Meeting/ 9th World Congress:

Toronto, Canada,
July 11–15, 2016

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

2017

IMS Annual Meeting

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

2018

IMS Annual Meeting:
TBD

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

2019

IMS Annual Meeting

@ JSM: Denver, CO,
July 27–August 1,
2019

2020

IMS Annual Meeting:
TBD

JSM: Philadelphia,
August 1–6, 2020

More IMS meetings around the world

IMS co-sponsored meeting

WNAR Annual Meeting in conjunction with the XXVIII International Biometric Conference
July 10–15, 2016
Victoria, BC, Canada

w <http://biometricconference.org/conference-information/>

The next WNAR Annual Meeting, in conjunction with the XXVIII International Biometric Conference (IBC2016), will be held July 10–15, 2016 at the Victoria Conference Centre in Victoria, British Columbia, Canada.

A list of invited sessions is at <http://biometricconference.org/invited-sessions/>. There will also be four full day short courses: *Analysis of life history data with multistate models* (Richard Cook and Jerry Lawless); *An introduction to the joint modelling of longitudinal and survival data* (Dimitris Rizopoulos); *A statistical approach to machine learning* (Andreas Ziegler and Marvin Wright); and *Design of complex experiments* (Andrew Mead and Steven Gilmour).

Registration will open later this year.

IMS co-sponsored meeting

UK Easter Probability Meeting 2016:
Random Structures Arising in Physics and Analysis
April 4–8, 2016
Lancaster University, UK

w <http://www.lancaster.ac.uk/math/easter-probability-meeting/>

Lancaster University, UK, is hosting the UK Easter Probability Meeting 2016, on “Random Structures Arising in Physics and Analysis”. The meeting will take place from April 4–8, 2016. The UK Easter Probability Meeting is a long-standing tradition that brings together the UK probability community. The aim is to discuss recent developments, to speak about future research and also to give PhD students an opportunity to become part of the UK probability community. The 2016 meeting in Lancaster consists of four mini-courses of three lectures each, given by leading international researchers on current topics in probability theory. The remaining time is reserved for 45 minute talks by invited speakers, shorter talks by PhD students, a poster session and time for discussions.



IMS sponsored meetings

ENAR Spring Meeting: March 6–9, 2016, Austin, Texas

w <http://www.enar.org/meetings/spring2016/index.cfm>

The 2016 ENAR Spring Meeting will be held at the JW Marriott Austin. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry. The scientific program will cover topics of great interest to researchers and practitioners, such as data science (big data), genomics, clinical trials, neuroimaging, biomarkers, health policy, electronic health records, ecology, and epidemiology.

Abstract submission: The abstract submission deadline for all contributed and invited papers/posters is **October 15, 2015**. This is also the submission deadline for the Distinguished Student Paper Awards.

Fostering Diversity in Biostatistics Workshop

On Sunday, March 6, 2016 ENAR will host a workshop to provide a forum for discussion of important issues related to diversity. Themes will include career and training opportunities within biostatistics. The workshop will focus on connecting underrepresented minority students interested in biostatistics with professional biostatisticians in academia, government and industry. Current biostatistics graduate students as well as biostatistics professionals in academia, government, and industry will share their experiences and discuss mentoring, recruiting, and retaining students in related graduate programs. Registration is required: see **w** <http://www.enar.org/meetings/diversity/index.cfm>

ENAR 2017 & 2018 dates

IMS sponsored meetings

March 6–9, 2016: in Austin, Texas

March 12–15, 2017: in Washington DC

March 25–28, 2018: in Atlanta, GA

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

Seminar on Stochastic Processes (SSP) 2016
March 16–19, 2016

University of Maryland, College Park, MD

w http://depts.washington.edu/ssproc/ssp_nextssp.php

The Seminar on Stochastic Processes (SSP) in 2016 will be held from Wednesday, March 16, through Saturday, March 19. It will be hosted by the University of Maryland.

The local organizers will be Sandra Cerrai, Dmitry Dolgopyat, Mark Freidlin and Leonid Korolov. The invited speakers will be

- Claudio Landim (*Kai Lai Chung Lecturer*)
- Louigi Addario-Berry
- Yuri Bakhtin
- Yimin Xiao
- Thaleia Zariphopoulou

The tutorial lectures will be delivered on March 16 by Konstantin Khanin.

The first Seminar on Stochastic Processes was organized in 1981 by Kai Lai Chung, Erhan Çinlar and Ronald Gettoor.

The 25th ICSA Applied Statistics Symposium 2016**June 12–15, 2016. Atlanta, Georgia**

End Date: June 15, 2016

w <http://www.math.gsu.edu/~icsa/>

Keynote speakers: Bin Yu and David Madigan; Banquet Speaker Michael Eriksen, Georgia State University. Details are forthcoming on the symposium website. Details of the scientific programs are on the symposium website.

IMS co-sponsored meeting**Stochastic Networks Conference 2016****June 20–24, 2016. San Diego, CA**w <http://stochasticnetworks2016.ucsd.edu/>

The aim of the conference is to bring together researchers who share an interest in stochastic network models, to survey recent developments, and to identify future research directions. As in the past, the 2016 meeting will be structured in a workshop format, with approximately 20 hour-long invited talks, allowing ample unscheduled time to maximize interactions between speakers and participants and to facilitate a fruitful exchange of ideas. In addition, there will be a poster session for contributed papers.

Stochastic networks is a multifaceted area of research dealing with the modeling, stability, control, performance, approximation, and design of stochastic networks. It gives rise to challenging and subtle mathematical problems, whose solution often requires a combination of ideas and techniques from several branches of mathematics, including probability theory, stochastic processes, analysis, optimization, algorithms, combinatorics, and graph theory. Research in this area is strongly motivated by applications in diverse domains, ranging from the traditional areas of telecommunications and manufacturing to service operations, biological and social networks, revenue management, and health care.

Like its predecessors, the 2016 Stochastic Networks Conference will emphasize new model structures and new mathematical problems that are motivated by contemporary developments in various application domains, as well as new mathematical methods for stochastic network analysis.

IMS co-sponsored meeting**39th Conference on Stochastic Processes and their Applications (SPA)****July 24–28, 2017. Moscow, Russia**

w TBC

IMS co-sponsored meeting**Fourth IMS Asia Pacific Rim Meeting****June 27–30, 2016****Hong Kong, China**w <http://ims-aprm2016.sta.cuhk.edu.hk/>

The Institute of Mathematical Statistics Asia Pacific Rim Meeting series promotes interaction and networking among statisticians and probabilists from Asia, the Pacific Rim, and other parts of the world. The previous three meetings were successfully held in Seoul, Tsukuba, and Taipei. We are pleased to announce that the fourth meeting will take place on the beautiful campus of The Chinese University of Hong Kong, during the period June 27–30, 2016. The program covers recent developments and the state-of-the-art in a variety of modern research topics in statistics and probability. For more information, you may contact the program chairs: Ming-Yen Cheng (cheng@math.ntu.edu.tw) and Xuming He (xmhe@umich.edu).

IMS co-sponsored meeting**9th World Congress on Probability and Statistics****July 11–15, 2016. Toronto, Canada**w <http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/>

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

The 9th World Congress on Probability and Statistics will be hosted by the Fields Institute. Previous congresses have been held in Istanbul (2012), Singapore (2008), Barcelona (2004), Guanajuato (2000), Vienna (1996), Chapel Hill (1994), Uppsala (1990), and Tashkent (1986).

IMS co-sponsored meeting**Sixth IMS–ISBA joint meeting: BayesComp at MCMSki****January 5–7, 2016. Lenzerheide, Switzerland**w <http://www.pages.drexel.edu/~mw125/mcmskiV/program.html>

The next joint IMS–ISBA meeting, also known among participants as “MCMSki V”, will be held in Lenzerheide, Switzerland, from Tuesday, January 5 to Thursday, January 7, 2016. This year the meeting will be the first meeting of the newly created BayesComp section of ISBA. The InterDisciplinary Institute of Data Science at USI (Università della Svizzera Italiana) will co-sponsor the meeting and help with the organization. Other sponsors for MCMSki V include Springer, Google, the journal *Statistics and Computing*, Blossom Skis and Deviation Skis. MCMSki V will see the return of the Richard Tweedie ski race, on the afternoon of Wednesday January 6th. The fastest man and woman will be rewarded with a pair of skis (one pair each of Blossom skis and Deviation skis). The plenary speakers are Stephen Fienberg, Steve Scott, David Dunson, Krys Latuszynski, Tony Lelièvre.



Other meetings around the world

Lunteren Meeting

November 9–11, 2015

De Werelt, Lunteren, The Netherlands

w <http://homepages.cwi.nl/~colette/lunteren2015.html>

The annual Meeting of Dutch Statisticians and Probabilists will take place November 9–11, 2015, in De Werelt in Lunteren. Those who wish to participate in the meeting, including those who will not stay overnight, are kindly requested to register before October 1st. For registration and detailed information see the website.

13th Iranian Statistical Conference

August 24–26, 2016

Kerman, Iran

w http://isc13.uk.ac.ir/index.php?slc_lang=en&sid=1

Contact Hamid Pezeshk **e** hamid.pezeshk@gmail.com

The 13th Iranian Statistical Conference will be held in Kerman from August 24 to 26, 2016. It is jointly organized by the Shahid Bahonar University of Kerman and Iran Statistic Society. Scheduled every two years, the conference is a major Iranian event for statistics and probability, covering all branches, including theoretical, methodological, applied and computational statistics and probability, and stochastic processes.

The program of the 13th conference will cover a wide range of topics in statistics and probability, with lectures and discussions on a variety of modern research topics, as well as in-depth sessions on applications of these disciplines to other sciences, industrial innovation and society. Besides contributed papers and posters, it will also feature several special plenary lectures presented by leading specialists and invited sessions on topics of current research interests. The venue of the conference will be the Shahid Bahonar University of Kerman in Kerman.

4th Stochastic Modeling Techniques & Data Analysis Conference (SMTDA2016)

June 1–4, 2016

Valletta, Malta

w <http://www.smta.net/smta2016.html>

The 4th SMTDA international conference will focus on new trends in theory, applications and software of Stochastic Modeling Techniques and Data Analysis. SMTDA 2016 is organized by the ASMDA International Society and the University of Malta.

SMTDA's main objective is to welcome papers, theoretical or practical, presenting new techniques and methodologies in the broad area of stochastic modeling and data analysis. An objective is to use the methods proposed for solving real life problems by analyzing the relevant data. Also, the use of recent advances in different fields will be promoted, such as new optimization and statistical methods, data warehouse, data mining and knowledge systems, computing-aided decision supports and neural computing.

Particular attention will be given to interesting applications in engineering, productions and services (maintenance, reliability, planning and control, quality control, finance, insurance, management and administration, inventory and logistics, marketing, environment, human resources, biotechnology, medicine).

The publications of the conference include: the book of abstracts in electronic and paper form; electronic Proceedings in CD and in the web in a permanent website; publications in international journals; publications in edited books.

For more information and Abstract/Paper submission and Special Session Proposals please visit the conference website or send an email to secretariat@smta.net

This event will host the 5th Demographics 2016 International Workshop (<http://www.smta.net/demographics2016.html>) in the University of Malta, Valletta (June 1–4, 2016).

ISBA 2016 World Meeting

June 13–17, 2016

Forte Village Resort Convention Center Sardinia, Italy

w <http://www.corsiecongressi.com/isba2016/>

The 2016 World Meeting of ISBA, the International Society for Bayesian Analysis, is the continuation of the traditional Valencia/ISBA Meetings regularly held since 1979. They represent a unique event where the Bayesian community gathers together to discuss recent advances and the future of our profession, at the same time looking back to our roots and traditions, following the footsteps of those who laid the foundations of where we are now.

De Finetti Lecture: Persi Diaconis, Stanford University, USA

Susie Bayarri Lecture: James Scott, University of Texas at Austin, USA

Bayesian Foundational Lectures: Peter J. Green, University of Technology Sydney and University of Bristol, UK; Sonia Petrone, Bocconi University, Italy; David Spiegelhalter, University of Cambridge, UK

Keynote Speakers: Sudipto Banerjee, UCLA, USA; Merlise A. Clyde, Duke University, USA; David B. Dunson, Duke University, USA; Raquel Prado, UC Santa Cruz, USA

ISBA 2018 World Meeting

July 9–13, 2018. Edinburgh, UK

w TBC

More info coming, mark your calendars.

3rd ISNPS (International Society for Non-Parametric Statistics) Conference**June 11–16, 2016****Avignon, France**

w http://www.isnpstat.org/index.php?option=com_content&view=article&id=56:first-announcement&catid=8:uncategorised

e isnps.2016.avignon@gmail.com

Important deadlines: All speakers must submit the abstract for their session before January 31st, 2016. Proposition of contributed talks before January 31st. All speakers must register online before February 15th, 2016.

The 3rd ISNPS conference will put together recent advances and trends in several areas of nonparametric statistics. This conference will be a perfect place to facilitate the exchange of research ideas, promote collaboration between researchers from all over the world and contribute to the further development of the field. The scientific program (scheduled from June 12th to the 16th with a pause on the 14th) will include plenary talks, special invited talks, invited sessions as well as contributed talks and posters on all areas of nonparametric statistics.

Invited speakers: Sarah van de Geer, Department of Mathematics, ETH Zürich; Stéphane Mallat, CMAP, Ecole Polytechnique et Académie des Sciences; Thomas Mikosch, Department of Mathematics University of Copenhagen; Art Owen, Department of Statistics, Stanford; Gérard Biau, LSTA, Université Pierre et Marie Curie; Regina Liu, Department of Statistics and Biostatistics, Rutgers University; Wolfgang Polonik, Department of Statistics, University of California at Davis; Anders Rabhæk, Department of Economics, University of Copenhagen.

SIAM Conference on Uncertainty Quantification**April 5–8, 2016****Lausanne, Switzerland**

w <http://www.siam.org/meetings/uq16/>

Contact Jim Berger **e** berger@stat.duke.edu

Uncertainty quantification is critical to achieving validated predictive computations in a wide range of scientific and engineering applications. The field relies on a broad range of mathematics and statistics foundations, with associated algorithmic and computational development.

This conference will bring together mathematicians, statisticians, scientists, and engineers with an interest in development and implementation of uncertainty quantification methods. While applications of UQ in many fields will be represented at the conference, the focal application for UQ16 is Life science. Other major conference themes include the mathematical foundation of UQ and the connections between UQ and big data. The goal of the meeting is to provide a forum for the sharing of ideas, and to enhance communication among this diverse group of technical experts, thereby contributing to future advances in the field.

The main themes are: Mathematical foundations of UQ; UQ in Life Science; and UQ in Data Science.

Travel Fund Application Deadline: October 19, 2015 (for SIAM Student Travel Award and Post-doc/Early Career Travel Award Applications).

Statistical Challenges in Modern Astronomy VI**June 6–10, 2016. Pittsburgh, PA, USA**

w <http://www.scma6.org>

Contact Chad Schafer **e** cschafer@cmu.edu

After five groundbreaking conferences at Penn State, Statistical Challenges in Modern Astronomy VI will be held at Carnegie Mellon University, June 6 to 10, 2016. This meeting will continue the interdisciplinary tradition of its predecessors, bringing together researchers in astronomy, cosmology, statistics, and machine learning to facilitate progress on the significant data analysis challenges that result from current and future astronomical sky surveys.

We are accepting abstracts for contributed talks and posters: please complete the form on the main website by February 1, 2016. We have travel grants available for early career researchers: see the website for details and apply by March 1, 2016.

The program is under development but tentatively includes **keynote talks** by Zeljko Ivezic (Univ. of Washington) and Robert Tibshirani (Stanford); **invited talks by astronomers/cosmologists** Coryn Bailer-Jones (Max Planck Institute for Astronomy), Rebekah Dawson (UC Berkeley), Laurent Eyer (Geneva), Daniel Foreman-Mackey (Univ. of Washington), Ashish Mahabal (Caltech), Rachel Mandelbaum (CMU), Phil Marshall (SLAC), Brice Menard (Johns Hopkins), Pavlos Protopapas (Harvard), Lucianne Walkowicz (Princeton), Risa Wechsler (Stanford); **and by experts in statistical and machine learning methods:** Ethan Anderes (UC Davis), Jeremy Kubica (Google), Ann Lee (CMU), Thomas Lee (UC Davis), James Long (Texas A&M), Jon McAuliffe (UC Berkeley), Xiao Li Meng (Harvard), Bodhisattva Sen (Columbia), Robert Wolpert (Duke).

Info-Metrics Institute Spring 2016 Conference:**Information-Theoretic Methods of Inference****April 1–2, 2016****Cambridge, UK**

w <http://www.american.edu/cas/economics/info-metrics/conference/Info-Metrics-Spring-2016-conference.cfm>

Contact Arnob Alam **e** info-metrics@american.edu

The objective of this workshop is to study new methods of statistical inference based on information-theoretic methods. Info-metric and Information-Theoretic ideas are being applied in variety of disciplines, such as biology, ecology, economics, finance and physics (for examples see Fall 2014 conference celebrating the fifth anniversary of the Institute).

The Spring 2016 workshop focuses on the use of info-metric and information-theoretic ideas in the development and analysis of statistical models. The aims of the workshop are to provide a forum for the dissemination of new research in this area and also to stimulate discussion between researchers across fields.

The conference will consist of invited talks, invited sessions, and submitted papers.

Call for papers

The conference organizers encourage submissions focused on the use of info-metric and information-theoretic ideas in the development and analysis of statistical models. Please submit your paper to **e** info-metrics@american.edu with the subject line "Submission Spring 2016." Submission should include a very detailed abstract-summary or preferably a draft paper. Published papers will not be accepted.

Submission deadline: Sunday, November. 1, 2015

NEW**NEW****International Conference on Questionnaire Design, Development, Evaluation, and Testing****November 9–13, 2016****Miami, Florida**

w <http://www.amstat.org/meetings/qdet2/index.cfm>

CALL FOR INVITED ABSTRACT SUBMISSIONS

Deadline October 29, 2015

QDET2 is the first international conference in more than a decade devoted to questionnaire design, development, testing, and evaluation. Researchers from across the world are invited to share new solutions and fresh approaches to survey measurement, questionnaire design, and evaluation.

Invited abstract proposals for QDET2 are now open. Invited presentations will be eligible for submission (publication not guaranteed) to a conference book post-conference.

Proposals not accepted as invited presentations will be considered automatically as candidates for contributed sessions, unless the author requests otherwise. Look for the call for contributed sessions in March 2016.

36th International Symposium on Forecasting**June 19–22, 2016****Santander, Spain**

w <http://forecasters.org/isf/>

The International Symposium on Forecasting (ISF) is the premier forecasting conference, attracting the world's leading forecasting researchers, practitioners, and students. Through a combination of keynote speaker presentations, academic sessions, workshops, and social programs, the ISF provides many excellent opportunities for networking, learning, and fun.

Important 2016 Dates:

31 January	Proposals for invited sessions
22 February	Travel grant applications due
16 March	Abstract submission deadline
31 March	Abstract acceptance/rejection
15 May	Early registration deadline

NEW

Employment Opportunities around the world

Canada: Waterloo, ON

University of Waterloo

Actuarial Science - Tenure track or Tenured

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24881707

Canada: Waterloo, ON

University of Waterloo

Statistics or Biostatistics - Tenure track or Tenured

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24881683

Hong Kong

The University of Hong Kong

Tenure-Track Associate Professor/Assistant Professor in the

Department of Statistics and Actuarial Science (2 posts)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24803482

Taiwan: Kaohsiung

National Sun Yat-sen University, Department of Applied Mathematics

Assistant, Associate, or Full Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24976994

Taiwan: Taipei

Academia Sinica, Institute of Statistical Science

Regular Research Positions

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 2016. Candidates in all areas of Statistics will be considered. Candidates should have a PhD degree in statistics or areas related to data science. Application materials must include (1) a curriculum vitae, (2) three letters of recommendation, and (3) representative publications and/or technical reports. Additional supporting materials such as transcripts for new PhD degree recipients may also be included. Except for the letters of recommendation, electronic submissions are encouraged. Applications should be submitted to

Dr. Hsin-Cheng Huang

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: hchuang@stat.sinica.edu.tw

Applications should be received by December 30, 2015 for consideration.

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19863582

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25027515

United Kingdom: London

Imperial College London

Non-Clinical Reader/Professor in Biostatistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24631195

United States: Davis, CA

University of California, Department of Statistics

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24875281

United States: Los Angeles, CA

Marshall School of Business, USC

Postdoctoral Research Associate

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25049172

United States: Monterey, CA

Naval Postgraduate School, Department of Operations Research

Assistant or Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24816660

United States: Santa Barbara, CA

University of California, Santa Barbara

Assistant Professor-Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25055790

United States: Santa Barbara, CA

University of California, Santa Barbara

Assistant Professor-Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25055770

United States: Boston, MA**BOSTON UNIVERSITY****Department of Mathematics and Statistics****Tenured Position – Statistics**

The Department of Mathematics and Statistics invites applications for a tenured Professor in Statistics. The position will begin July 1, 2016. A strong commitment and record of teaching and research is essential. This position is part of a cluster hire in Statistics, and the ideal candidate would also be interested in serving as the Director of our Program in Statistics. Please submit a cover letter briefly describing your research and teaching interests, a CV, and the names and contact information for three references to mathjobs.org, for the Full Professor Statistics Search. Questions about the position and department may be directed to Prof. Tasso Kaper (chair) tasso@bu.edu. Review of applications will begin on November 16, 2015 and will continue until the position is filled. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor.

BOSTON UNIVERSITY**Department of Mathematics and Statistics****Tenured Position – Statistics**

The Department of Mathematics and Statistics invites applications at the tenured Associate Professor level in Statistics. PhD required; salary commensurate with experience. The position will begin July 1, 2016. Strong commitment and record of teaching and research is essential. Please submit a cover letter, CV, research statement, teaching statement, and four letters of recommendation, at least one of which addresses teaching, to mathjobs.org, for the Associate Professor Statistics Search. Alternatively, have all of the materials sent to ASCP Statistics Search, Department of Mathematics and Statistics, Boston University, 111 Cummington Mall, Boston, MA 02215. Application deadline is December 1, 2015. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor. Women and minorities are especially encouraged to apply.

BOSTON UNIVERSITY**Department of Mathematics and Statistics****Tenure Track Position – Statistics**

The Department of Mathematics and Statistics invites applications for tenure-track Assistant Professor of Statistics. PhD required. The position will begin July 1, 2016. A strong commitment to research and teaching at both undergraduate and graduate level is essential. Please submit a cover letter, CV, research statement, teaching statement, and four recommendation letters, (one teaching) to mathjobs.org. Alternatively, submit materials to Statistics T-T Search, Mathematics and Statistics, Boston University, 111 Cummington Mall, Boston, MA 02215. The application deadline is December 1, 2015. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor.

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=24925365

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=24925346

United States: New Haven, CT**Yale University**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25062056

United States: Storrs, CT**University of Connecticut**

Professor and Department Head

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25025918

United States: Atlanta, GA**Georgia Tech**

The School of Mathematics at Georgia Tech is accepting applications for faculty positions at all ranks and in all areas of Pure and Applied Mathematics and Statistics. Applications by highly qualified candidates, and especially those from groups underrepresented in the mathematical sciences, are particularly encouraged. See www.math.gatech.edu/resources/employment for more details and application instructions.

United States: Champaign, IL**University of Illinois at Urbana-Champaign, Department of Statistics (F1500086)**

Assistant Professor in Statistics and Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25019287

United States: Bridgewater, MA**Bridgewater State University**

Department of Mathematics, Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25036810**United States: Cambridge, MA****Harvard University Statistics Department**

Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25056048**United States: Williamstown, MA****Williams College**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24448901**United States: College Park, MD****University of Maryland**

Michael and Eugenia Brin Chair

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25080593**United States: East Lansing, MI****Michigan State University**

Fixed Term Teaching Specialist

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24321642**United States: Rochester, MI****Oakland University**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24778963**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=24931828**United States: Charlotte, NC****University of North Carolina Charlotte**

Assistant Professor in PDE

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25054860**United States: Lincoln, NE****University of Nebraska, Dept of Statistics**

Research Assistant Professor in Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25065159**United States: New York, NY****Department of Information, Operations & Management Sciences
Tenure-Track Faculty Position in Statistics**

The Statistics Group in the Department of Information, Operations & Management Sciences at the Stern School of Business, New York University, invites applications for a tenure-track position at the assistant professor level starting in the 2016-2017 academic year.

Statistics is a multidisciplinary program at the Stern School. Appropriate candidates will have evidence of boundary-spanning interests across fields that reflect significant interfaces of Statistics with areas of relevance in a Business School, such as Data Mining, Marketing, Economics, Finance, and Operations. The Statistics Group includes 9 full-time Statistics faculty members and a number of faculty affiliates, and has diverse interests and expertise, including Actuarial Science, Categorical Data, Computationally Intensive Methodology, High-Dimensional Statistics, Econometrics, Multivariate Statistics, Network Data, Stochastic Processes, and Time Series Analysis.

A candidate should have a Ph.D. or be assured of its completion within one year of the 2016-17 academic year, and is expected to be a productive researcher and effective teacher at both the undergraduate and graduate levels. Experience in classroom teaching is highly desirable. Candidates with significant experience in teaching may also be considered for a one-year contract appointment as visiting faculty at the assistant professor level.

Please submit all application materials by December 15, 2015, to assure full consideration.

Please go to <http://apply.interfolio.com/30831>, to apply. For questions, please send e-mail to ioms@stern.nyu.edu.

For information about the Statistics program at the NYU Stern School of Business, visit our website at <http://www.stern.nyu.edu/ioms>.

New York University is an equal opportunity/affirmative action employer and committed to building a culturally diverse educational environment. In keeping with this commitment, NYU invites applications from women, people with disabilities and members of minority groups.

United States: Lincoln, NE**University of Nebraska, Statistics**

Tenure Track Assistant Professor- Statistical Prediction

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25097862**United States: Piscataway, NJ****Department of Statistics & Biostatistics and the Center for Integrative Proteomics Research at Rutgers University**

Tenure-Track Assistant or Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25064893**United States: Princeton, NJ****Princeton University**

Faculty Position in Operations Research & Financial Engineering

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25019161**United States: Columbia, SC****University of South Carolina, Department of Statistics**

Assistant Professor, Big Data and Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24777063**United States: Brookings, SD****South Dakota State University**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24995182**United States: College Station, TX****Texas A&M University Statistics Department**

Faculty Positions Available

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24937995**United States: Blacksburg, VA****Virginia Tech -- Virginia Polytechnic Institute**

Dept. of Statistics - 4 Tenure-track Openings

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24903184**United States: Charlottesville, VA****University of Virginia, Department of Statistics**

Open Rank Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25110701**United States: Richmond, VA****University of Richmond**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24837975**United States: Philadelphia, PA****Wharton Department of Statistics, University of Pennsylvania****Tenure-track Position(s)**

The Department of Statistics of the Wharton School, University of Pennsylvania, is seeking applicants for full-time, tenure-track faculty position(s) at any level: Assistant, Associate, or Full Professor. Applicants should show outstanding capacity and achievement in research, as well as excellent teaching and communication skills. Applicants must have a Ph.D. (expected completion by June 30, 2017 is acceptable) from an accredited institution. The appointment is expected to begin July 1, 2016.

Please visit our website, <https://statistics.wharton.upenn.edu/recruiting/facultypositions>, for a description of the department and link to submit a CV and other relevant material. Any questions should be addressed to "Chair of the Search Committee" and sent to statistics.recruit@wharton.upenn.edu.

The University of Pennsylvania is an EOE. Minorities/Women/Individuals with disabilities/Protected Veterans are encouraged to apply.

*Visit the jobs section on the IMS website,
where you can:*

- * *View job opportunities in probability and statistics, including in academia and industry*
- * *Post your resume/CV online*
- * *Create personal Job Alerts, and never let a matching job opportunity pass you by!*

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



International Calendar of Statistical Events

IMS meetings are highlighted in **maroon** with the  logo, and new or updated entries have the **NEW** or **UPDATED** symbol. **t** means telephone, **f** fax, **e** email and **w** website. Please submit your meeting details and any corrections to Elyse Gustafson at erg@imstat.org

October 2015

October 1–2: Munich, Germany. 6th CEQURA Conference **w** <http://www.cequra.uni-muenchen.de/conference2015/index.html>

October 5–7: Dubai, UAE. Seventh Global Summit on Cancer Therapy **w** <http://cancer.global-summit.com/middleeast/>

October 28–29: Washington DC. 2015 Modern Math Workshop **w** <http://www.msri.org/workshops/789>

October 28–November 1: Antalya, Turkey. Ninth International Statistics Congress **w** <http://www.istkon.net/istkon09/en>

October 29–31: Stevens Institute of Technology, Hoboken, NJ, USA. 6th Annual High Frequency Finance and Data Analytics Conference **w** http://hfsi.stevens.edu/hff_conference

November 2015

NEW **November 9–11:** Lunteren, The Netherlands. **Lunteren Meeting** **w** <http://homepages.cwi.nl/~colette/lunteren2015.html>

November 10–13: Prague, Czech Republic. AMISTAT 2015 (Analytical Methods in Statistics) **w** <http://www.karlin.mff.cuni.cz/~amistat2015/>

November 20–21: Lafayette, Louisiana, USA. 2015 Lloyd Roeling UL Lafayette Mathematics Conference: Statistics **w** <http://math.louisiana.edu/node/182>

December 2015

December 4–5: London, UK. Complex Systems in Time Series **w** <http://www.lse.ac.uk/statistics/events/SpecialEventsandConferences/Complex-Systems-in-Time-Series>

December 6–11: Atlantic City, NJ, USA. 71st Annual Deming Conference on Applied Statistics **w** www.demingconference.com

December 16–19: Vishwakarma Institute of Technology Pune, Maharashtra, India. IEEE International Conference on Information Processing **w** www.icip.in

December 28–31: Kolkata, India. Ninth International Triennial Calcutta Symposium on Probability and Statistics **w** <http://triennial.calcuttastatisticalassociation.org>

January 2016


 **January 5–7:** Lenzerheide, Switzerland. Sixth IMS-ISBA joint meeting: BayesComp at MCMSki.


w <http://www.pages.drexel.edu/~mw125/mcmskiV/program.html>

January 25–27: Lunteren, The Netherlands. 15th Winter school on Mathematical Finance **w** <https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html>

March 2016

March 1–4: Bochum, Germany. 12th German Probability and Statistics Days 2016: Bochumer Stochastik-Tage **w** <http://www.gpsd-2016.de/>

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

 **March 16–19:** University of Maryland, College Park, MD, USA. Seminar on Stochastic Processes (SSP) 2016 **w** http://depts.washington.edu/ssproc/ssp_nextssp.php

April 2016

NEW **April 1–2:** Cambridge, UK. Info-Metrics Institute Spring 2016 Conference: Information-Theoretic Methods of Inference **w** <http://www.american.edu/cas/economics/info-metrics/conference/Info-Metrics-Spring-2016-conference.cfm>

 **April 4–8:** Lancaster University, UK. UK Easter Probability Meeting 2016: Random Structures Arising in Physics and Analysis **w** <http://www.lancaster.ac.uk/math/easter-probability-meeting/>

NEW **April 5–8:** Lausanne, Switzerland. SIAM Conference on Uncertainty Quantification **w** <http://www.siam.org/meetings/uq16/>

May 2016



May 18–21: Cappadocia, Turkey. International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications **w** <http://www.ic-smhd2016.com/>



June 2016

NEW **June 1–4:** Malta. 4th Stochastic Modeling Techniques & Data Analysis Conference **w** <http://www.smta.net/smta2016.html>

International Calendar *continued*


June 2016 continued



 **June 6–10:** Pittsburgh, PA, USA **Statistical Challenges in Modern Astronomy VI**  <http://www.scma6.org>


 **June 11–16:** Avignon, France. **3rd ISNPS Conference**  <http://www.isnpstat.org>


  **June 12–15:** Atlanta, GA. **3rd ICSA Applied Statistics Symposium**  <http://math.gsu.edu/~icsa/>

 **June 13–17:** Sardinia, Italy. **ISBA 2016 World Meeting**  <http://www.corsiecongressi.com/isba2016/>


June 15–18: Cartagena, Colombia. **Second International Congress on Actuarial Science and Quantitative Finance**  <http://icasqf.org>

 **June 19–22:** Santander, Spain. **36th International Symposium on Forecasting**  <http://forecasters.org/isf/>

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

 **June 20–24:** San Diego, CA. **Stochastic Networks Conference 2016**  <http://stochasticnetworks2016.ucsd.edu/>

 **June 27–30:** Hong Kong, China. **Fourth IMS Asia Pacific Rim Meeting**  <http://ims-aprm2016.sta.cuhk.edu.hk/>

June 27–July 1: Barcelona, Spain. **3rd Barcelona Summer School on Stochastic Analysis**  http://www.crm.cat/en/Activities/Curs_2015-2016/Pages/3rd-BCN-Summer-School-on-Stochastic-Analysis.aspx



July 2016

 **July 10–15:** Victoria, BC, Canada. **WNAR Annual Meeting in conjunction with the XXVIII International Biometric Conference**  <http://biometricconference.org/conference-information/>



 **July 11–15:** Toronto, ON, Canada. **IMS Annual Meeting at 9th World Congress in Probability and Statistics**  <http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/>

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



August 2016

 **August 24–26:** Kerman, Iran. **13th Iranian Statistical Conference**  http://isc13.uk.ac.ir/index.php?slc_lang=en&sid=1

November 2016



 **November 9–13:** Miami, FL. **International Conference on Questionnaire Design, Development, Evaluation, and Testing**  <http://www.amstat.org/meetings/qdet2/index.cfm>

December 2016



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

July 2017

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



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

July 2018

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

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

July 2019

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

August 2020

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

August 2021

 **August 7–12:** Seattle, WA, USA. **JSM 2021**  <http://amstat.org/meetings/jsm/>

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4: June/July	May 1	May 15	June 1
5: August	July 1	July 15	August 1
6: September	August 15	September 1	September 15
7: Oct/Nov	September 15	October 1	October 15
8: December	November 1	November 15	December 1

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Articles

- Basic properties of critical lognormal multiplicative chaos
JULIEN BARRAL, ANTTI KUPIAINEN, MIKA NIKULA,
EERO SAKSMAN AND CHRISTIAN WEBB 2205
- A counterexample to the Cantelli conjecture through the Skorokhod embedding problem
VICTOR KLEPTSYN AND ALINE KURTZMANN 2250
- Ratios of partition functions for the log-gamma polymer NICOS GEORGIU,
FIRAS RASSOUL-AGHA, TIMO SEPPÄLÄINEN AND ATILLA YILMAZ 2282
- Disorder, entropy and harmonic functions
ITAI BENJAMINI, HUGO DUMINIL-COPIN, GADY KOZMA AND ARIEL YADIN 2332
- Martin boundary of random walks with unbounded jumps in hyperbolic groups
SÉBASTIEN GOUËZEL 2374
- Randomly trapped random walks
GÉRARD BEN AROUS, MANUEL CABEZAS, JIŘÍ ČERNÝ AND ROMAN ROYFMAN 2405
- A lower bound on the two-arms exponent for critical percolation on the lattice
RAPHAËL CERF 2458
- Embedding laws in diffusions by functions of time A. M. G. COX AND G. PESKIR 2481
- Exact Rosenthal-type bounds IOSIF PINELIS 2511
- Spines, skeletons and the strong law of large numbers for superdiffusions
MAREN ECKHOFF, ANDREAS E. KYPRIANOU AND MATTHIAS WINKEL 2545
- Regenerative tree growth: Markovian embedding of fragmenters, bifurcators, and bead
splitting processes JIM PITMAN AND MATTHIAS WINKEL 2611
- Forward-backward stochastic differential equations and controlled McKean-Vlasov
dynamics RENÉ CARMONA AND FRANÇOIS DELARUE 2647
- The range of tree-indexed random walk in low dimensions
JEAN-FRANÇOIS LE GALL AND SHEN LIN 2701
- Expected signature of Brownian motion up to the first exit time from a bounded domain
TERRY LYONS AND HAO NI 2729
- Multifractal analysis of superprocesses with stable branching in dimension one
LEONID MYTNIK AND VITALI WACHTEL 2763
- Independence ratio and random eigenvectors in transitive graphs
VIKTOR HARANGI AND BÁLINT VIRÁG 2810