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IMS Bulletin

October/November 2014

CONTENTS

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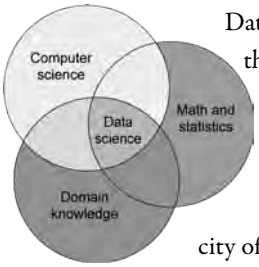
IMS Presidential Address

Each year the outgoing IMS President delivers an address at the IMS Annual Meeting. This year Bin Yu, Chancellor's Professor of Statistics and EECS, University of California at Berkeley, gave her address at the Australian Statistical Conference in Sydney in July. The following article is based on her address:

Let us own data science

It is my honor and pleasure to deliver this IMS Presidential Address at the joint meeting of the Statistical Society of Australia Inc. (SSAI) and IMS.



Data science is all the rage in the media. Most people would agree that it has three pillars: computer science, statistics/mathematics and domain knowledge (some believe data science is the intersection of the three as shown in the figure (left) while others think it is the union.)

Today, we—SSAI and IMS—have gathered in the beautiful city of Sydney. Let's turn the clock back 67 years to 1947, when the Statistical Society of New South Wales (SSNSW) was formed here in Sydney. A group of statisticians met at the University of Sydney in the spring of 1947 to start a society of statistics in order to further "the study and application of statistical methods in all branches of knowledge and human activity." I was very pleased to learn that the first President of SSNSW was a woman (in 1947!): Helen Newton Turner, 1908–95, who first worked at CSIRO as a statistician and later decided to become a geneticist. Her obituary noted: "Not many scientists in Australia have contributed as much and as directly to the growth and well-being of a major Australian industry [wool] as she did. Not that she would have agreed with this description; she was a very modest woman and would have said, 'It wasn't me, it was my team.'" Clearly, Turner and her collaborators made a huge impact in domain science (animal breeding) and the wool industry, and worked as a team, all hallmarks of data science today.

Helen Newton Turner, the first president, in 1947, of the Statistical Society of New South Wales, which was to become the first chapter of SSAI

The obituary goes on to describe Turner's three main contributions as "...an experimental scientist, introducing objective measurement methods into breeding [...] as a communicator and publicist of the new methods [and] as an educator of postgraduate students and Department of Agriculture staff." Turner was a superb educator and communicator to the public, again desirable traits of a data scientist.

If we turn the clock back a further 17 years, to 1930s Ann Arbor, we would meet

Continues on **page 13**

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Executive Committee

IMS Members' News

ISBA Zellner Medals for Mike West and Fabrizio Ruggeri

The International Society for Bayesian Analysis (ISBA) has conferred its two inaugural Zellner Medals on IMS Fellow Mike West, the Arts & Sciences Professor of Statistics and Decision Sciences, a distinguished professor in the Department of Statistical Science at Duke University, and IMS member Fabrizio Ruggeri, Research Director of CNR-IMATI in Milan, Italy. Named for the founding President of the Society, the Zellner Medal is awarded once every two years to (at most two) statisticians in recognition of their "outstanding service to Bayesian statistics and the society." 2014 was the first year of the award.

Mike West, who was one of the founders as well as a past President of the Society, received the 2014 inaugural award with a citation that noted: "A scientific life spent always at the top, and a vision of the future which became reality, from the work to establish ISBA as a society to its construction on sound bases."

Fabrizio Ruggeri's citation noted his "outstanding service to ISBA and ISBA local chapters around the world and his fundamental contributions in theory, methodology and novel applications of Bayesian philosophy."

Simon Tavaré to take presidency of London Mathematical Society

IMS Fellow Simon Tavaré has been announced as president-designate of the London Mathematical Society, UK. Simon Tavaré is the current director of the Cancer Research UK Cambridge Institute and professor in Cambridge's Department of Applied Mathematics and Theoretical Physics (DAMTP) and a Fellow of the Royal Society (FRS). His research centres around stochastic computational methods and cancer genomics—primarily the statistical analysis of microarray and second-generation sequencing technologies. Current LMS president Terry Lyons also expressed delight at the announcement of his successor, describing Tavaré as "a tremendous communicator." Professor Tavaré will take up his post in November 2015.

Terry Speed wins CSIRO Eureka Prize

For his superb leadership of the bioinformatics team at the Walter and Eliza Hall Institute of Medical Research, and his other contributions to the science of bioinformatics, Terry has been awarded the CSIRO Eureka Prize for Leadership in Science. "Terry was one of the creators of the field of bioinformatics, and is one of the world's leading statisticians," Australian Museum Director and CEO Kim McKay said. "He also devotes tremendous effort to the people he works with. He has supervised over 60 postgraduate students, and mentored dozens of other researchers."

New Editors for IMS Journals

Several IMS core and co-sponsored journals have new editors, whose three-year terms start January 1, 2015. Maria Eulalia Vares will be the new editor of the *Annals of Probability,* taking over from Chris Burdzy. The co-sponsored publications *Electronic Communications in Probability (ECP)* and the *Electronic Journal of Probability (EJP),* also have new editors. Sandrine Péché will become editor of *ECP*, taking the reins from Anton Bovier. Its sister journal, the *Electronic Journal of Probability,* will be edited by Brian Rider, who takes over from Michel Ledoux. The Managing Editor for *ECP/EJP* will be Djalil Chafaï. Finally, *Probability Surveys* also gets a new editor, Ben Hambly, who takes over from Laurent Saloff-Coste.

Thank you to all the outgoing, incoming and serving editors, and associate editors, for your countless hours of service to our profession.

SAMSI Programs 2015–16

IMS members encouraged to participate in SAMSI's 2015–16 Research Programs in Computational Neuroscience and Forensic Science

SAMSI announces its two new and exciting programs for 2015–16. They are the *Challenges in Computational Neuroscience (CCNS)* and the *Statistics and Applied Mathematics in Forensic Science (Forensics)*. IMS members will have many opportunities to collaborate with people in other disciplines such as neurobiologists, statisticians, forensic scientists and others.

Challenges in Computational Neuroscience (CCNS)

The CCNS program will develop mathematical and statistical methods for neuroscience applications. These will be used to understand the underlying mechanisms that bridge multiple spatial and temporal scales, linking the activity of individual components (e.g., molecular biology, genetics, and neuron networks), and their interactions to the complex dynamic behavior of the brain and nervous system. Brain theory, modeling, and statistics will be essential to turn data into better understanding of the brain. The CCNS program will address the underlying methodological, theoretical, and computational challenges. Probability and statistics, dynamical systems, geometry, and computer science will be combined with respect to theory and in applications.

Program on Statistics and Applied Mathematics in Forensic Science (Forensics)

SAMSI's program on Forensics is focused on strengthening the statistical and applied mathematical bases of forensic science. Forensic science is fundamentally based upon statistical comparisons of the characteristics of a material left at a crime scene to characteristics of a source or suspect. These comparisons are often acknowledged by forensic scientists to be highly subjective. A series of reports by the National Research Council (NRC) has raised deep questions about major forms of forensic evidence and has made a clear case for heeding statistical underpinning for forensic procedures. These include fingerprints, patterns and impressions (footprints and tire tracks), toolmarks and firearms, hair, fibers, documents, paints and coatings, bloodstains, and fire debris. Working groups will focus on statistical issues for pattern evidence; bias; imaging; quality control for forensics laboratories. Crosscutting challenges are identifying where statistics can have a quick impact, and educating mathematical scientists about forensics and forensic scientists about the mathematical sciences.

There are many opportunities for IMS members to get involved in SAMSI programs. Financial support is available for visiting researchers to be resident at SAMSI for periods of one month to one year. Postdoctoral positions are available in both programs and give ample opportunities for the fellows to collaborate with senior level researchers. Workshops and working groups give many people the opportunity to collaborate with others on research projects and to network with their peers. SAMSI offers workshops to graduate and upper level undergraduate students to learn about the latest research and applications in the statistical and mathematical sciences that will involve these two research program topics. All involved researchers will get chances to broaden their interests and skill sets, participate in cutting edge interdisciplinary projects and make new connections. New researchers and members of underrepresented groups are especially encouraged to participate in SAMSI workshops and programs.

To find out more about either of these research programs, or to apply, go to the SAMSI website, www.samsi.info.

Recent papers

Annals of Statistics: 42(4) August 2014

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

Annals of Applied Statistics: 8(2) June 2014

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

Continues on **page 5**

COPSS Awards at JSM

Members of the Committee of Presidents of Statistical Societies (COPSS) are pleased to announce the 2014 awards, which were presented to the winners at the Joint Statistical Meetings in Boston, Massachusetts, by COPSS Chair Jane Pendergast.

The winner of the Presidents' Award is Martin J. Wainwright of the University of California, Berkeley, for fundamental and groundbreaking contributions to high-dimensional statistics, graphical modeling, machine learning, optimization and algorithms covering deep and elegant mathematical analysis as well as new methodology with wide-ranging implications for numerous applications.

The 2014 Fisher Lecturer was Grace Wahba of the University of Wisconsin–Madison, for groundbreaking fundamental contributions to many areas of statistics, including time series, splines, smoothing, nonparametric statistics, likelihood estimation and density estimation, and to interdisciplinary areas including climatology, epidemiology, bioinformatics and machine learning; and for her work in reproducing kernel Hilbert space representation and generalized cross-validation, which have become standard practice in scientific research and industry. Her lecture was titled "Positive Definite Functions, reproducing Kernel Hilbert Spaces, and All That."

The Elizabeth L. Scott Award was presented to Kathryn Chaloner of the University of Iowa, for her commitment and success in developing programs to encourage and facilitate women to undertake careers in statistics; for extensive mentoring of women students and young faculty; for work to identify and remove inequities in employment for underrepresented components of the profession; and for serving as a role model, balancing work and family while excelling as a teacher, researcher, and academic administrator.

These awards are jointly sponsored by COPSS founding partner members: ASA, IMS, ENAR, WNAR and SSC. Award criteria and nominating procedures are available at www.copss.org.

From top: Kathryn Chaloner (Elizabeth Scott Award); Grace Wahba (Fisher Lecturer) and Martin J. Wainwright (Presidents' Award). Photos courtesy of Eric Sampson, ASA.

Continued from **page 4**

Obituary: Laurent Cavalier

1971–2014

Laurent Cavalier

Laurent Cavalier, Professor of Mathematics at the Aix-Marseille Université, France, passed away on January 13, 2014, after being operated on for appendicitis in a hospital in Marseille, France. He was only 42 years old.

Laurent Cavalier was born on October 13, 1971. After studying pure mathematics at the University of Montpellier, he became interested in Statistics and moved to the Université Pierre et Marie Curie (Paris 6) where he was admitted to DEA of Statistics and then obtained his Master Degree in 1994. His PhD work at the Université Pierre et Marie Curie under my supervision was devoted to nonparametric estimation of level sets and statistical tomography. He defended his PhD thesis in 1998. The next year, he accepted a position of assistant professor (Maître de Conférences) at the Université Aix-Marseille 1 (later renamed as Aix-Marseille Université) where he worked until his death. He was promoted to the rank of associate professor and then to full professor.

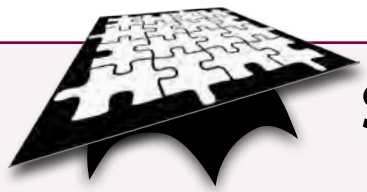
Laurent Cavalier's research was mainly devoted to statistical inverse problems. This new area has been rapidly developing over the last two decades and Laurent Cavalier was one of the leading researchers to whom this advance was due. He was working on many aspects of inverse problems. Among his most prominent contributions are the construction and refined study of adaptive methods (the risk hull method, and the block Stein methods), the derivation of exact asymptotics of the minimax risks in several statistical inverse problems, a pioneering work on the tomography problem with Poisson data, estimation in inverse problems with non-compact operators. His works on inverse problems with errors in the operator were also very influential.

Laurent Cavalier was a brilliant lecturer; he was invited to give advanced courses in several leading research institutions including Yale University, the University of Göttingen, Humboldt University and WIAS in Berlin, as well as at summer schools (Stats in the Château, 2009). He authored two surveys on inverse problems in statistics and was preparing a book on this subject but his premature death put a brutal end to all these projects.

Laurent Cavalier contributed a lot to the scientific life of the French statistical community. He was organizing, jointly with Oleg Lepski, the annual "Meeting on Mathematical Statistics" at CIRM, Luminy, France. This event was very stimulating for the development of statistical science in France and became a benchmark for several generations of young researchers. Laurent bore the main burden of local organizer of these meetings for many years. Later, with a group of other statisticians from France and Spain, he founded another important and now very popular event, Journées Statistiques du Sud, a two-day annual summer school featuring short courses on recent developments in mathematical and applied statistics. Laurent was also an active member of the scientific committee, Etats de la Recherche, of the French Mathematical Society (SMF).

Laurent was a "man of the south": he enjoyed living in the south of France where he was born, near the sea and the mountains. He was very active in sports, such as hiking in the montains and especially football. He was an open and lovely person, and his untimely death profoundly saddened all those who knew him. Laurent is survived by his wife Elsa and his two sons, Gael and Romain.

Alexandre Tsybakov,
Professor at CREST-ENSAE



Student Puzzle 6 deadline extended

We are **extending the deadline** for the Student Puzzle printed in the last issue, to encourage more entries! The puzzle appears in the September 2014 issue (you can download the whole issue as a PDF from **http://bulletin.imstat.org**) and also at **http://bulletin.imstat.org/2014/09/student-puzzle-corner-6-deadline-now-november-1/**

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 now **November 1, 2014**.
The names and affiliations of (up to) the first 10 student members to submit correct solutions, and the answer to the problem, will be published in the next issue of the Bulletin. The Editor's decision is final.

Obituary: Susie Bayarri

1956–2014

M.J. Susie Bayarri

M.J. (Susie) Bayarri passed away on August 19, 2014, in Valencia, Spain, after an 18-month battle with a brain tumor. Susie was a Fellow of the IMS and one of the most prominent Bayesian statisticians in the world.

Susie was born on September 16, 1956 in Valencia, Spain. She studied at the University of Valencia, receiving Masters (1979) and PhD (1984) degrees in mathematics, with theses on Bayesian statistics under the direction of José-Miguel Bernardo.

Susie started her career in 1978 as an Assistant Professor in the Department of Statistics and Operations Research at the University of Valencia, becoming Full Professor in 1998 and remaining at the department for the rest of her career.

Susie's husband shockingly died in 1984. She was devastated but it resulted in her doing something bold—she applied for, and won, a Fulbright fellowship to go to the United States for a year at Carnegie Mellon University. She spent the 1985–86 academic year at Carnegie Mellon, and significant time there during the ensuing years, doing wonderful research on selection models and foundations with Morrie DeGroot.

Susie decided to make visits to the US a permanent part of her schedule; she would visit from August through December each year, focusing on research, while concentrating her teaching in Valencia from January through June. Her US visits were first at Carnegie Mellon, then Purdue University (where she also had visiting professorship appointments in 1988 and 1994) and, from 1998 onward, at Duke University and the Statistical and Applied Mathematical Sciences Institute (SAMSI). At Duke she was adjunct professor from 2003–14 and at SAMSI she had numerous leadership roles, including being the Leader of the entire 2006–07 research program.

Susie made major contributions to both the theory and methodology of Bayesian statistics, helping it become the prominent part of the scientific landscape that it is today. Her continuing long-term interests were selection models and weighted distributions; objective Bayesian methods; Bayesian analysis of queueing systems; Bayesian robustness; model criticism and *p*-values; model uncertainty and multiple comparisons; and calibration and validation of complex computer models.

Susie was author or editor of five books and nearly 70 scientific research papers, three of which won major awards, including the 2006 Frank Wilcoxon Award and the 2008 Jack Youden Prize. She was also highly active in major interdisciplinary collaborations: recently, she had been working with scientific collaborators to develop a quantitative methodology for assessing the risk associated with catastrophic pyroclastic flows from volcanoes.

As one of the few early female Bayesian statisticians, Susie served as a role model for many students and younger researchers (male and female). She instilled her passion for research in her five Masters and seven PhD students, most of whom have gone on to have prominent research careers of their own.

Susie had major leadership roles, including serving as President of the International Society for Bayesian Analysis (ISBA) in 1998 and Presidenta de la Sociedad Española de Biometría from 2001–03. One of her last leadership roles in Spain was serving as the principal investigator of the Biostatnet project, a web-based collaboration of 180 investigators at universities inside and outside Spain and at biomedical institutions. Susie also served on 13 editorial boards, including being Coordinating Editor of the *Journal of Statistical Planning and Inference* from 2001–07, and was an organizer of 38 international meetings and conferences.

Susie was an inveterate traveler, and loved the explosion of Bayesian conferences that happened around the world in recent decades. She would often be among those closing down the bar or the dance floor at a conference. Besides travel, she loved jogging, wine and food (she even won an award one year from the wine society Verema, as the top food critic in Spain).

Susie received numerous honors, including being elected Fellow of the ASA in 1997, elected to the International Statistical Institute in 1997, elected Fellow of the IMS in 2008 and, in a bittersweet ceremony during the World Conference of ISBA in July, 2014, was in the first elected class of ISBA Fellows. The outpouring of admiration and love for her that was expressed by the attendees at the conference was inspiring. The next Objective Bayes conference will be held, in Susie's honor, during the first week of June 2015—fittingly, in Valencia.

Those who had the privilege of knowing Susie will remember her not only as an outstanding statistician and tireless advocate for Bayesian statistics, but also as someone lively, funny, and extremely generous. She entered the hearts of everyone who came to know her, and will remain in our hearts forever.

Contributions can be made, in Susie's memory, to an endowment fund created by ISBA, at https://bayesian.org/civicrm/contribute/transact?reset=1&id=33, to support an award, prize or lecture (TBD) in Susie's name.

James Berger, Duke University

Obituary: Herbert Aron David

1925–2014

Herbert Aron David, Emeritus Distinguished Professor in Liberal Arts and Sciences at Iowa State University, Ames, passed away on July 14, 2014, in Columbia, Maryland, USA. At Iowa State he served as Director and Head of the Statistical Laboratory and Department of Statistics (1972–84), Professor (1972–80), and Distinguished Professor (1980–96).

H.A. David was born in Berlin, Germany, on December 19, 1925, and lived in Düsseldorf until the age of 13. After Kristallnacht in November 1938, his family migrated to Sydney, Australia, where David graduated from Sydney University in 1947 with a BSc (Hons) in mathematics. He moved to London in 1949 to pursue a PhD in statistics at University College London and worked on order statistics under the direction of H. O. Hartley. The influential Hartley–David paper on bounds for the expectations of range and maximum of a sample (*Annals of Mathematical Statistics,* **25**, 85–99, 1954) came out of this work. He was also exposed to computing through early mechanical calculators, Brunsvigas; he kept one in his Ames office much later in life. He married Vera Reiss in London 1950 and after graduation in 1953, he returned to Sydney to work as a Research Officer at the CSIRO (Commonwealth Scientific and Industrial Research Organization). He moved to Melbourne University as a Senior Lecturer in Statistics in 1955, then to the USA in 1957, joining Virginia Polytechnic University at Blacksburg as a Professor of Statistics. In 1964 he moved to Chapel Hill as a Professor of Biostatistics at the University of North Carolina, and from there to Ames in 1972.

David was a Fellow of the American Statistical Association (1962), the American Association for the Advancement of Science (1962), the Institute of Mathematical Statistics (1964), and an elected member of the International Statistical Institute (1969). He received the Wilks Award for Outstanding Contributions to Statistical Methodologies from the US Army in 1983.

During his career, David supervised 25 students and published over 125 research articles in the areas of order statistics, robustness, paired comparisons, competing risks, biometry, and cyclic designs. In later years, he did intensive work on the history of statistics, statisticians, and statistical terminology and continued to be active, publishing his last paper in 2011. He is best known for his classic book on order statistics. With three editions and translations, *Order Statistics* (1970, 1979 in Russian, 1981, and 2003 with H.N. Nagaraja), has had a significant effect on theoretical and applied research in statistics and in other disciplines. It has also led to an explosion of research in order statistics, and, more recently to an international biennial conference on ordered data. The two editions of David's monograph, *Method of Paired Comparisons* (1963, 1978 in Russian, 1988) and of *Theory of Competing Risks* (1978, with M. Moeschberger), have influenced the work of numerous researchers in these areas.

David's last book, *Annotated Readings in the History of Statistics* (2001, with A.W.F. Edwards), celebrates the important Pascal's contributions on the concept of expectation (Pascal, 1654) to the origin of confidence limits (Fisher, 1930). His edited work, *Statistics: An Appraisal* (1984, with H. T. David), celebrates the fiftieth anniversary of the first Statistical Laboratory in the USA at Iowa State University, and *Advances in Biometry* (1996, with P. Armitage) commemorates 50 years of the International Biometric Society. David also edited the 1978 volume *Contributions to Survey Sampling and Applied Statistics—Papers in Honor of H. O. Hartley*.

H. A. David (photo courtesy of Iowa State University)

David held offices for many professional societies in various capacities. He served as Associate Editor (1958–64) and Editor (1967–72) of *Biometrics*, and as President (1982–83) and Vice President (1981, 84) of the Biometric Society. For IMS he was a Council member (1974–76), a member of the Committee on Mathematical Tables (1974–75), on Fellows (1975–76; Chair, 1977), and on Memorials (1984–85; Chair, 1986). He served as a Council Member, Member of Board of Directors, an Associate Editor of the *JASA*, and on several other significant committees, for the American Statistical Association.

H.A. David was respected for his high level of personal and professional integrity. In addition to being a top rate scientist, he was known for his fairness, thoughtfulness, brevity and clarity, and mentorship. He was involved in the civil rights movement in the 1960s, the anti-Vietnam war movement in the 1970s, and with Amnesty International in later years. After Vera's death in 1991, he met Ruth Finch and they were married from 1993 to 2011. David is survived by his son, daughter-in-law, and three grandchildren.

"A Conversation with H. A. David" (*Statistical Science*, 2004, Vol. 19, No. 4, 720–734), contains a closer look at the man and his work.

H. N. Nagaraja,
The Ohio State University

Obituary: Witold Klonecki

1930–2012


Witold Klonecki

Prominent Polish statistician Witold Klonecki, born on September 28, 1930, died on August 10, 2012 at the age of 82.

Witold Klonecki received a master degree in mathematics from the University of Poznań in 1955 and a PhD degree from the University of Wrocław in 1963. His PhD dissertation, "On phenotypical functions," was written under the supervision of Julian Perkal. Witold Klonecki completed his habilitation in 1970 and in 1983 he has received the title of professor.

Klonecki worked in the University of Poznań from 1954–58. From 1959 to 1963 he was employed by the University of Wrocław and later on he returned to Poznań. In 1968 he became a head of the Section of Applications to Biology, Economics and Technology at the Institute of Mathematics of the Polish Academy of Sciences, Wrocław Branch. The section had existed since the late 1940s and was directed by Hugo Steinhaus, followed by Julian Perkal and Stefan Zubrzycki, respectively. The main activities of the section included intensive collaboration with various professionals and education in applied probability and statistics. Under Witold Klonecki's guidance the main activity of the section evolved to, and was mainly focused on, PhD studies in modern statistical methodology. Consequently, the section was renamed Section of Mathematical Statistics and Its Applications in 1973. He headed the section until 1991. During this period the section was visited by leading statisticians from around the world. Also in 1973 Witold Klonecki with co-workers initiated the organization in Poland of a series of conferences on mathematical statistics. This year the fortieth conference in this series is organized. Many of the conferences were international ones, with strong representation of outstanding guests. Moreover, Klonecki's close contacts with Jerzy Neyman made it possible to send some Polish students to take part in PhD studies in Berkeley. In turn, he organized in Poland two big international conferences to celebrate the 80th and 100th anniversaries of Neyman's birth. These events were followed by special volumes of papers, edited by him and his colleagues. He also organized the 14th European Meeting of Statisticians in Wrocław in 1981. All these activities gave young Polish statisticians opportunities to make contact with many leading researchers worldwide, making it possible to learn current statistical topics and trends and enabling them to be invited to several statistical departments. This was a springboard for many academic careers.

As further support to the development of statistics in Poland, the journal *Probability and Mathematical Statistics* was founded in Wrocław due to the initiative of Witold Klonecki, who also served many years as its co-editor.

In 1992 Professor Klonecki moved to the Institute of Mathematics of the Technical University of Wrocław, where he was active well beyond his official retirement in 2000. During his work he supervised 14 PhD theses.

His scientific interests in his early career were focused on population genetics and Poisson mixtures; linear models when working at the Academy of Sciences; and again on some mathematical aspects of genetics while employed at the Technical University. The series of his papers, written in the period 1983–92 in co-operation with Stefan Zontek, constitutes an interesting and important contribution to the theory of admissible estimation in linear models.

Witold Klonecki was a fellow of the Institute of Mathematical Statistics and a member of the Bernoulli Society and the International Statistical Institute.

His wife Kazimiera passed away several years before him. He is survived by four sons. He will be remembered as a person full of energy who played a considerable organizational role in re-establishing the statistical community in post-war Poland.

Teresa Ledwina,
Institute of Mathematics, Polish Academy of Sciences

XL-Files: Leadership: are you open for it?

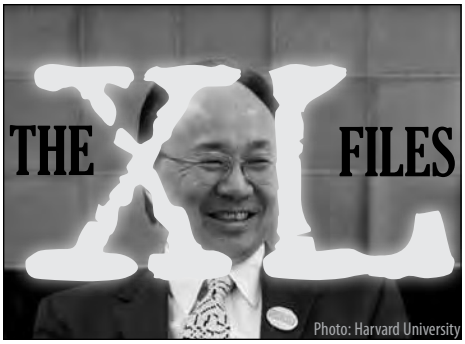


Photo: Harvard University

Contributing Editor Xiao-Li Meng writes:

In addition to increasingly frequent requests to predict the future (see the last *XL-Files*), another sure sign of "professional aging" is being asked to talk about *leadership*. Just this past summer alone, I served on ICSA–KISS and IMS–NRC panels on leadership (while still sharpening my predictive skills on a JSM panel about the next 25 years of statistics).

But what exactly *is* leadership? Anyone who thinks s/he really knows the answer is likely busy touring the country instead of serving on academic panels. Therefore what I was able to share at the panels were some personal observations on traits for being an effective *leader*. Again, don't ask me for a precise definition, but the leaders to whom I referred are those whose mindsets and decisions can make your (professional) life a fulfilling or depressing one. You may not care if a leader can impress you, but surely you don't want one who can depress you (unless you are a masochist). Consequently, my response to anyone asking what it takes to be a good leader is rather simple: *think about what you want from a leader*. Rhetorical though this might sound, it has provided practical guidance for me. It has also helped me to realize that an effective leader should be a "triple opener"...

An Open Heart

Virtually all leaders need to interact with a variety of people with diverse abilities, backgrounds, curiosities, demeanors, experiences, etc. To interact effectively, leaders have to respect people even when they don't like them. To do so for an extended period—and without exhausting yourself—requires something more profound than diplomatic skills. It requires an *open heart*, an almost innate ability to appreciate that there is something worth learning from, and about, every fellow human being. It's almost a tautology to say that it is hard to like these people whom you don't like, but that is precisely at the heart of the matter when you are in a position to affect these people's lives in some ways. An open heart builds wider empathetic channels to more individuals, and such empathy is critical in reducing unfair treatment, especially to those with whom you may have every other reason to disassociate yourself.

An Open Mind

Most people would tell you that good leaders listen, but fewer know how hard it is to *really* listen, especially for those who are trained to engage in research brainstorming and in academic debate, where shouting out half-baked ideas and driving each other up the wall are expected and encouraged. Carrying over that habit, I constantly found myself eager to express my opinions in various meetings I conducted as a dean, especially when someone was saying something that, in my opinion, was wrong-headed: while I was "listening," my mind was completely occupied by constructing counter-arguments! It didn't take long before I realized that listening *effectively* would require more an *open mind* rather than merely open ears. Perhaps being truly open-minded will always be an aspiration, but leaders without such an aspiration tend to have a much harder time building consensus that benefits the people they serve and themselves.

An Open Bottle

Few people find socially friendly environments unwelcoming. The same is true for leadership style. Brainstorming sessions are more fruitful over creative meals, and difficult conversations tend to flow a bit easier in a cafeteria or a bar. Therefore, effective leaders are more likely to be always prepared to open a bottle of social lubricant, be it Guinness, Gewürztraminer, or Gerolsteiner. And pay from your own pocket if such expenses are not reimbursable, because the ultimate beneficiary is *you*—your work is more enjoyable (literally), you have fewer sleepless nights (as long as you don't open too many bottles a day), and most importantly, you will have more life-long friends (or at least fewer life-long enemies).

…but not an Open Mouth

Not everything should be open, however. I recall a time when I couldn't respond to an accusation from a faculty member because it involved confidential information. Worse, I couldn't tell him that I couldn't tell him, because that itself would have implied confidential information was involved.

Being able to protect others—especially those not of your liking—when facing unjustified blame is a trait required of good leaders. It can be a lonely, frustrating, or even helpless experience. Yet, effective leadership almost always involves giving organizations' and others' interests higher priority. This is not about being noble but more about being *practical.* A party will not run smoothly if the host's main interest is in ensuring that s/he has a better time than everyone else.

Speaking of parties, it is time to open a bottle of G. H. Mumm to toast all the leaders who have kept their hearts and minds open all the time, but their mouths open only when appropriate. Bottoms up!

WNAR/IMS Honolulu meeting report

WNAR (the Western North American Region of The International Biometric Society) and the Institute of Mathematical Statistics combine each year to hold the IMS-sponsored WNAR/IMS meeting: this year it was in the lovely location of Honolulu, Hawaii. Wesley Johnson, professor of statistics at the University of California, Irvine, was one of the organizers. He reports:

Major features of the annual WNAR/IMS conferences have been the high quality sessions, the relatively small but not too small size, and typically wonderful venues. The 2014 WNAR/IMS Conference was no exception. It was hosted by the Department of Public Health Sciences and Office of Public Health Studies from June 15-18, 2014, in Honolulu, Hawaii at the Campus Center on the University of Hawaii at Manoa campus. This was a very well attended conference despite the obvious distractibility of beautiful Hawaii. There were five invited IMS sessions interspersed among twelve invited WNAR sessions and twelve contributed sessions. The WNAR Presidential Invited Address was given by Christl Donnelly from Imperial College London on the topic *"Statistical Challenges in Understanding Disease Transmission and Control."* An all-day short course was given by Thomas Lumley from the University of Auckland entitled *"Introduction to large-scale genetic association studies."*

The IMS invited sessions were:

Statistical Methods for Applications in High-Dimensional and Complex Problems (Organizer: Z. John Daye; University of Arizona)

Hypothesis testing and estimation for kernel-based regression models and other models under non-regular conditions (Organizers: Youyi Fong and Chongzhi Di; Fred Hutchinson Cancer Research Center)

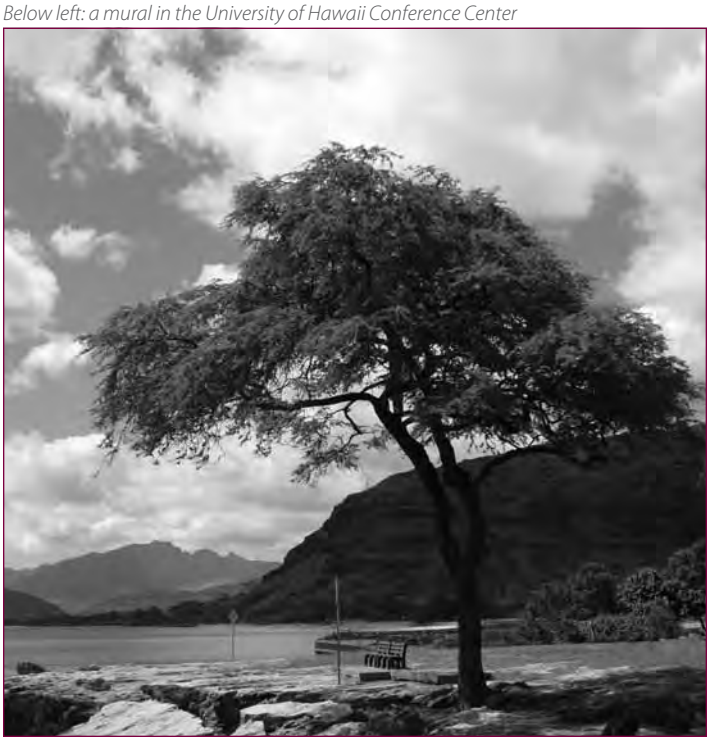
Bayesian Approaches for Inference with Instrumental Variables (Organizer: Prakash Laud; Medical University of Wisconsin)

Statistics in Medical Imaging (Organizer: Thomas Lee; UC, Davis)

Advances in Functional Data Analysis (Organizer: Kathryn Prewitt; Arizona State University)

Full program details for the conference can currently be found at http://manoa.hawaii.edu/publichealth/node/453

Above: Scott Bartell and Daniel Gillen (both UC Irvine), and Thomas Lumley (Auckland) in a lively discussion about epidemiologic methods. Lumley was also presenter of a short course on large scale genetic association studies
Below: the beautiful west coast of Oahu
Below left: a mural in the University of Hawaii Conference Center



The 2015 WNAR/IMS meeting will be at Boise State University, Boise, Idaho, from June 21–24, 2015. The Local organizer is Kyungduk Ko. Details to follow.

Bin Yu: Presidential Address 2014 *continued*

"Let us Own Data Science"

Continued from **cover**

Professor Harry C. Carver (1890–1977) in the Mathematics Department of University of Michigan. Carver started and was the first editor of *The Annals of Mathematical Statistics* (later split into *AOS* and *AOP*), which marked the beginning of IMS. He was a mathematical statistician (no surprise) and an aerial navigation expert (big surprise!). The US Air Force bestowed on him the highest honor in peacetime: Decoration for Exceptional Service, for his contributions to air navigation.

Harry C Carver

Carver took leave from the University of Michigan and enrolled himself in an Air Force school as an ordinary cadet and trained and studied with all the young cadets for a year. He then returned to Ann Arbor and started teaching a course on air navigation. (Carver was a believer in what he did: on approaching retirement at 70, he devised a "retirement desirability" objective function for US locations—average temperature, total rainfall, number of days of sunshine, etc.—and used weather records to optimize this function to find the best retirement location [Santa Barbara, California] and there he moved.)

Carver also recognized keenly the importance of computing machines in air navigation. In the preface to his 1943 book, *An Introduction to Air Navigation*, he wrote, "...logarithms must be considered now as a tool of the past. Present-day commercial institutions almost without exception use computing machines rather than logarithms in the conduct of their business in the interest of efficiency in both time and labor: moreover progressive schools now have installations of these machines that enable their students to work more problems in less time than formerly."

Perhaps, through a modern lens, Carver could be viewed as an early "machine learner" and he was carrying out "on-line learning" or "streaming data analysis" since in air navigation, planning, recording, and controlling the movement of an airplane have to be done very fast or in real time. Interested in the speed of computing for air navigation, he got the first Hollerith Tabulating Machine at University of Michigan. Carver's "on-line" analysis seems mostly point estimation via optimization (possibly with some uncertainty considerations), however, hence in the spirit of modern-day machine learning.

Wikipedia/Marcin Wichary

A Hollerith Tabulating Machine

Who, we may ask, is Hollerith? Wikipedia tells us Herman Hollerith (1860–1929) was also a statistician, and an inventor. He founded the Tabulating Machine Company that was later merged with three other companies to become IBM. Wikipedia reads: "Hollerith is widely regarded as the father of modern machine data processing. With his invention of the punched card evaluating machine the beginning of the era of automatic data processing systems was marked. His draft of this concept dominated the computing landscape for nearly a century."

The motivation for his invention of the Hollerith Tabulating Machine arose from the 1890 US Census. It was predicted that it would take 13 years to process the census data, but the census is every 10 years in the US, by law. Faster data processing tools had to be found. Hollerith came up with the idea of punched cards to store census records: a hole or not indicates a male or a female, for example. Note that this binary storage format is similar to the binary storage format in a digital computer. The next challenge for Hollerith was to have these punched cards read automatically to add up counts. He solved this by taking advantage of Edison's invention of electricity with an electric counting machine that registers a count when the electricity is allowed to flow with a hole.

Putting the traits of Turner and Carver together gives a good portrait of a data scientist:

1. Statistics (S)
2. Domain/science knowledge (D)
3. Computing (C)
4. Collaboration/teamwork (C)
5. Communication to outsiders (C)

That is, **data science = SDCCC = SDC^3**.

Just like Turner and Carver, many of the later prominent statisticians were also "data scientists". William Cochran (1909–80) was instrumental in establishing four statistics or biostatistics departments across US universities, at Iowa State, NC State, Johns Hopkins, and Harvard. He was also a recipient of ASA's prestigious Samuel S. Wilks Medal. In the introduction to his book *Sampling Techniques*, he wrote "Our knowledge, our attitudes, and our actions are based to a very large extent upon samples. This is

Presidential Address *continued*

equally true in everyday life and in scientific research ... But when the material is far from uniform, as is often the case, the method by which the sample is obtained is critical, and the study of techniques that ensure a trustworthy sample becomes important."

Non-uniform sampling is an important issue to address in big data problems, since with the increased size of data comes the increased heterogeneity or non-uniformity.

John W. Tukey (1915–2000) was best-known for his invention of FFT with Cooley. He created Exploratory Data Analysis (EDA) and made it accepted in the statistics community. He received a US Medal of Science and might have defined "data science" accurately in his 1962 article, "The Future of Data Analysis":

"It will still be true that there will be aspects of data analysis well called technology, but there will also be the hallmarks of stimulating science: intellectual adventure, demanding calls upon insight, and a need to find out 'how things really are' by investigation and the confrontation of insights with experience."

According to Wikipedia, Tukey's principles of statistical practice have been summarized by A.D. Gordon. I paraphrase these principles below and believe they serve well as principles of data science:

- Usefulness and limitation of theory
- Importance of robustness
- Importance of massive empirical experience of a method for guiding its use
- Importance of data's influence on methods chosen
- Rejection of the role of "police"
- Resistance to once-for-all solutions and over-unification of statistics
- Iterative nature of data analysis
- Importance of computing
- Training of statisticians

Clearly, statisticians have been doing a big part of the job of a data scientist today and no existing other disciplines do more than statistics. We need to fortify our position in data science by focusing on training skills of **critical thinking** (that enables statistics and domain knowledge seeking), **computing** (that implies parallel computation with memory and communication dominating scalability), and **leadership, interpersonal and public communication** (that enable collaboration and communication with outside). For the twitter generation, I have a shorter message:

Think or sink; Compute or concede; Lead or lose.

Since we do the job of a data scientist, let's us call ourselves data scientists! You might ask, what's the big deal about a name? Well, words *do* mean things.

Let us take a look at the game of branding. As they evolved, the fields of Statistics and Computer Science have taken very different approaches regarding branding. Statistics uses the same term: "statistics" means different things to different people at different times. Its original meaning was derived from population census in Europe. Now "Statistics" covers a vast range of activities so is not very informative to an outsider. Most people to this day understand it in its original meaning—counting or census—though many statisticians today are part of research on cancer, genomics, neuroscience, and astronomy. By contrast, the data-related sub-field of Computer Science has adopted new names for new developments over time: AI, Data Mining, Machine Learning, Deep Learning...

Imagine an 18-year-old, J, choosing between statistics and data science in college. J's brain is excited by the new and bored with the old, as clearly shown in the data used in my collaborative work with the Gallant Lab (cf. Nishimoto et al (2011), *Current Biology*). In this data, clips of movies were shown to a human subject and his/her fMRI brain signals were recorded. When the clips are displayed next to the corresponding brain signals, one can see that the brain is "excited" (high level of activity) at the beginning of a clip, and then most of the time quickly "cools down" (low level of activity).

J probably took an AP statistic class in high school; or if not, J looks up "statistics" on Wikipedia, and finds:

"Statistics is the study of the collection, organization, analysis, interpretation and presentation of data. It deals with all aspects of data, including the planning of data collection in terms of the design of surveys and experiments. When analyzing data, it is possible to use one of two statistics methodologies: descriptive statistics or inferential statistics."

J finds this description not very exciting, to say the least. So J Googles "statistics" and sees this:

The top picks by Google are all related to the original meaning of statistics about census. "How about 'statistician'?" J wonders, and

finds its definition in Wikipedia as follows: "A statistician is someone who works with theoretical or applied statistics. The profession exists in both the private and public sectors. It is common to combine statistical knowledge with expertise in other subjects." This description is a bit circular and doesn't speak to J, but J reads on...

"...Typical work includes collaborating with scientists, providing mathematical modeling, simulations, designing randomized experiments and randomized sampling plans, analyzing experimental or survey results, and forecasting future events (such as sales of a product)."

More jargon to J. In the June/July 2014 *"Terence's Stuff"* Terry Speed sketches the image of a statistician from the point of view of an outsider:

We (statisticians) "don't deal with risk, with uncertainty... we're too absolute, we do p-values, confidence intervals, definite things like that." We "raise arcane concerns about mathematical methods." Said a scientist, "I had no interest in very experienced statisticians" ..."I wasn't even thinking about what model I was going to use. I wanted actionable insight, and that was all I cared about."

These impressions of statisticians would not help J to turn in our direction, if J were to talk to adults about statistics.

Now J turns his attention to "Data Science". J thinks to himself, "It's about data and science, and it sounds exciting!"—just as an undergraduate student told me recently when I asked him to choose between statistics and data science. Moreover, Wikipedia gives the following definition:

"Data science is the study of the generalizable extraction of knowledge from data, yet the key word is *science*."

This definition is a lot more attractive than statistics' definition. It is concise and to the point. Going down the Google search result list leads us to an IBM website (http://www-01.ibm.com/software/data/infosphere/data-scientist/) that states:

"Data scientists are inquisitive: exploring, asking questions, doing 'what if' analysis, questioning existing assumptions and processes. Armed with data and analytical results, a top-tier data scientist will then communicate informed conclusions and recommendations across an organization's leadership structure."

Doesn't this sound like an applied statistician's description? I wonder how many statisticians in academic departments relate to this description as their job description and for what percentage.

Recalling the fact that J's brain is excited by the new and bored by the old, we ask what would J choose, statistics or data science?

A good new name like data science has power. For example, a data science MA program attracts a lot more applicants than a statistics MA program; Moore–Sloan foundations established three data science environment centers; Moore Foundation is giving DDD investigator awards; and universities are looking into data science FTEs.

Many of our visionary statistics colleagues saw data science coming. Professor Jeff Wu claimed "data science" as our own as early as 1998. In Wu's inaugural lecture of his Carver (yes, that Carver!) Chair Professorship at University of Michigan, he proposed that we change "statistics" to "data science" and "statistician" to "data scientist". He went on to say that "several good names have been taken up: computer science, information science, material science, cognitive science. 'Data science' is likely the remaining good name reserved for us." My late colleague Professor Leo Breiman (1928–2005) was a probabilist, statistician and machine learner. His inventions included CART (with collaborators), Bagging and Random Forests. In his 2001 seminal paper "Statistical modeling: the two cultures" in *Statistical Science*, he wrote: "If our goal as field is to use data to solve problems, then we need to move away from exclusive dependence on data models and adopt a diverse set of tools."

Let us Own Data Science

> How do we own it? The answer is not hard. Work on real problems. Relevant methodology/theory will follow naturally.

Data Science represents an inevitable (re)-merging of computational and statistical thinking in the big data era. We have to *own* data science, because domain problems don't differentiate computation from statistics or vice versa, and data science is the new accepted term to deal with a modern data problem in its entirety. Gains for the statistics community are many, and include attracting talent and resources, and securing jobs for our majors, MAs and PhDs.

How do we own it? The answer is not hard. We just have to follow the footsteps of Turner, Carver, Hollerith, Cochran and Tukey, and **work on real problems**. Relevant methodology/theory will follow naturally. The real problems of today come from genomics, neuroscience, astronomy, nanoscience, computational social science, personalized medicine/healthcare, finance, government, to name just a few. Hence it is not surprising that a 2011 McKinsey Report *"Big data:*

Presidential Address *continued*

The next frontier for innovation, competition, and productivity" predicts that "There will be a shortage of talent necessary for organizations to take advantage of big data. By 2018, the United States alone could face a shortage of 140,000 to 190,000 people with deep analytical skills as well as 1.5 million managers and analysts with the know-how to use the analysis of big data to make effective decisions."

As a community, we statisticians have to act. Some suggestions: at an individual level, you could put "data scientist" next to "statistician" on your website and resume if your job is partly data science; aim to get on interesting and/or important data projects; upgrade your computing, interpersonal and leadership skills; scale up algorithms and carry out data science research (e.g. analysis of parallel and/or random algorithms).

As a community, our public image needs much improvement. We could all prepare a two-minute elevator pitch in lay terms, ready to talk to non-statisticians to diversify our "counting" image; we could give pubic speeches and interviews with media when opportunities arise; we could blog and tweet; we could upload Youtube videos about statistics and our own work; and we could update our websites with accessible descriptions of research. The most urgent is to update the statistics and data science Wikipedia pages, possibly by asking our students in classes to help.

Bin Yu's Twitterized summary of her Presidential Address, delivered in Sydney in July

As a community, we need to write vision statements and/or white papers to persuade deans and upper administrations and funding agencies to provide resources (money and positions)—recall that Cochran started four statistics/biostatistics departments!—for us to make major contributions to data science. We need to reform statistical curricula (especially introductory courses); we need to put out MOOCs or online (multi-media) courses that integrate the essence of statistics and computing principles, with interesting modern data problems as examples.

IMS is doing its bit to engage us in data science. An IMS–MSR Data Science Conference is planned for 2015 in Boston, entitled "Foundations of data science: Synergies between statistics and machine learning". I am pleased to announce the organizing committee consists of three co-chairs: David Dunson, Rafa Irizarry, and Sham Kakade, and four other members, A. Braverman, S. Dumais, A. Munk, and M. Wainwright.

Moreover, we have run an IMS membership drive to attract young people, especially young machine learners, into IMS (see http://bulletin.imstat.org/2014/07/ims-a-cross-continent-human-network-with-free-student-membership/). And I would like to use this opportunity to tell you that in 2015, IMS Named and Medallion Lecture nominations will be open to the community. Watch out for announcement at http://imstat.org/awards/lectures/nominations.htm

To summarize:

- **Let us own data science**
- **Think or sink;**
- **Compute or concede;**
- **Lead or lose.**

Thank you for your attention!

References (a biased selection):

Lindsay, B. G., Kettenring, J., and Siegmund, D. O. (2004), "A Report on the Future of Statistics," *Statistical Science*, **19**, 387–413.

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Computing Community Consortium (CCC) (2012). White papers. "Challenges and Opportunities with Big Data," "From Data to Knowledge to Action: A Global Enabler for the 21st Century," and "Big-Data Computing."

Jordan et al (2013). US NRC report on Massive Data.

Rudin et al (2014). ASA white paper. Discovery with Data: Leveraging Statistics with Computer Science to Transform Science and Society

Terence's Stuff: Male Champions of Change (MCC)

Terry Speed returns to the topic of gender equity, and wonders how can we learn from the model of Male Champions of Change?

I ended my recent rant about gender equity (June/July 2013) with a call to arms: "When will you—all you men out there—join the battle for gender equity? Don't just leave it to women to challenge the men who rule their lives."

At the time I was unaware of an initiative in my own country doing this, and extremely effectively. One reason that I had not before heard of *Male Champions of Change* [MCC] was that it is aimed at Australia's most powerful and influential men, the leaders of banks, airlines, telecommunication and retail companies, and men in the most senior roles in government and the armed forces. These people don't interact much with my academic world. However, this idea is so good that we simply must adapt to our own circumstances.

Since 1984 Australia has had a Sex Discrimination Commissioner, currently Elizabeth Broderick. Her office deals with a host of issues, including sexual harassment, domestic violence, maternity leave and slavery. In 2010 she established MCC as a coalition of male leaders in business and government committed to using their collective influence to put the issue of women's representation in leadership at the forefront of the national agenda.

In 2011 they adopted a charter committing themselves to actively advancing gender equality across their businesses and to acting as public advocates. This charter contains most of the gender equity goals of academics like myself, such as *Adopting and implementing employment policies and practices that eliminate gender discrimination in areas such as recruitment, hiring, pay, and promotion*; *Developing mechanisms to foster balance between work and family life for women and men; Sharing experiences and strategies for advancing gender equality within Australia's corporate sector*; and *Being spokespersons for the promotion of gender equality, both individually and collectively*.

This is not male paternalism, women needing to be saved by corporate knights in shining armor galloping in to fix the problem. It is best described in the words of one male champion: "Let's not pretend that there aren't already established norms that advantage men. Men invented the system. Men largely run the system. Men need to change the system."

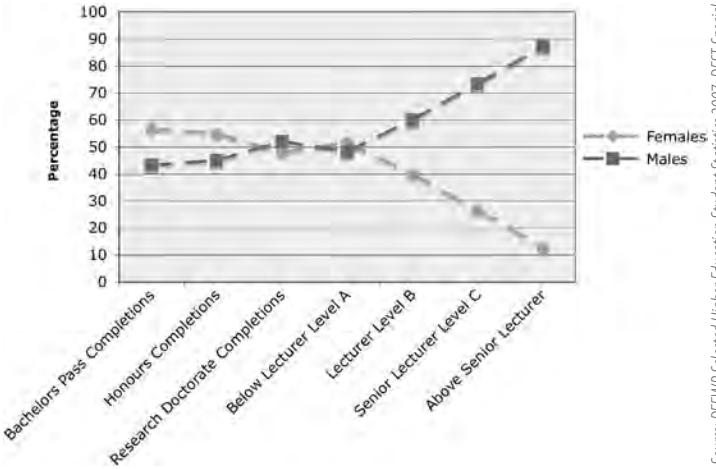
Do we in academia, and specifically in the statistics profession, need MCC? I think the answer is unequivocally Yes. Indeed, we've seen something like this before, in the Fourteen Points for Management of W Edwards Deming. His 14th point was "Clearly define top management's permanent commitment to ever-improving quality... and its obligation to implement all of these principles." Deming saw—and had experience to support the view—that change occurred in a company only if the top manager of that company strongly supported the change. It was said that he would not give advice to anyone in a company if he could not begin with a conversation with the top manager. As I see it, Elizabeth Broderick has reached the same conclusion: win over these powerful men, and we have a chance of winning over the people below them.

And who are our top managers? I would start with past and current chairs of our departments of statistics, presidents of our societies, and senior statisticians in business, government and industry. Following the recent, highly successful *Women in Statistics Conference*, wouldn't it be wonderful to have a *Male Champions for Change in Statistics Conference*? Men could sign up, agree on a charter, and examine whether they are living up to their aspirations in championing women. They could learn from the corporate MCC, perhaps in analysing these elements of their leadership approach: *what I say, how I act, what I prioritise, & what I measure.*

They would need to develop strategies that are appropriate to our profession, and measures of effectiveness that make sense to us. The CEO of a large Australia telecoms company has decreed that all roles will now be advertised as available in a flexible work arrangement. This has the potential to impact over 40,000 employees (and their families) in this one organization. None of us have this kind of power, but we *can* all do a lot more than we are doing.

I learned about MCC at the terrific 2014 Women in Astronomy Workshop. I realized then what should have been obvious long ago, that we in Statistics have a lot to learn from other groups pursuing gender equity.

Mind the Gap… Academic Profiles by Gender; Natural and Physical Sciences 2007



Source: DEEWR Selected Higher Education Student Statistics 2007; DEST Special Report FTE Staff in AOU Groups 2007 Courtesy Prof Sharon Bell, Charles Darwin University

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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 statements of financial position as of December 31, 2013 and 2012, and the related statements of activities and cash flows for the year ended December 31, 2013, and the six-month period ended December 31, 2012, 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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits 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 Institute of Mathematical Statistics as of December 31, 2013 and 2012, and the changes in its net assets and its cash flows for the year ended December 31, 2013, and the six-month period ended December 31, 2012, in accordance with accounting principles generally accepted in the United States of America.

Cimini + Panichi, Inc.

Cleveland, Ohio
September 12, 2014

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

Statements of Financial Position

December 31, 2013 and 2012

Assets	2013	2012
Cash and cash equivalents	$ 313,438	$ 467,123
Accounts receivable	118,411	95,543
Interest receivable	1,470	2,147
Investments, at fair market value	3,537,237	2,309,955
Certificates of deposit	1,364,341	1,425,784
Prepaid expenses	40,505	49,824
Investments restricted for endowment	76,685	75,970
Total assets	$ 5,452,087	$ 4,426,346
Liabilities and Net Assets		
Liabilities:		
Accounts payable and accrued liabilities	$ 146,468	$ 330,931
Unearned memberships, subscriptions, and meeting revenues	1,193,407	951,165
Total liabilities	1,339,875	1,282,096
Net assets:		
Unrestricted:		
Undesignated	3,922,348	2,960,794
Council-designated	65,331	63,236
Total unrestricted	3,987,679	3,024,030
Temporarily restricted	47,848	44,250
Permanently restricted	76,685	75,970
Total net assets	4,112,212	3,144,250
Total liabilities and net assets	$ 5,452,087	$ 4,426,346

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Statement of Activities

For the year ended December 31, 2013

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total 2013
Revenues, gains, and support:				
Membership dues and journal subscriptions	$ 278,037	$ -	$ -	$ 278,037
Non-member subscriptions	1,762,386	-	-	1,762,386
Sales of back issues	1,899	-	-	1,899
Page charges	29,156	-	-	29,156
Sales of books	983	-	-	983
Scientific meetings	12,200	-	-	12,200
Managed meetings	4,083	-	-	4,083
Advertising	58,825	-	-	58,825
Offprints, royalties, and other	103,278	-	-	103,278
Contributions	5,482	4,911	715	11,108
Net realized and unrealized gains	451,649	-	-	451,649
Interest and dividends	78,234	1,873	-	80,107
Net assets released from restrictions	3,186	(3,186)	-	-
Total revenues, gains, and support	2,789,398	3,598	715	2,793,711
Expenses:				
Program	1,659,411	-	-	1,659,411
General and administrative	166,338	-	-	166,338
Total expenses	1,825,749	-	-	1,825,749
Changes in net assets	963,649	3,598	715	967,962
Net assets, beginning of year	3,024,030	44,250	75,970	3,144,250
Net assets, end of year	$ 3,987,679	$ 47,848	$ 76,685	$ 4,112,212

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Statement of Activities

For the six-month period ended December 31, 2012

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total 2012
Revenues, gains, and support:				
Membership dues and journal subscriptions	$ 231,319	$ -	$ -	$ 231,319
Non-member subscriptions	859,283	-	-	859,283
Sales of back issues	-	-	-	-
Page charges	21,158	-	-	21,158
Sales of books	1,749	-	-	1,749
Scientific meetings	12,200	-	-	12,200
Managed meetings	12,060	-	-	12,060
Advertising	18,790	-	-	18,790
Offprints, royalties, and other	82,220	-	-	82,220
Contributions	70	5,474	890	6,434
Net realized and unrealized gains	101,344	-	-	101,344
Interest and dividends	41,572	1,456	-	43,028
Net assets released from restrictions	2,000	(2,000)	-	-
Total revenues, gains, and support	1,383,765	4,930	890	1,389,585
Expenses:				
Program	814,095	-	-	814,095
General and administrative	84,355	-	-	84,355
Total expenses	898,450	-	-	898,450
Changes in net assets	485,315	4,930	890	491,135
Net assets, beginning of period	2,538,715	39,320	75,080	2,653,115
Net assets, end of period	$ 3,024,030	$ 44,250	$ 75,970	$ 3,144,250

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Statements of Cash Flows

For the year ended December 31, 2013 and the six-month period ended December 31, 2012

	2013	2012
Cash flows from operating activities:		
Changes in net assets	$ 967,962	$ 491,135
Adjustments to reconcile changes in net assets to net cash provided by operating activities:		
Write-off of uncollectible accounts receivable	4,470	2,615
Net realized and unrealized gains	(451,649)	(101,344)
Contributions restricted for long-term purposes	(715)	(890)
Changes in operating assets and liabilities:		
Accounts receivable	(27,338)	(79,848)
Interest receivable	677	(230)
Prepaid expenses	9,319	(5,608)
Accounts payable and accrued liabilities	(184,463)	151,334
Unearned memberships, subscriptions, and meeting revenues	242,242	(301,295)
Net cash provided by operating activities	560,505	155,869
Cash flows from investing activities:		
Purchases of investments, net of proceeds from sales	(774,905)	(127,408)
Restricted cash for endowment	-	42,422
Purchases of certificates of deposit	(1,265,000)	(1,010,000)
Proceeds from the sale of certificates of deposit	1,325,000	839,000
Net cash used by investing activities	(714,905)	(255,986)
Cash flows from financing activities:		
Proceeds from contributions restricted for long-term purposes	715	890
Net cash provided by financing activities	715	890
Decrease in cash and cash equivalents	(153,685)	(99,227)
Cash and cash equivalents, beginning of period	467,123	566,350
Cash and cash equivalents, end of period	$ 313,438	$ 467,123

The accompanying notes are an integral part of these financial statements

Institute of Mathematical Statistics

Notes to the Financial Statements

For the year ended December 31, 2013 and the six-month period ended December 31, 2012

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

For the year ended December 31, 2013 and the six-month period ended December 31, 2012

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.

Fiscal Year

As of July 1, 2012, the Institute changed its fiscal year-end from June 30 to December 31. Accordingly, the accompanying financial statements for the six-month period ended December 31, 2012 only reflect activity from July 1, 2012 to December 31, 2012.

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 statements 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 statements 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/period as the investment income is generated.

Note 2: Summary of Significant Accounting Policies (continued)

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.

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, 2013 and 2012 as $2,300 and $2,300, respectively.

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 statements 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 statements 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.

Concentrations of Credit Risk

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

Note 2: Summary of Significant Accounting Policies (continued)

Concentrations of Credit Risk (continued)

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, 2013 and during the six-month period ended December 31, 2012, 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 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, 2013 and 2012, the Institute has identified no uncertain income tax positions and has incurred no amounts for income tax penalties and interest for the year and six-month period then ended.

The Organization 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 2010.

Advertising

Advertising costs are expensed as incurred. Advertising expense amounted to $5,914 and $7,984 for the year ended December 31, 2013 and for the six-month period ended December 31, 2012, respectively.

Note 2: Summary of Significant Accounting Policies (continued)

Subsequent Events

In preparing these financial statements, the Institute has evaluated events and transactions for potential recognition or disclosure through September 12, 2014, 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, 2013 and 2012, investments are reported at fair value and consisted of the following:

	2013	2012
Mutual funds – equities	$ 2,592,575	$ 1,726,659
Mutual funds – fixed-income	1,021,347	659,266
Total investments	$ 3,613,922	$ 2,385,925

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 and are based on the best available information, which has been internally developed.

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

Note 4: Fair Value Measurements (continued)

Financial assets consisted of the following at December 31, 2013:

	Level 1	Level 2	Level 3	Total
Certificates of deposit	$ -	$ 1,364,341	$ -	$ 1,364,341
Investments ($76,685 included in investments restricted for endowment):				
Mutual funds – international equity	749,609	-	-	749,609
Mutual funds – domestic equity	1,842,966	-	-	1,842,966
Mutual funds – fixed-income	1,021,347	-	-	1,021,347
	$ 3,613,922	$ 1,364,341	$ -	$ 4,978,263

Financial assets consisted of the following at December 31, 2012:

	Level 1	Level 2	Level 3	Total
Certificates of deposit	$ -	$ 1,425,784	$ -	$ 1,425,784
Investments ($75,970 included in investments restricted for endowment):				
Mutual funds – international equity	502,601	-	-	502,601
Mutual funds – domestic equity	1,224,058	-	-	1,224,058
Mutual funds – fixed-income	659,266	-	-	659,266
	$ 2,385,925	$ 1,425,784	$ -	$ 3,811,709

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 three months to nine months.

Note 5: Unearned Memberships, Subscriptions, and Meeting Revenues

Unearned memberships, subscriptions, and meeting revenues consist of the following at December 31, 2013 and 2012:

	2013	2012
Member dues and subscription fees	$ 173,114	$ 170,082
Non-member subscription fees	804,600	546,627
Lifetime and lifetime retired membership dues and subscription fees	215,693	234,456
Total unearned memberships, subscriptions, and meeting revenues	$ 1,193,407	$ 951,165

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, 2013:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment	$ -	$ 9,775	$ 76,685	$ 86,460

Endowment net asset composition by type of fund as of December 31, 2012:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment	$ -	$ 8,047	$ 75,970	$ 84,017

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

Changes in endowment net assets for the year ended December 31, 2013:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets, December 31, 2012	$ -	$ 8,047	$ 75,970	$ 84,017
Investment return		1,728	-	1,728
Contributions to perpetual endowment	-	-	715	715
Endowment net assets, December 31, 2013	$ -	$ 9,775	$ 76,685	$ 86,460

Changes in endowment net assets for the six-month period ended December 31, 2012:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets, June 30, 2012	$ -	$ 6,734	$ 75,080	$ 81,814
Investment return		1,313	-	1,313
Contributions to perpetual endowment	-	-	890	890
Endowment net assets, December 31, 2012	$ -	$ 8,047	$ 75,970	$ 84,017

	2013	2012
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	$ 76,685	$ 75,970
Total endowment funds classified as permanently restricted net assets	$ 76,685	$ 75,970

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

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 Organization 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.

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 $12,409 and $4,772 for the year ended December 31, 2013 and the six-month period ended December 31, 2012, respectively.

Note 8: Functional Expenses

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
	$ 1,659,411	$ 166,338	$ 1,825,749

Note 8: Functional Expenses (continued)

Program and general and administrative expenses for the six-month period ended December 31, 2012 were as follows:

	Program	General and Administrative	Total
Production expenses (see Note 9)	$ 407,934	$ -	$ 407,934
Editorial expenses (see Note 9)	144,081	-	144,081
Mailing and shipping at press	43,578	-	43,578
Salaries, payroll taxes, and employee benefits	35,190	35,189	70,379
Management fee	27,896	27,896	55,792
Scientific meetings	40,162	-	40,162
Managed meetings	-	-	-
Supported journal royalty	78,902	-	78,902
Postage and shipping from office	4,661	1,998	6,659
Insurance	3,064	1,313	4,377
Credit card fees	5,446	-	5,446
Professional fees	-	11,400	11,400
Business meetings	2,499	-	2,499
Membership drives and publicity	7,984	-	7,984
Information technology service	2,339	-	2,339
Storage	4,066	-	4,066
Contributions to other organizations	1,929	-	1,929
Rent and utilities	825	825	1,650
Administrative services	-	2,227	2,227
Printing, non-journal	1,618	-	1,618
Computer equipment and software	928	397	1,325
Supplies	121	121	242
Office expense and other	648	278	926
Telephone	224	96	320
Scientific legacy	-	-	-
Bad debt expense	-	2,615	2,615
	$ 814,095	$ 84,355	$ 898,450

Note 9: Production and Editorial Expenses

Production and editorial expenses incurred were as follows for the year and six-month period ended December 31, 2013 and 2012, respectively:

	2013	2012
Production expenses:		
Core publications:		
The Annals of Applied Probability	$ 110,196	$ 54,373
The Annals of Applied Statistics	133,389	76,211
The Annals of Probability	186,759	59,485
The Annals of Statistics	141,852	66,622
Statistical Science	62,231	27,729
IMS Bulletin	22,094	9,348
IMS Collections	3,799	5,190
NSF-CBMS Regional Conference Series	2,562	-
Web page	14,184	6,919
Total core publications	677,066	305,877
Supported publications:		
Annales de l'Institut Henri Poincaré	53,481	29,599
Bayesian Analysis	126	-
Bernoulli	107,996	31,725
Bernoulli News	2,728	1,095
Brazilian Journal of Probability and Statistics	17,615	10,114
Stochastic Systems	2,881	-
Total supported publications	184,827	72,533
Co-sponsored publications:		
Probability Surveys	1,395	2,065
Statistics Surveys	1,458	230
Current Index to Statistics	955	237
IMS Monographs	3,627	62
Electronic Journal of Probability	396	1,133
Electronic Journal of Statistics	13,138	6,966
Total co-sponsored publications	20,969	10,693
General publication expenses:		
Electronic operations for all publications	67,165	18,831
Total general publication expenses	67,165	18,831
Total production expenses	$ 950,027	$ 407,934

Note 9: Production and Editorial Expenses (continued)

	2013	2012
Editorial expenses:		
Current Index to Statistics	32,912	15,687
IMS Bulletin	73,160	38,600
WWW editor	47,716	31,682
Managing and production editors	103,827	47,612
Central editorial office	21,000	10,500
Total editorial expenses	$ 278,615	$ 144,081

Note 10: Net assets

	2013	2012
The following are net assets available at December 31:		
Unrestricted:		
Undesignated	$ 3,922,348	$ 2,960,794
Council-designated:		
Dorweiller Fund	-	3,616
Hotelling Fund	-	1,607
New Researchers Meeting Fund	31,799	31,672
Development Fund	25,000	25,000
Scientific Legacy Fund	8,532	-
Laha Fund	-	1,341
Total Council-designated	65,331	63,236
Total unrestricted	3,987,679	3,024,030
Temporarily restricted:		
Schramm Lecture Fund	22,347	20,686
Tweedie Memorial Fund	11,173	11,092
Open Access Fund	4,553	4,425
Le Cam Earnings Fund	8,199	7,364
Blackwell Earnings Fund	1,576	683
Total temporarily restricted	47,848	44,250
Permanently restricted:		
Blackwell Lecture Endowment	43,740	43,070
Le Cam Endowment	32,945	32,900
Total permanently restricted	76,685	75,970
Total net assets	$ 4,112,212	$ 3,144,250

We apologise for printing these Financial Statements so small!

If you would like to read a full-size version you can download the PDF from the Bulletin website:

http://bulletin.imstat.org/wp-content/uploads/FY2013-Final-Financial-Statements.pdf

Call for nominations: Newbold Prize

The Bernoulli Society recently approved the establishment of the **Ethel Newbold Prize for excellence in statistics**, to be awarded every two years beginning in 2015. The name of the prize recognizes a historically important role of women in statistics. The prize itself is for excellence in statistics without reference to the gender of the recipient. The Ethel Newbold Prize is generously supported by Wiley.

Bernoulli Society for Mathematical Statistics and Probability

Description

The Ethel Newbold Prize is to be awarded to an outstanding statistical scientist for a body of work that represents excellence in research in mathematical statistics, and/or excellence in research that links developments in a substantive field to new advances in statistics.

In any year in which the award is due, the prize will not be awarded unless the set of all nominations includes candidates from both genders.

The award consists of the prize amount of €2500, together with an award certificate.

For this call, the prize winner will be selected in spring 2015. The prize will be awarded at the World Statistics Congress in Rio de Janeiro (http://www.isi2015.org/) and the awardee will be invited to present a talk at the IMS/Bernoulli Society Ninth World Congress on Probability and Statistics in Toronto, July 11–15, 2016 (http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/).

Further information about the Ethel Newbold Prize may be found at http://www.bernoulli-society.org/index.php/prizes.

Submission of nominations

Each nomination should include a letter outlining the case in support of the nominee, along with a curriculum vitae. Nominations, as well as any inquiries about the award, should be sent to Oddbjorg Wethelund, Department of Mathematics, Aarhus University, **e** oddbjorg@imf.au.dk.

The deadline for accepting nominations is November 30, 2014.

About Ethel Newbold

Ethel May Newbold (1882–1933) was an English statistician and the first woman to be awarded the Guy Medal in Silver by the Royal Statistical Society, in 1928. A detailed biography of Ethel Newbold may be found in her obituary: Greenwood, M. (1933). Ethel May Newbold. *Journal of the Royal Statistical Society*, **96**, No. 2 (1933), 354–357. http://www.jstor.org/stable/2341811

The Newbold Prize Committee

The Committee members are Eva B. Vedel Jensen (chair), Claudia Klüppelberg and Jon Wellner.

If you hear news of any IMS member or Fellow, or items of interest to IMS members, please tell us, and we'll tell everyone else!

Email your news to bulletin@imstat.org today.

IMS meetings around the world

IMS sponsored meeting
2015 ENAR/IMS Spring Meeting
March 15–18, 2015
Hyatt Regency, Miami, Florida, USA
w http://www.enar.org/meetings/spring2015/index.cfm
ENAR program chair: Mithat Gönen, Memorial Sloan Kettering Cancer Center. ENAR associate program chair: Brisa Sánchez, University of Michigan. IMS program chair: Lurdes Y. T. Inoue, University of Washington.

The 2015 ENAR Spring Meeting will be held at the Hyatt Regency Miami, in Miami, FL, from March 15-18. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry. There are two workshops immediately before the meeting: for junior biostatistics researchers (http://www.enar.org/meetings/JuniorResearch/index.cfm) and "Fostering Diversity in Biostatistics" workshop (http://www.enar.org/meetings/diversity/index.cfm)

Tilmann Gneiting, Group Leader at the Heidelberg Institute for Theoretical Studies (HITS) and Professor of Computational Statistics at the Karlsruhe Institute of Technology (KIT) in Germany, will present the IMS Medallion Lecture *"Uncertainty Quantification in Complex Simulation Models Using Ensemble Copula Coupling"*. The ENAR President's Invited Address will be given by David L. DeMets on *"Big Data, Big Opportunities, Big Challenges."*

Key dates: October 15, 2014 is the deadline for online abstract submission; February 16, 2015 is the deadline for room reservations at Hyatt Regency Miami. For additional hotel and travel information: https://www.enar.org/meetings/spring2015/hotel.cfm

ENAR, 2016–2018

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

IMS sponsored meeting
2017 ENAR/IMS Spring Meeting
March 12–15, 2017
Washington DC
w http://www.enar.org/meetings.cfm

IMS sponsored meeting
2018 ENAR/IMS Spring Meeting
March 25–28, 2018, Atlanta, GA
w http://www.enar.org/meetings.cfm

Joint Statistical Meetings dates, 2015–2020

IMS sponsored meeting
IMS Annual Meeting @ JSM 2015: August 8–13, 2015
Seattle, WA, USA
w http://amstat.org/meetings/jsm/

IMS sponsored meeting
JSM 2016: July 30–August 4, 2016, Chicago, IL, USA
w http://amstat.org/meetings/jsm/

IMS sponsored meeting
IMS Annual Meeting @ JSM 2017: July 29–August 3, 2017
Baltimore, MD, USA
w http://amstat.org/meetings/jsm/

IMS sponsored meeting
JSM 2018
July 28–August 2, 2018
Vancouver, Canada

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

IMS sponsored meeting
JSM 2020
August 1–6, 2020
Philadelphia, PA

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2015

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

2016

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

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

2017

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

2018

IMS Annual Meeting: TBD

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

2019

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

More IMS meetings around the world

IMS co-sponsored meeting NEW

10th Conference on Bayesian Nonparametrics
June 22–26, 2015
Raleigh, NC, USA

w https://stat.duke.edu/bnp10/

IMS Representatives on Program Committees: Ismael Castillo, Jaeyong Lee, Antonio Lijoi, Surya Tokdar, Aad van der Vaart

The Bayesian nonparametrics (BNP) conference is a bi-annual international meeting bringing together leading experts and talented young researchers working on applications and theory of nonparametric Bayesian statistics. It is an official section meeting of the Bayesian nonparametrics section of the International Society for Bayesian Analysis (ISBA).

Abstract submission is open; deadlines are December 1, 2014 for contributed talks, February 1, 2015 for invited and keynote talks, and May 1, 2015 or until max capacity reached (whichever is earlier) for posters.

IMS sponsored meeting NEW

WNAR/IMS Annual Meeting
June 21–24, 2015
Boise State University, Boise, Idaho

The Western North American Region of The International Biometric Society announces the 2015 WNAR Annual Meeting in Boise, Idaho.

More information coming soon, but please mark your calendars now.

The Local organizer for the 2015 WNAR meeting is Kyungduk Ko.

IMS co-sponsored meeting

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

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

[*See poster below*]

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

The ninth international conference on Extreme Value Analysis will take place at the University of Michigan, Ann Arbor. It will feature recent research on the probability and statistics of extreme value phenomena and its important applications to climate and weather, finance, insurance, engineering and computer science.

All students, researchers, practitioners, and scientists with interests in statistics of extremes are welcome to EVA in Ann Arbor!

Abstracts are due February 27, 2015: see http://sites.lsa.umich.edu/eva2015/abstract-submission

Decisions on accepted talks/posters announced (by e-mail) by March 16, 2015.

Details on registration and payment will appear on the conference website shortly.

IMS co-sponsored meeting

International Symposium in Statistics (ISS) 2015

Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familial-longitudinal Data

July 6–8, 2015

Memorial University, St. John's, Canada

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

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

The main topics of interest of this symposium are:

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

It is also of interest to discuss further challenges in analysis when data may contain measurement errors, missing values, and/or outliers, for example. The scientific program will include keynote, special invited, invited, and contributed paper sessions.

IMS co-sponsored meeting

38th Conference on Stochastic Processes and their Applications

UPDATED

July 13–17, 2015, Oxford, United Kingdom

w http://www.oxford-man.ox.ac.uk/events/spa2015

We are delighted to announce that the 2015 Conference on Stochastic Processes and their Applications (SPA2015) will be hosted by the Oxford-Man Institute at the University of Oxford from 13th-17th July, 2015. Martin Barlow (University of British Columbia) will chair the Scientific Committee and Terry Lyons (University of Oxford) will be deputy chair of the Scientific Committee and chair of the local Organising Committee.

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.

IMS co-sponsored meeting

INFORMS Applied Probability Society Conference 2015

July 5–8, 2015, Istanbul, Turkey

w TBC

The next APS meeting will be held at the Koç University campus (Istanbul, Turkey) on July 5–8, 2015.

IMS sponsored meeting

2015 IMS-China Conference on Statistics and Probability

July 1–4, 2015

Kunming, Yunnan, P. R. China

w http://www.2015imschina.com

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

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

IMS co-sponsored meeting

2015 European Meeting of Statisticians

July 6–10, 2015

Amsterdam, The Netherlands

w http://ems2015.nl/

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

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

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

Other meetings around the world

SuSTaIn EdgeCutter One Day Workshop on Astrostatistics

NEW

December 17, 2014
London, UK

w http://www.sustain.bris.ac.uk/ws-astrostatistics/
Contact Guy Nason **e** g.p.nason@bristol.ac.uk

This workshop will present a selection of cutting-edge international research in the rapidly growing discipline of Astrostatistics. The workshop will bring together statisticians who are interested in astronomy and astronomers who are interested in statistical methods. We aim to provide a valuable opportunity to network and to foster extensive future interaction between the two disciplines.

Invited speakers

- Sarah Bridle, University of Manchester, UK
- Alan Heavens, Imperial College, UK
- Jason McEwen, University College, London, UK
- Daniel Mortlock, Imperial College, UK
- Xiao-Li Meng, Harvard University, USA
- Jean-Luc Starck, CEA Saclay, France
- Licia Verde, Universitat de Barcelona, Spain
- Ian Vernon, Durham University, UK

Registration

The registration fee for the workshop is £25, which covers access to the workshop and refreshments including a buffet lunch. Please register before December 1, 2014, via the link at http://www.sustain.bris.ac.uk/ws-astrostatistics/

Limited financial assistance will be available to graduate students and early career researchers. This will be available on a first-come first-served basis and can cover travel and subsistence (but not registration). Please email the organizers to check availability.

Posters

Participants are encouraged to bring posters and should indicate on the registration form that they will be bringing a poster. Partipants that do not indicate in advance that they will be bringing a poster will only be permitted to display it if there is space.

14th Winter School on Mathematical Finance

NEW

January 26–28, 2015
Lunteren, The Netherlands

w https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html
Contact Peter Spreij **e** spreij@uva.nl

The 14th Winter school on Mathematical Finance will take place from January 26–28, 2015 at the Congrescentrum De Werelt in Lunteren, The Netherlands. Special topics are Nonlinear Pricing and Dependence and Model Risk. There will be two mini courses of five hours each, by Damiano Brigo (Imperial College) and Ludger Rüschendorf (University of Freiburg). Special invited lectures will be given by Christian Bender (Saarland University), Freddy Delbaen (ETH Zürich) and Matheus Grasselli (McMaster University). Four short lectures complete the programme, given by Kees de Graaf (Universiteit van Amsterdam), Shashi Jain (NRG), Andrei Lalu (Universiteit van Amsterdam) and Daniël Linders (Katholieke Universiteit Leuven).

Participants who would like to present a poster will be given this opportunity. The precise format and scheduling of a poster session will be decided on later, depending on the number of such participants. Participants who want to present a poster are requested to contact the organizers.

Registration and further information, including about grant support for young researchers, is available from the website above.

Stochastic Networks Conference

NEW

June 20–24, 2016
University of California at San Diego

w TBD

Details of this conference will follow. Please mark your calendars.

If you're organizing a meeting and want it listed here, please visit the "submit a meeting" webpage and fill in the details. Easy.

imstat.org/submit-meeting.html

It's free publicity…

12th Workshop on Stochastic Models, Statistics and their Applications
NEW

February 16–20, 2015

Wrocław, Poland

w http://www.smsa2015.rwth-aachen.de/home.html

Following the successful previous workshops of the Society of Reliability, Quality and Safety (AG ZQS), the conference will put together recent advances and trends in areas related to stochastic modeling, statistical inference and their applications. Contributions motivated by or addressing issues in engineering, industry and natural sciences are particularly welcomed, as several focused sessions are devoted to such topics. The workshop aims at facilitating the exchange of research ideas, stimulating collaboration and promoting young researchers. In 2015 the workshop will be organized as, but not limited to, a German-Polish one and takes place at Wrocław. It is organized by the Institute of Mathematics of Wrocław UoT, in collaboration with the Polish Mathematical Society, the Institute of Computer Engineering, Control and Robotics of Wrocław UoT and the Institute of Statistics of RWTH Aachen University. More information at the website above.

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

A Contributed Proceedings Volume of selected papers will be published in the Springer series *Proceedings in Mathematics and Statistics.* The abstract submission deadline has passed.

Wrocław, located is the largest city in Lower Silesia in Poland. It is home to 630,000 people within the city limits; the metropolitan area has a population of 1.2 million making it the largest city in Western Poland. For more information please visit www.wroclaw.pl

Wrocław, Poland

Workshop on Statistical Learning of Biological Systems from Perturbations
NEW

May 31–June 5, 2015

Ascona, Switzerland

w http://www.cbg.ethz.ch/news/ascona2015

This workshop will be held in Ascona, Switzerland, May 31 to June 5, 2015.

Advances in biotechnology have made genome-scale measurements routine, including most recent techniques for perturbing individual genes in a targeted manner. These interventional data hold the promise to infer biological networks and to move forward systems biological approaches significantly. A major challenge now is to use the vast amount of data generated from these technologies and to devise appropriate statistical models and computational inference methods. Unlike observational data, interventional data can reveal causal relationships among genes or other biomolecular entities. As such, the statistical analysis and computational integration of perturbation data is an important step towards large-scale biological system identification with abundant applications in biology and medicine.

This workshop will (i) explore recent advances and open problems in statistical learning, data integration, and causal inference of biological systems; (ii) present biomedical applications to recent genome-wide perturbation data, such as RNA interference data, obtained, for example, from cancer cells or cells infected by pathogens; and (iii) facilitate meaningful interaction between biomedical and quantitative researchers.

Confirmed invited speakers include: Brenda Andrews (Donnelly Centre), Alexis Battle (Johns Hopkins University), Roderick Beijersbergen (Netherlands Cancer Institute), Michael Boutros (DKFZ, Heidelberg), Anne Carpenter (Broad Institute), Bernd Fischer (EMBL/DKFZ Heidelberg), Marloes Maathuis (ETH Zurich), George Michailidis (University of Michigan), Lars Steinmetz (EMBL Heidelberg and Stanford), with others still pending.

Contributed presentations will also be welcome.

More details and pre-registration instructions are available at http://www.cbg.ethz.ch/news/ascona2015

We strongly encourage pre-registration, in previous years places have filled up quickly.

Niko Beerenwinkel
Peter Bühlmann
Darlene Goldstein
Wolfgang Huber

Employment Opportunities around the world

Canada: Ottawa, ON

University of Ottawa

Tenure-Track position in statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20106767

Canada: Waterloo, ON

University of Waterloo

Lecturer Positions - Statistics and Actuarial Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19601782

Canada: Waterloo, ON

University of Waterloo

Actuarial Science - Tenure track or Tenured

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19992710

Canada: Montreal, QC

HEC Montreal

Tenure-track position in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20301924

Hong Kong

The Hong Kong University of Science and Technology

Tenure-track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20091709

Switzerland: Lausanne

EPFL

Faculty Positions in Statistics or Computational Applied Mathematics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19815986

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Positions

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

United Kingdom: Bristol

University of Bristol

Research Assistant/Associate in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19641901

Taiwan: Taipei

Academia Sinica

Institute of Statistical Science

Research Positions

The Institute of Statistical Science, Academia Sinica, is seeking candidates for tenure-track or tenured research positions at the level of assistant or associate research fellow available in 2015. Candidates in all areas of Statistics will be considered. Candidates should have a PhD degree in statistics or areas related to data sciences. 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. Ching-Kang Ing
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: cking@stat.sinica.edu.tw

Applications should be received by December 31, 2014 for consideration.

For more information, please visit http://www.stat.sinica.edu.tw/statnewsite/?locale=en_US

The Hong Kong University of Science and Technology
Department of Information Systems, Business Statistics and Operations Management

Tenure-track Assistant Professor

Applications are invited for a tenure track Assistant Professor position in Statistics starting July 1, 2015. Appointment at a senior level could be made for applicants with exceptionally strong credentials. Demonstrated or potential excellence in research and teaching, and a doctoral degree in statistics or a related field by the time of appointment are required.

The statistics group, housed in the School of Business and Management, is also heavily involved in an undergraduate degree program in Risk Management and Business Intelligence. Applicants with prior business school experience or interests in business related statistical research are especially welcome. Excellent computational skills in handling large and complex data sets is a plus.

Salary will be highly competitive. Fringe benefits include medical/dental insurance, annual leave, and housing benefits. Applications will be accepted until positions are filled. Those received by January 31, 2015 will receive full consideration.

Please submit a CV, the names and addresses of three referees to
Recruitment Committee of Statistics Group
Department of Information Systems, Business Statistics and Operations Management
The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, HONG KONG
Email: statrecruit@ust.hk Fax: (852) 2358-2421

United Kingdom: Coventry

University of Warwick
Professor of Statistics and Data Science/Director of the Warwick Data Science Institute
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20167351

United Kingdom: Edinburgh

University of Edinburgh
The Thomas Bayes Chair of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19768475

United States: Tempe, AZ

Arizona State University
Faculty Positions in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20379108

United States: Fullerton, CA

California State University, Fullerton
Tenure Track Faculty Position - Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20318003

United States: Los Angeles, CA

UCLA
UCLA Department of Mathematics Faculty Positions 2015-16
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19560832

United States: Los Angeles, CA

UCLA
Statistics/Social Sciences Tenure Track Faculty
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20158944

United States: San Diego, CA

San Diego State University
Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20111994

United States: Santa Barbara, CA

University of California, Santa Barbara
Tenure-Track Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19950797

Continues on **page 32**

Employment Opportunities *continued*

United States: Stanford, CA

Stanford University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159915

United States: Stanford, CA

Stanford University

Stein Fellow

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159907

United States: New Haven, CT

Yale University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20106288

United States: New Haven, CT

Yale School of Public Health

Assistant/Associate Professor, Biostatistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20314438

United States: Athens, GA

University of Georgia

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20029673

United States: Atlanta, GA

The School of Mathematics at 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: Atlanta, GA

Georgia Tech (The H. Milton Stewart School of Industrial & Systems Engineering)

Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20061039

United States: Iowa City, IA

University of Iowa, Department of Biostatistics

FACULTY POSITIONS IN BIOSTATISTICS

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19602313

United States: Champaign, IL

University of Illinois

Assistant/Associate/Full Professor - Department of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159049

United States: Bloomington, IN

Indiana University

Assistant and Full Professor Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20174576

United States: Indianapolis, IN

Eli Lilly

Associate Consultant-Statistician

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19736148

United States: Indianapolis, IN

Eli Lilly

Associate Consultant - Statistician Computation

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19735961

United States: Indianapolis, IN

Eli Lilly

Senior Statistician - Computation

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19735738

United States: Lawrence, KS

University of Kansas

Bischoff-Stouffer Distinguished Professor of Mathematics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20377671

United States: Boston, MA

Boston University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159265

United States: Bridgewater, MA

Bridgewater State University

Department of Mathematics, Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19301039

United States: Bridgewater, MA

Bridgewater State University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20379307

United States: Ann Arbor, MI

The University of Michigan

Tenure-track Assistant Professor

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

United States: East Lansing, MI

Michigan State University

Chairperson

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20028781

United States: Columbia, MO

University of Missouri

Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19931435

United States: Columbia, MO

University of Missouri

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19931296

United States: Mississippi State, MS

Mississippi State University

Assistant/Associate/Full Research Professor - Experimental Statistics/ Biometrics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20225594

United States: Bridgewater, NJ

Eli Lilly

Associate Consultant - Statistician Computation

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19736033

United States: Bridgewater, NJ

Eli Lilly

Senior Statistician - Computation

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19735902

United States: New Brunswick, NJ

Rutgers

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20193795

United States: Princeton, NJ

Princeton University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19772777

United States: New York, NY

New York University, Stern School of Business
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 2015–2016 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 2015–16 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.

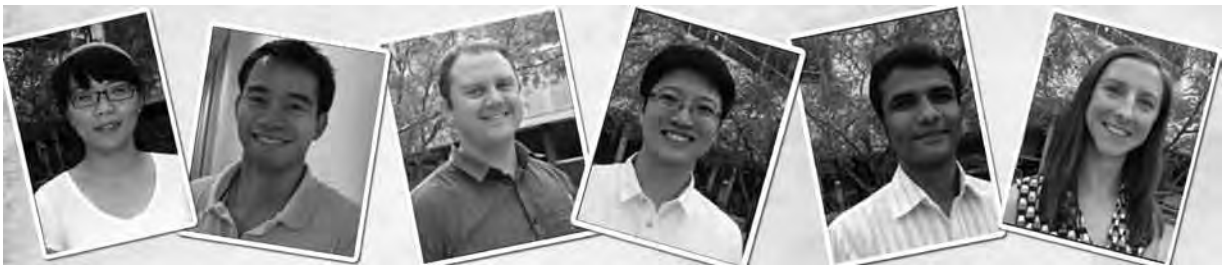
Please submit all application materials by December 15, 2014, to assure full consideration.

Please go to apply.interfolio.com/25737, Stern's faculty application system, 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://w4.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.

Continues on **page 35**



samsi
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2015-16 Postdoctoral Fellowships at SAMSI

Up to 6 postdoctoral fellowships are available at the Statistical and Applied Mathematical Sciences Institute for either of the two SAMSI Research Programs for 2015-16: **Challenges in Computational Neuroscience (CCNS)** and **Statistics and Applied Mathematics in Forensic Science (Forensics)**. Appointments, for up to 2 years, will begin in August 2015, and will offer competitive salaries, travel stipend and health insurance.

Challenges in Computational Neuroscience (CCNS)

The CCNS program will develop mathematical and statistical methods for neuroscience applications to understand the underlying mechanisms that bridge multiple spatial and temporal scales, linking the activity of individual components (e.g., molecular biology, genetics, and neuron networks), and their interactions to the complex dynamic behavior of the brain and nervous system. Brain theory, modeling, and statistics will be essential to turn data into better understanding of the brain. The CCNS program will address the underlying methodological, theoretical, and computational challenges. Probability and statistics, dynamical systems, geometry, and computer science will be combined with respect to theory and in applications.

Program on Statistics and Applied Mathematics in Forensic Science (Forensics)

In response to the NRC, White House, and congressional call for forensic reform, that includes a greater statistical and mathematical presence, SAMSI announces a yearlong program in forensic science. The central goal is to strengthen the statistical and applied mathematical bases of forensic science. Forensic science is, in major part, based upon statistical comparisons of the characteristics of a material left at a crime scene to characteristics of a source or suspect. These comparisons are often acknowledged by forensic scientists to be highly subjective. A series of reports by the National Research Council (NRC) has raised deep questions about major forms of forensic evidence, and has made a clear case for a needed statistical underpinning for forensic procedures, including fingerprints, patterns and impressions (footprints and tire tracks), toolmarks and firearms, hair, fibers, documents, paints and coatings, bloodstains, and fire debris. Working groups are planned on statistics and forensic science; pattern evidence; bias; imaging; quality control for forensics laboratories; identifying where statistics can have a quick impact; and educating mathematical scientists about forensics and forensic scientists about the mathematical sciences.

Application to SAMSI

In your cover letter, please indicate your interest in one of the two programs (CCNS or Forensics).

Criteria for selection of SAMSI Postdoctoral Fellows include demonstrated research ability in statistical and/or applied mathematical sciences, computational skills along with good verbal and written communication abilities, and finally, a strong interest in the SAMSI program areas. The deadline for full consideration is December 15, 2014, although later applications will be considered as resources permit.

SAMSI is an AA/equal opportunity employer All qualified applicants are encouraged to apply, especially women and members of minority groups.

To apply, go to mathjobs.org, SAMSIPD2015 Job #6133

Employment Opportunities *continued*

United States: Ithaca, NY

Cornell University

Two Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20336322

United States: Cincinnati, OH

Xavier University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20242451

United States: Philadelphia, PA

Wharton Department of Statistics, University of Pennsylvania

Tenure-track Position

The Department of Statistics of the Wharton School, University of Pennsylvania, is seeking applicants for a full-time, tenure-track Assistant Professor position. Candidates 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, 2016 is acceptable) from an accredited institution. The appointment is expected to begin July 1, 2015.

The department, located in the business school, provides services to the entire university and is interested in applicants in all scientific areas.

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.

United States: Pittsburgh, PA

Carnegie Mellon University

Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19839207

United States: Brookings, SD

South Dakota State University

Assistant or Associate Professor of Statistics

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International Calendar of Statistical Events

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

October 2014

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

October 27–30: Grahamstown, South Africa. **56th Annual Conference of the South African Statistical Association w** http://www.sastat.org.za/sasa2014

November 2014

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

November 20–21: Boston, Massachusetts, USA. **Integrative Approaches to Understand Allelic Function w** http://www.hsph.harvard.edu/2014-pqg-conference/

December 2014

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

December 11–12: Wagga Wagga, NSW, Australia. **Applied Statistics and Public Policy Analysis w** http://csusap.csu.edu.au/~azrahman/ASPPAC2014

NEW December 17: London, UK. **SuSTaIn EdgeCutter one day Workshop on Astrostatistics w** http://www.sustain.bris.ac.uk/ws-astrostatistics/

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

December 20–22: Athens, Greece. **Greek Stochastics ζ w** http://www.stochastics.gr/meetings/zeta/

January 2015

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

January 12–16: Kolkata, India. **International Conference on Robust Statistics 2015 w** http://www.isical.ac.in/~icors2015/

January 15-16: NIMBioS at the University of Tennessee, Knoxville. **Lymphoid Cells in Acute Inflammation w** http://www.nimbios.org/workshops/WS_lymphoid

NEW January 26–28: Lunteren, The Netherlands. **14th Winter School on Mathematical Finance w** https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html

February 2015

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

March 2015

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

April 2015

April 8–10: NIMBioS, Knoxville, Tennessee, USA. **Information and Entropy w** http://www.nimbios.org/workshops/WS_entropy

May 2015

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

May 26–28: Haikou, Hainan, China. **24th International Workshop on Matrices and Statistics (IWMS-2015)** **w** http://iwms2015.csp.escience.cn/dct/page/1

NEW May 31–June 5: Ascona, Switzerland. **Workshop on Statistical Learning of Biological Systems from Perturbations** **w** http://www.cbg.ethz.ch/news/ascona2015

June 2015

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

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

NEW ims June 21–24: Boise, Idaho, USA. **2015 WNAR/IMS Annual Meeting** **w** TBC

NEW ims June 22–25: Raleigh, NC, USA. **10th Conference on Bayesian Nonparametrics** **w** https://stat.duke.edu/bnp10/

June 29–July 2: Athens, Greece. **9th Annual International Conference on Statistics** **w** http://www.atiner.gr/statistics.htm

June 30–July 4: Piraeus, Greece. **16th Applied Stochastic Models and Data Analysis International Conference (ASMDA)** **w** http://www.asmda2015.com

July 2015

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

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

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

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

NEW ims July 13–17: Oxford, UK. **38th Conference on Stochastic Processes and Applications** **w** http://www.oxford-man.ox.ac.uk/events/spa2015

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

International Calendar *continued*

August 2015

ims August 8–13: Seattle, WA. **IMS Annual Meeting at JSM 2015.** **w** http://amstat.org/meetings/jsm/

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

September 2015

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

March 2016

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

June 2016

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

NEW June 20–24: University of California at San Diego. **Stochastic Networks Conference** **w** TBD

July 2016

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

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

July 2017

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

July 2018

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

July 2019

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

August 2020

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

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

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

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

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

Volume 43 · Issue 7

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