

# IMS Bulletin



#### **December 2013**

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### **Farewell from the Editor**

Dimitris Politis writes: Why is that in adult life three years pass in an eye-blink while in high school they seem an eternity? Do we perceive time on a logarithmic scale as in the Weber-Fechner law of perception of sensations? Or is it that we pack our days so full with appointments and activities that we have to race through them without a breather?

The other day—or was it the other year?—I was giving a talk in the Economics department of my university. I was debating whether to repeat some results I had covered in my previous talk in that same room to avoid boring my audience but then I



looked around: it was clear that only 20-25% of the audience could even have attended my previous talk as it had taken place three years earlier!

It was such a brief three years ago that I took over from Xuming He as Editor of the Bulletin. The task seemed daunting at first but became manageable due to the untiring efforts of our invaluable Assistant Editor, Tati Howell. In those three years, Tati and I have tried to keep our readers informed and entertained. In this, we were aided by our group of wonderful Contributing Editors: Terence's Stuff, a cornerstone of the Bulletin, Rick's Ramblings that rambled on(line) only to be replaced by the ever so witty X-L Files, and Anirban's Angle that quickly unfolded to be a thesaurus of stimulating thoughts on statistical education and practice, as well as more occasional contributions from others.

It was also in these last three years that, on the recommendation of several IMS members including former president Ruth Williams, Tati and I set out on the mission to revamp and modernize the online presence of the Bulletin (bulletin.imstat.org). Whereas in olden days it was only possible to download a PDF copy of the printed *Bulletin*, now and for the last two and a half years—all Bulletin articles exist as separate links that are individually accessible and searchable. In addition, there is an interactive, blog-like feature to the new Bulletin: readers can post their own comments after an article. Readers can also start their own thread of discussion on a topic of their choice in our Open Forum!

These are still relatively new features and people have not yet taken advantage of them fully. But I would like to encourage our readers to participate in the open discussion that the new Bulletin affords; this can be a powerful tool. To give an example, Terry's "Rant" in the June/July 2013 issue (http://bulletin.imstat.org/2013/05/terences-stuff-a-rant/) was a thought-provoking article on gender (in)equality and the apparent under-representation of women in IMS's special lectures. How does one go about addressing such an issue? Should there be quotas or shall the IMS awards be given regardless of gender, ethnicity, etc., on a strictly meritocratic basis? Is the nomination procedure or the actual selection to blame? Even deciding whether indeed there has been a selection bias is not a trivial

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#### **Contact information**

IMS Bulletin Editor: Dimitris PolitisAssistant Editor: Tati Howell

**Contributing Editors:** 

Peter Bickel, Anirban DasGupta, Nicole Lazar, Xiao-Li Meng, Terry Speed

Contact the IMS Bulletin by email:

e bulletin@imstat.org

w http://bulletin.imstat.org

fhttps://www.facebook.com/IMSTATI

Contact the IMS regarding your dues, membership, subscriptions, orders or change of address:

- IMS Dues and Subscriptions Office 9650 Rockville Pike, Suite L3503A Bethesda, MD 20814-3998 USA
- **t** 877-557-4674 [toll-free in USA]
- t +1 216 295 5661[international]
- **f** +1 301 634 7099
- e staff@imstat.org

Contact the IMS regarding any other matter, including advertising, copyright permission, offprint orders, copyright transfer, societal matters, meetings, fellows nominations and content of publications:

- Executive Director, Elyse Gustafson IMS Business Office
   PO Box 22718, Beachwood
   OH 44122, USA
- t 877-557-4674 [toll-free in USA]
- **t** +1 216 295 5661[international]
- f +1 216 295 5661
- e erg@imstat.org

#### <u>Executive Committee</u>

President: Bin Yu

president@imstat.org

President-Elect: Erwin Bolthausen

president-elect@imstat.org

Past President: Hans R. Künsch

president-past@imstat.org

Treasurer: Jean Opsomer

jopsomer@stat.colostate.edu

Program Secretary: Judith Rousseau

rousseau@ceremade.dauphine.fr

Executive Secretary: Aurore Delaigle

a.delaigle@ms.unimelb.edu.au

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### **IMS Members' News**

#### **Terry Speed receives Australian Prime Minister's Award**

Our columnist Terry Speed, head of the Division of Bioinformatics at the Walter and Eliza Hall Institute of Medical Research in Melbourne, has been awarded the Australian Prime Minister's Prize for Science. The prize recognizes Terry's contribution to cancer research via his work in bioinformatics, where he analyses data from cancerous cells. Terry writes about the attention he received in *Terence's Stuff* on page 14 (and features in a cartoon on page 15!)

#### Kenneth P. Burnham awarded 2013 NISS Jerome Sacks Award

Kenneth P. Burnham was selected as the 2013 Jerome Sacks Award for Cross-Disciplinary Research. The award, named in honor of Jerry Sacks, founding director of NISS, was established to recognize "sustained, high-quality cross-disciplinary research involving the statistical sciences." Burnham was cited for "outstanding and influential contributions to statistical ecology with novel methods of inference, data analysis, and computation used throughout the world."

In a statement to express his gratitude, Burnham wrote, "I am honored, and pleased, to receive the Jerome Sacks award for sustained interdisciplinary research. I am a statistician; however, I also have a degree in biology. For 41 years I have worked at the interface of statistics and wildlife–fisheries–ecology. Most of this time I have been "embedded" in the wildlife discipline working as a team member. This is not consulting; this is being a fully involved member of a team, having a good understanding of the subject to which I apply my statistical expertise: I can speak the applied subject matter language. This is necessary to having a long-term cross disciplinary career, a career that has been very rewarding and fulfilling to me. Whereas, for most of my career I was employed by wildlife organizations, hence not a statistics department, I made sure to keep my identity as a statistician. I have kept close contact with other statisticians (and certainly worked with many), and I read both literatures. I routinely attend statistics conferences and wildlife-ecology conferences; but I make it clear I am a statistician. Over the course of my career this "identity" issue is one I have thought about and worked to maintain. I urge others doing long-term cross disciplinary statistical research and application to not let themselves become isolated from statistics colleagues.

"I have contributed to the theory and application of capture-recapture and distance sampling methods and models, and to model selection. Such theoretical research has lead to working on real and important issues; this applied work has been at times stressful, but in the end, has been very rewarding. For example, I have worked on the analysis of the Northern Spotted Owl demography data since 1989. Other contentious subjects I have been involved in include endangered fish (e.g., salmonids), abundance estimation of marine mammals, waterfowl harvest, and illegal killing of elephants for ivory poaching. I reiterate, in all cases I have been part of a team working on these issues. The Jerome Sacks award is great for the profession, in my opinion; and I am honored and delighted to receive this award. Thank you."

Burnham is an emeritus professor at Colorado State University (CSU) and an independent consultant. He was a statistician and senior scientist at the United States Geological Survey, Biological Resources Discipline and the Colorado Cooperative Fish and Wildlife Research Unit at CSU. He is interested in design of studies for sampling biological populations, especially for estimation of population abundance and population dynamics parameters. He also specializes in statistical inference methods for ecological, wildlife, and fisheries studies, and data-based modeling of biological processes, including model selection and assessing model selection uncertainty.

### Editor's Farewell continued

#### Continued from cover

question since the statistical features of the award-eligible population (e.g., age, gender, etc.) are not available.

These difficult issues have since been the subject of heated discussion within the IMS Council. The interest of past president Hans Künsch in this topic was made apparent by his quick online comment after Terry's column at the *Bulletin* website. The matter was then put on the Council's agenda, and the IMS Executive Committee has just put together a recommendation for the future that will hopefully ensure greater attention to diversity without imposing a quota system; you can read the full details of the Council's motion below.

Had there been more public (and open!) discussion on the matter, it could/would have weighed in on the Council's deliberations. So the moral is: participate in the online forum of the *Bulletin*, and make your voice heard!

In saying my farewells, I am very happy to leave the *Bulletin* in excellent hands as Anirban DasGupta has agreed to be the Editor for the next three years. The downside is that Anirban's Angle [see page 10] will take a necessary three-year hiatus. However, Anirban has appointed a wonderful team of six Contributing Editors, who will also start on January 1, but I won't spill the beans now...

Look us up—preferably online!—in the H<sup>3</sup> New Year: Happy, Healthy, Hopeful(ly)!

#### Sally Morton receives 2013 NISS Distinguished Service Award

Professor Sally Morton, Chair of the Department of Biostatistics at the University of Pittsburgh, was one of the two recipients of the 2013 National Institute of Statistical Sciences (NISS) Distinguished Service Awards. The awards, to Morton and Thomas Gerig, were presented by Alan Karr, NISS Director, in August at the NISS/SAMSI (Statistical and Applied Mathematical Sciences Institute) reception at JSM.

NISS established the Distinguished Service Awards to recognize individuals who have given extraordinary service that significantly advances NISS and its mission. As Karr noted, the recipients, "didn't *have* to do what they did for NISS, but did it because they believe in NISS and what it does for the statistics community."

Sally Morton was given the award for her long-term service to the Board of Trustees for NISS, serving on the Executive Committee, the Nominating Committee and the National Presence Committee. She is currently serving on the Affiliates Committee and also on the SAMSI Governing Board. Thomas Gerig, Emeritus Professor of Statistics at North Carolina State University, was recognized for his four years as Assistant Director for the NISS and SAMSI Affiliates Program, and serving NISS as Treasurer for several years.



□ = access published papers online

IMS Journals and Publications

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

mhttp://projecteuclid.org/aos

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

http://projecteuclid.org/aoas

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

Mhttp://projecteuclid.org/aop

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

Mhttp://projecteuclid.org/aoap

Statistical Science: Jon Wellner

http://imstat.org/sts

Mhttp://projecteuclid.org/ss

IMS Collections

http://imstat.org/publications/imscollections.htm Mhttp://projecteuclid.org/imsc

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

IMS Co-sponsored Journals and Publications

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

Mhttp://projecteuclid.org/ejs
Electronic Journal of Probability: Michel Ledoux

Mhttp://ejp.ejpecp.org

Electronic Communications in Probability:
Anton Bovier

mhttp://ecp.ejpecp.org

Current Index to Statistics: George Styan http://www.statindex.org

[20] log into members' area at imstat.org

Journal of Computational and Graphical Statistics:
Thomas lee

http://www.amstat.org/publications/jcgs ©log into members' area at imstat.org

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

nttp://mistat.org/ssunhttp://projecteuclid.org/ssu

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

IMS-Supported Journals

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

Mhttp://projecteuclid.org/aihp

Bayesian Analysis: Marina Vannucci

Mhttp://ba.stat.cmu.edu

Bernoulli: Eric Moulines

http://www.bernoulli-society.org/
nttp://projecteuclid.org/bj

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

Mhttp://projecteuclid.org/bjps

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

#### IMS-Affiliated Journals

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

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

### XL-Files: Romantic Regression towards the Mean



## Contributing Editor Xiao-Li Meng recently officiated at the wedding of two young colleagues.

The International Year of Statistics seems to have brought me some unusually exciting, and challenging, speaking opportunities. The last XL-Files documented my 24 second Ig Nobel fame, which came with the grand challenge of explaining statistics clearly to a lay audience in seven words. Another equally unique and nerve-wracking experience came only a few weeks later. This time I was asked to officiate a wedding of two members of my Happy Team.

Are you kidding me? A statistician officiating a wedding? Well, read on, especially if you have no one to kid around with tonight, or must sleep in your study where my XL-Files await.

### Opening Remarks at the wedding of Victoria and Yves:

Ladies and Gentlemen, almost all wedding ceremonies are conducted in one universal language, Love. But Victoria and Yves are so special that today we will employ two universal languages to celebrate their wedding: Love and Statistics. Please be seated, especially if the very mention of statistics makes you dizzy.

Let me start by asking a simple question: What are the chances that two statisticians fall in love with each other, during a course entitled "Real-life Statistics: Your Chance for Happiness (or Misery)", which started with a module on Romance? If you find that question too difficult, let's try this one: What's the connection between Statistics and Romance?

The answer is soulmate. Have you found yours? If not, there are plenty of online sites that promise to find one for you, if you are willing to fill out a questionnaire and make a sizeable donation. But what is their magic formula? Well, the answers you provide about your lovely self and your loving desire will be fed into a formula called Romantic Regression, a term I was told was coined by someone in another school in Cambridge too small to have a statistics department. This magic formula, which is known to statisticians as Logistic Regression, will then seek another lost soul with the highest matching probability to yours.

Being top statistics students in the right school in Cambridge, who were also too poor to make a sizeable donation, Yves and Victoria knew a better way to find their soulmates. Instead of relying on any magic formula, they found that magical feeling in each other's hearts by joining the team that designed and taught the aforementioned happy course. Being a not too shabby statistician myself, I can give you a 99% confidence interval on when, and where, that magical moment took place. It was between July 12 and 22, 2010, on the Fudan campus in Shanghai, where Yves and I were co-teaching a version of the happy course for a study abroad program. I had also invited Victoria and a few other members of the Happy Team to join us for a short period.

Harvard professors do not have access to their teaching fellows' email boxes. But I had my data, all observational, nevertheless signaling. Since statisticians make a living by extracting signals from noisy data, please allow me to demonstrate how I turned

my very limited data into a heartwarming discovery. Along the way, I hope I can make statistics less (or more) dizzying for you.

Data Point One: Being an extremely well-mannered and courteous young man, Yves had always responded to my inquiries and requests in the most pleasant and helpful way. However, somewhere during that ten days when I asked Yves if another Happy Team member could join an excursion Yves and Victoria had already planned, Yves' answer was as dazzling as his tango moves, starting from the difficulty of getting train tickets, to uncertainty about where they would actually visit, to whether they would return the same evening. Statistical Lesson One: A statistically significant test is the one where the data are in serious contradiction to the hypothesis that nothing is going on.

Data Point Two: Before their excursion, only Yves had the flu. After they returned, Victoria was so sick that she lost her voice. Statistical Lesson Two: Although association does not imply causation, it is often a good first step to build evidence, especially when the time direction is consistent with the causal direction.

Data Point Three: On August 15, 2010, Victoria wrote to me: "I thank you from the bottom of my heart for the trip to Shanghai. Believe it or not, it actually changed my life in more than one way ... It was truly unbelievable and unforgettable." Statistical Lesson Three: Good data can speak for themselves.

Alright, enough advice on statistics. Time for advice on marriage, as Victoria and Yves have asked me to provide. Advice about marriage from a statistician? Yes, because statisticians understand well the universal law of regression towards the mean. In layperson's terms, it simply means that if you are at

the top, then there is only one direction to go. Most of those who have ever chased high-return stocks can give personal and painful testimony about this fact. Statistically speaking, when two people fall in love to the degree that they decide on marriage, their expectations of each other, and indeed of themselves, are extremely high. Some of these expectations are reflections of reality and hence sustainable. But others are idealizations, or what we statisticians would call a model. But nobody can be a model 24/7, not even a super-model.

The real trouble is that whereas we all give ourselves a little slack when we fail to meet our own expectations, we tend to be much less forgiving when others fail to meet our expectations. The law of regression towards the mean tells us that disappointment is inevitable when we start with extremely high expectations. I am not suggesting that in order to maintain a healthy marriage you have to try everything under the sun to live up to your soulmate's expectations. That's not sustainable, and that is exactly the essence of the law of regression towards the mean. What I do suggest is that every time you feel the urge to launch a major complaint about your soulmate because she or he has become so different from the person you fell in love with, pause for a second and ask yourself if it is just possible that she or he feels the same way, or even more so, about you? So my advice for maintaining a good marriage is: be yourself, but put yourself in your spouse's shoes once in a while. However, don't overdo it. I am not asking you to put yourselves in your spouse's clothing, because that would be considered cross-dressing, at least for many of us.

Clearly the only logical conclusion is that statisticians should be among the most desirable soulmates. Yves and Victoria obviously understand that simple fact, which is why I signed Yves' PhD thesis in statistics as a member of his thesis committee, and I officially presented Victoria her PhD degree in statistics as the dean of the graduate school. I am therefore extremely happy and very grateful that today I have the opportunity to present them with a joint PhD: *Perfectly Happy Devotion* to each other.

#### **Exchange of Rings:**

A ring is a perfect symbol of regression towards the mean, because whereas any ring is expected to be a perfect circle mathematically, a closer inspection would almost always reveal some charming individualities. It therefore symbolizes our common desire for perfect love, but it also reminds us that to love perfectly, we must accept each other for who we are.

#### **Closing Remarks:**

Victoria and Yves, it has been a true privilege for me to have both of you as my students and dear friends, and I am certain that all your family members, friends, and colleagues

feel the same joy to have you as a part of their lives. Now you are just a few minutes away from officially being in each others' lives for good. Everybody, here and elsewhere, will expect your marriage to be as perfect as marriage can be, and I am as confident as a statistician can be that you will defy the law of regression towards the mean.

But before I proceed with the formal declaration of marriage, Yves, I'd like to tell you what I expect from you. Yves, as you know, at the end of the declaration, I will give you permission to kiss the bride. Of course both of us know well that you do not need my or anyone else's permission to kiss Victoria—after all, I suspect that was how you made her voiceless in China. But this time I expect you will gather all your charm and strength, to give her the kiss of her life and your life. That is, instead of making her voiceless, make her breathless and speechless. Can you deliver that?

In case you wonder whether I delivered what Victoria and Yves had expected from me, may I brag that now I have a non-empty client base for those who want "a funny, personal, and intellectually engaging wedding ceremony"? I never brag without data—during the Russianstyle wedding feast, a couple approached me: "If we were not married, we definitely would have hired you!"

Are you married?



# IMS Council votes on equal opportunity for IMS Special Invited Lectures

In reaction to the absence of women among IMS special invited lecturers in 2013 (see the article by Terry Speed in the June/July issue, http://bulletin.imstat.org/2013/05/terences-stuff-a-rant/), Council had an intensive discussion at the Council meeting in Montreal and by email during September and October. In the end, the following motion was proposed and approved by Council:

In order to make sure that IMS committees take the Resolution on Equal Opportunities fully into account in their work and search seriously for qualified candidates that tend to be overlooked by the traditional procedure, the Council approves the following three steps:

- 1. The housekeeping email that each committee gets from the Executive Director once it is set up in Basecamp is modified and extended. Currently, this email just points the members to the committee guidelines. In the future it will include the text of the Equal Opportunity Resolution and it will say the Council asks the committee to take this resolution into account in their work. This applies to all IMS committees.
- 2. The President contacts the Chair of the Committee on Special Lectures before it starts its work to discuss how to ensure awareness of the issue of diversity. The Executive Director reminds the President to do this when the new chair is appointed, and the past-President is encouraged to share his/her experience with the new President when the new members to the committee are appointed.
- 3. At the name gathering stage, the Committee on Special Lectures compiles two separate non-empty lists for each type of special lectureship, one for men and one for women. It is expected that the committee considers and discusses the candidates on both lists seriously, but there is no quota for the voting. The committee is asked to pay attention also to other groups which had not been well represented in the past, and include members of them in the respective lists, if possible.

The motion represents a compromise between different views among Council members, taking some positive action without introducing quotas and without putting a substantial administrative burden on the committee. The specific steps address the under-representation of women, but it implies an obligation to consider similar steps for other groups who may be considered by many at a later point as under-represented.

#### IMS Resolution on Equal Opportunities

The IMS is an equal opportunity organization, which seeks to ensure that all of its members participate in all of its activities to the fullest extent that is appropriate, regardless of age, sex, race or ethnicity, subject matter specialty, or any other characteristic. These opportunities for participation include, but are not restricted to membership of its standing committees, its program committees for sponsored and co-sponsored meetings, and its honors and awards, including fellowships and special lectureships.

### I IMS Awards: nominate now

#### Tweedie New Researcher Award: nominate by December 1

The IMS Tweedie New Researcher Award was created in memory of Richard L. Tweedie to finance the winner to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference (at Harvard University, July 31–August 2, 2014, immediately before JSM in Boston. To be eligible for the 2014 award, the new researcher must have received their doctoral degree in 2008–2013, and the nominee should be a member of the IMS at time of nomination. See http://www.imstat.org/awards/tweedie.html

#### Harry C. Carver Medal: nominate by February 1, 2014

The Carver Medal was created in honor of one of IMS's founders, Harry C. Carver. The medal is for exceptional service specifically to the IMS and is open to any member of the IMS who has not previously been elected President. The medal will be awarded at a ceremony at JSM Boston. See http://www.imstat.org/awards/carver.html

#### IMS Fellowship: nominate by January 31, 2014

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

- (1) a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or
- (2) a candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas.

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

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

### COPSS Awards 2014: nominations open

Each year, the statistical profession recognizes outstanding members at the Joint Statistical Meetings in an awards ceremony organized by the Committee of Presidents of Statistical Societies (COPSS). Nominations are an important part of the process, and everyone can contribute—from the newly minted PhD graduate to the pharmaceutical statistician to the longtime professor. All statisticians see excellence in their mentors, colleagues, and management and it's important to single out those persons who make exceptional contributions to the profession. So take a few minutes, review the various awards on tap this year, and see if you can identify worthy individuals.

The following awards are being presented at the 2014 JSM in Boston, Massachusetts.

The Fisher Lectureship is awarded yearly for outstanding contributions to aspects of statistics and probability that closely relate to the scientific collection and interpretation of data. The award exists to recognize the importance of statistical methods for scientific investigations. The awardee's hour-long lecture is delivered during JSM. Eligible nominations should be sent in PDF format by December 15, 2013 to the Fisher Award committee chair, Terry Speed at terry@stat. berkley.edu.

The Presidents' Award is presented yearly in recognition of outstanding contributions to the statistics profession. It is typically granted to an individual who has not yet reached his or her 41st

birthday. In the special case of an individual who has received his or her statistically related terminal degree fewer than 12 years prior to the nomination deadline, the individual will be eligible if he or she has not yet reached his or her 46th birthday during the year of the award. Eligible nominations should include a current curriculum vitae, the nominee's date of birth, a nomination letter (up to three pages), and up to five supporting letters. Nominations should be sent in PDF format by January 15, 2014, to the Presidents' Award committee chair. Ray Carroll at copsspresidents14@gmail.com

The Elizabeth L. Scott Award is presented biennially (even years) to an individual who has helped foster opportunities in statistics for women and exemplifies the contributions of Elizabeth Scott's lifelong efforts to further the careers of women in academia. Nominations should be sent by January 15, 2014, to the Elizabeth Scott Award committee chair Shirley Mills at smills@math.carleton.ca

These awards are jointly sponsored by the American Statistical Association, Institute of Mathematical Statistics, International Biometric Society (ENAR and WNAR), and Statistical Society of Canada. They represent a discipline-wide acknowledgment of the outstanding contributions of statisticians, regardless of their affiliations with any professional society.

For detailed award criteria and nominating procedures, see the COPSS website at niss.org/copss/.

### **IMS Travel Award**

#### Application deadline: February 1, 2014

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

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

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



#### **New in 2014 From Annual Reviews:**

### Annual Review of Statistics and Its Application

Volume 1 • January 2014 • http://statistics.annualreviews.org Access available online, via your mobile device, or in print.

Editor: Stephen E. Fienberg, Carnegie Mellon University

Associate Editors: Nancy Reid, University of Toronto

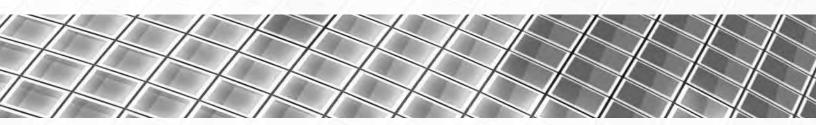
Stephen M. Stigler, University of Chicago

The Annual Review of Statistics and Its Application aims to inform statisticians, quantitative methodologists, and users of statistics about major methodological advances and the computational tools that allow for their implementation. It will include developments in the field of statistics, including theoretical statistical underpinnings of new methodology, as well as developments in specific application domains such as biostatistics and bioinformatics, economics, machine learning, psychology, sociology, and aspects of the physical sciences.

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### Math Alliance: A new model for inclusion and diversity

Professor Kathryn Chaloner is Head of the Department of Biostatistics at the University of Iowa, and leads the Alliance Statistics Initiative of the US National Alliance for Doctoral Studies in the Mathematical Sciences ("Math Alliance"). She writes: The National Alliance for Doctoral Studies in the Mathematical Sciences (www.mathalliance.org) is a new disciplinary model for increasing participation and inclusion of US students in doctoral study in the mathematical and statistical sciences. It is a partnership of faculty working together to mentor students in preparing for, entering, and graduating with a PhD. The partnership includes faculty at minorityserving schools, as well as faculty at majority institutions. Our goal is very simple: we want to be sure that every underrepresented or underserved American student with the talent and the ambition has the opportunity to earn a doctoral degree in a mathematical science. Our commitment is to build a national community of students, faculty, and staff who will work together to transform our departments, colleges, and universities into institutions where all students are welcome.

Data from the American Mathematical Society indicates that from 2005 to 2010 the number of PhDs awarded to underrepresented minorities (URMs¹) by mathematics programs in AMS Group II was 59, and that 24 of these were awarded by just two programs: North Carolina State University (NCSU) and the University of Iowa (UI). These two math programs have the following features in common:

 There is substantial buy-in on the part of senior faculty to minority doctoral education.

- Underrepresented Minority Students include Black non-Hispanic; American Indian and Alaska native; Hispanic.
- Buskes G. Mississippi Mathematics Renaissance. Notices of the AMS, 54, 1, 43–44, 2007
- Classification 27.0501 Statistics, General
- 4 Classification 26.1102 Biostatistics

- Strong ties have been built with undergraduate institutions regionally as well as with minority-serving institutions nationally.
- A strong mentoring program has been instituted for all graduate students.
- There is a willingness to assess the culture and practices of the graduate program in the context of increasing numbers of US and, especially, underrepresented minority students<sup>2</sup>.

Statistical sciences were included in the Math Alliance from its formation in 2001; our history is on our website.

What is the situation in the statistical sciences for URMs? According to the NSF public database, since 1995, 1288 PhDs in Statistics<sup>3</sup> were awarded to US citizens and permanent residents of the US ("US students"). Of these, 58 (4.5%) were awarded to URMs. Rice University awarded eight of these PhDs, Duke University six and Baylor University five; other programs awarded three or fewer. Rice, Duke and Baylor together graduated 33% of URMs receiving PhDs in Statistics.

In Biostatistics<sup>4</sup> 312 PhDs were awarded to US students and 32 of these (10%) were to URM. Among these, seven were awarded by the University of Alabama at Birmingham, five by the University of North Carolina and four by each of the University of Washington Seattle and Harvard University. These four programs with the largest numbers awarded 62% of URMS receiving PhDs in Biostatistics. In both Statistics and Biostatistics therefore, a similar pattern emerges of a few programs graduating a large fraction of PhDs awarded to URMs.

Two additional things I learned from the NSF database: Statistics has a lower percentage of US students among its PhD recipients than Mathematics (over 50% of PhDs in Statistics were awarded to international students). And the number of degrees earned by



Young researchers at the Math Alliance Field of Dreams

URMs, and the percentage of URMs among all PhD recipients, has been essentially the same since 1995.

I think it is fair to conclude that we could do better in including all Americans in our Statistics and Biostatistics PhD programs. I am working with the Alliance towards this end, along with Statistics co-chairs Leslie McClure (UAB), Javier Rojo (Rice) and Kim Weems (NCSU). Among other things, propagating best practices in recruiting and mentoring to doctoral programs in statistical sciences is a priority of the Statistics Initiative of the Math Alliance.

I encourage those of you who would like to see a more inclusive and diverse workforce in the statistical sciences to consider becoming part of the Math Alliance. You are welcome to come to our annual conference, The Field of Dreams. Working with the faculty and students in the Math Alliance has been a great opportunity for me to get to know some very special people and work with some wonderful students. Please consider this an invitation to get involved and to engage all mathematically talented undergraduates in the exciting opportunities available.

Please visit the Math Alliance website, www.mathalliance.org, our YouTube channel and Flickr site! Questions can be directed to mathalliance@uiowa.edu

We are grateful to the National Science Foundation for their support of the National Alliance for Doctoral Studies in the Mathematical Sciences.

### Anirban's Angle: 215 Influential Developments in Statistics

Anirban DasGupta writes his last column, for now (he will be the new Bulletin editor from the next issue):

On July 18, 2013, I wrote an email to Steve Stigler, which said: "Dear Steve, has any well-known person made a list of what she or he considers to be the most major inventions/ discoveries in statistics? I ask because I prefer to use another person's list than write one myself." On July 22, Steve thus replied: "Anirban, some time ago there was a list of 10 discoveries in the sciences and the chi-sq was one. I am working on a book on the five most consequential ideas in statistics, but it is quite different in scope and flavor. So go ahead and make a list—my guess is that different people's lists will show little overlap."

So, blame it on Steve: here, in my last column for the Bulletin, I enter into the absurdly perilous territory of making a personal list of 215 influential and original developments in statistics, primarily to provide a sense of our lavish and multifarious heritage to a fresh PhD in statistics. I choose items that have influenced the research or practice or education or thinking of many people across the world; the criterion was not deep theorems per se, rather innovations and publications with a universal and scopic impact. The choices are of course personal, but not prejudicial; no one should take them too literally. I had it looked over by 13 very senior world statisticians. There is, predictably, an overlap of this expanded list with the Springer Breakthroughs in Statistics volumes. I list the items followed by what I know to be the first serious suggestion or origin of the particular item; this is of course very difficult and some errors are likely! A more elaborate version with the 215 corresponding publications is at bulletin.imstat.org/ and www.stat. purdue.edu/~dasgupta.

215 Developments in Statistics: Likelihood 1657, WLLN 1713, CLT 1738, Bayes' thm 1763, scan statistics 1767, Latin sq 1782, sampling/surveys (The Bible)/1786, least squares 1805, normal distn 1809, Poisson process 1837, outlier detection 1852, Chebyshev ineq 1853, optimal design 1876, regression 1877, correlation 1888, Edgeworth expansion 1889, histogram 1891, mixture models 1894, Pearson family 1895, periodogram 1898, chi-sq test 1900, Gauss-Markov thm 1900, P-values 1900, Wiener process 1900, PCA 1901, Factor analysis 1904, meta analysis 1904, Lorenz curve 1905, t test 1908, maximum likelihood, 1912, variance stabilization 1915, SEM 1921, ANOVA 1921, sufficiency 1922, Fisher–Yates test 1922, Pólya urns 1923, exchangeability 1924, Slutsky 1925, stable laws 1925, Fisher inf 1925, factorial designs 1926, normal extremes 1927, Wishart distn 1928, Control charts 1931, Neyman-Pearson tests 1933, K-S test 1933, martingales 1935, Exp family 1936, Fisher's LDF 1936, Mahalanobis distance 1936, canonical corr 1936, conf intervals 1937, permutation tests 1937, F test 1937, Wilks' thm 1938, large dev. 1938, Cornish-Fisher expansions 1938, Kendall's au1938, Pitman estimates 1939, admissibility/ minimaxity 1939, errors in variables 1940, BIBD 1940, Berry Esseen thm 1941, Wald test 1943, Itô integral 1944, Wilcoxon's test 1945, SPRT 1945, Cramér-Rao ineq 1945, two stage estimators 1945, asymp normality MLE 1946, Jeffreys prior 1946, Plackett-Burman designs 1946, delta method 1946, resampling 1946, Monte Carlo 1946, Kendall and Stuart 1st ed 1946, Hunt-Stein thm 1946, Rao-Blackwell 1947, Mann Whitney test 1947, contingency table testing 1947, orthogonal arrays 1947, score test 1948, U statistics 1948, Anscombe residuals 1948, Pitman efficiency 1948, Bernstein-von Mises 1949, jackknife 1949, test for additivity 1949, Feller Vol I, 1950, Lehmann-Scheffe thm 1950, Durbin-Watson test 1950, NN classification 1951, long range dep. 1951, invariance principle 1951, ARMA models 1951,

thresholding 1952, Horvitz-Thompson est 1952, Lehmann's TSH 1953, semiparametric models 1953, Scheffe intervals 1953, Whittle estimator 1953, MCMC 1953, cusum charts 1954, ranking and selection 1954, saddlepoint approx 1954, test for change point 1955, Basu's thm 1955, shrinkage 1956, kernel density est 1956, empirical Bayes 1956, monotone likelihood ratio 1956, DKW 1956, adaptive inference 1956, Grenander est 1956, k-means clustering 1957, Roy's root test 1957, Kaplan-Meier 1958, FDA 1958, Copulas 1959, D-optimality 1959, LAN 1960, Kalman filter 1960, HMM 1960, conjugate priors 1961, Bayes factor 1961, James Stein est 1961, Hartley-Rao method 1962, kriging 1963, variogram 1963, ridge regr. 1963, Monte Carlo tests 1963, M est 1964, nonparametric regression 1964, Box-Cox transformations 1964, growth curve models 1964, Shapiro-Wilk test 1965, random coefficient regression 1965, Jolly-Seber models 1965, Bahadur expansion 1966, Bahadur slope 1967, robust Bayes 1967, total positivity 1968, q-q plot 1968, longitudinal data 1968, fractional Brownian motion 1968, Grubbs' tests 1969, AIC 1969, repeated sig tests 1969, Box Jenkins method 1970, empirical risk min 1971, VC classes 1971, penalized density est 1971, proportional hazards 1972, Stein's method 1972, GLM 1972, isotonic regression 1972, Stein's identity 1973, Cp 1973, robust regression 1973, Ferguson priors 1973, influence function 1974, proj pursuit 1974, opt est eqns 1974, covariance regularization 1975, partial likelihood 1975, KMT embedding 1975, imputation 1976, CV 1977, EDA 1977, EM 1977, consistent nonparametric regression 1977, BIC 1978, quantile regression 1978, Donsker classes 1978, bootstrap 1979, reference priors 1979, unit root test 1979, bootstrap consistency 1981, Pickands dependence function 1981, ARCH 1982, graphical models 1983, magic formula 1983, propensity scores 1983,

### SAMSI offering two new programs for 2014-15

The Statistical and Applied Mathematical Sciences Institute, (SAMSI) announces its 2014–2015 programs. SAMSI's programs will integrate applied mathematicians and statisticians with other scientific disciplines to further research in bioinformatics and ecology.

One program, *Beyond Bioinformatics, Statistical and Mathematical Challenges*, will look at the statistical and mathematical challenges arising in the analysis of genomic and related data with the goal of addressing relevant biological questions. As genomic and related data are growing more complex, novel methods need to be developed to help with data synthesis and analysis to answer previously inconceivable questions about biological processes. This program will focus on: 1) Statistical pre-processing of emerging high throughput data; 2) Dependence in high-dimensional data; in particular, multivariate discrete counts; 3) Integration of multi-omics data; 4) Modeling dynamics of mixtures, such as populations of cells, variants and meta-genomics; and 5) Big data and machine learning for addressing 'omic issues.

Program leaders for "Beyond Bioinformatics" include: Alexander Alekseyenko, NYU School of Medicine; Karin Dorman, Iowa State University; Nick Hengartner, Los Alamos National Lab; Susan Holmes, Stanford University; Katerina Kechris, University of Colorado-Denver; Shili Lin, The Ohio State University; Dan Nettleton, Iowa State University and Hongyu Zhao, Yale University.

The other SAMSI program is *Mathematical and Statistical Ecology*. This program brings together three groups of researchers—statisticians, mathematicians and theoretical ecologists—to study and develop the interactions among different approaches that ecological modeling has developed. One approach is that theoretical ecologists have developed mathematical models that are analyzed using traditional tools of applied mathematics, such as partial differential equations (PDEs) and dynamical systems. These models are then used to look at resilience, tipping points or other ecological properties. A second approach, typically used by statisticians and data analysts, involves sophisticated statistical tools such as Bayesian hierarchical models that are applied to large spatio-temporal

datasets, but often these models are developed without the detailed consideration of nonlinear dynamics. Some of the topics that will be explored through the year include:

1) Critical thresholds and tipping points; 2) Resilience of ecological systems; leading indicators; 3) Multi-scale and multivariate statistical method; 4) Climate and Biodiversity; 5) Implications for public policy. There is also likely to be a joint working group between the two programs, on the topics of Landscape Genomics.

Program leaders for "Mathematical and Statistical Ecology" include: Philip Dixon of Iowa State University, Lou Gross of the University of Tennessee and NIMBioS, Jennifer Hoeting of Colorado State University, Mevin Hooten of Colorado State University, Lea Jenkins of Clemson University, Claire Lunch of the National Ecological Observatory Network, Ron McRoberts of the US Forest Service, Jay Ver Hoef of NOAA, and Linda Young of the National Agricultural Statistics Service.

There are many opportunities for people to be involved with the SAMSI programs. *Financial support* is available for visiting researchers to be resident at SAMSI for periods of one month to one year. Several postdoctoral positions are funded for each SAMSI program. Young researchers have special opportunities to participate that typically have a one year appointment. Workshops and working groups give many people the opportunity to collaborate with others on research projects and to network with their peers. Dedicated workshops will allow graduate and upper level undergraduate students to learn about the latest research and applications in the statistical and mathematical sciences. 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** 

### **Anirban's Angle** continued from previous page

CART 1984, block bootstrap 1985, Chinese restaurant process 1985, Bayesian networks 1985, generalized est eqns 1986, prepivoting 1987, Daubechies wavelets 1988, EL 1988, multiresolution analysis 1989, landmark Gaussian distn 1989, boosting 1990, smoothing splines 1990, deconvolution ests 1990, SIR 1991, automatic bandwidths 1991, functional regression 1991, supersaturated designs 1993, local linear smoothers 1993, oracles 1994, bagging 1994, stationary bootstrap 1994, SureShrink 1995, reversible jump MCMC 1995, FDR 1995, soft margin SVM 1995, Lasso 1996, block thresholding 1999, LAR 2004, group lasso 2006, sparse PCA

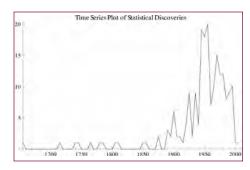
2006, covariance banding and tapering 2008.

Breaking down these items into categories: descriptive statistics 1, books 3, sampling and design 11, non and semiparametrics 18, probability 36, parametric inference 66, models and methodology 80.

Let me also report a time series plot of occurrences of these developments in five-year intervals [see right]. We cannot expect that innovations have checked in at a uniform rate over 350 years. There are some seven major peaks in the plot around special periods, corresponding, apparently, to the Pearson age, the Fisher age, the optimality/nonparametrics age, the methodology

age, the robustness/heavy math age, the bootstrap/computer age, and the HD age. Someone else's list may produce other peaks.

With this, I say goodbye to my colleagues around the world. It was a joy and a learning experience. Thank you.



# Resolving Irreproducibility in Empirical and Computational Research

Victoria Stodden writes: The reproducibility of published findings is becoming a hot topic. From reports in the popular press to congressional activity, and from scholarly society engagement to academic publications and editorials, there has been an upsurge in attention to this issue. I will offer some explanations of the concept itself, suggest reasons why this topic is suddenly front and center, and outline ways the field of statistics can contribute to resolving the underlying issues all this attention is bringing to the fore.

#### **Unpacking Reproducibility**

The concept of reproducibility is getting attention in mainstream discussions. On October 19, The Economist magazine opened a Briefing on "Unreliable Research" with a quote from Nobel Laureate Daniel Kahneman, "I see a train wreck looming," referring to the irreproducibility of certain psychological experiments [1]. On October 27, the Los Angeles Times informed us that "Science has lost its way" since it cannot be relied upon to generate "verifiable facts" [2]. Reproducibility is also discussed in scholarly communications [3-8]. In 2011 Science Magazine began requiring authors to remit code and data upon request for articles it publishes [9], and in April of this year Nature published an editorial entitled "Reducing our irreproducibility," in which they encouraged researchers to make raw data available and follow a checklist for reporting methods, while extending the methods section to accommodate [10]. These are just a few examples.

These discussions have emerged from a wide variety of scientific disciplines, each with different practices that contextualize the meaning of reproducibility differently. At one end of the spectrum is the traditional scientific notion of experimental researchers

capturing descriptive information about (non-computational) aspects of their research protocols and methods, labeled empirical reproducibility. For example, a spotlight was placed on empirical cancer research in 2011 when Bayer HealthCare in Germany could not validate the published findings upon which 67 of their in-house projects were based [11]. In 2012 Amgen's attempts to replicate studies were published, and they claimed to have only been able to do so for 6 of 53 articles [12]. These results rocked the research community and, in part, prompted Nature to encourage authors to communicate their methods more completely. These efforts could be described as attempts to adhere more closely to the long-established standards of communication, as reflected in the title of the Nature editorial of March 2012: "Must try harder." [13]

At the other end of the spectrum are the very different concerns arising from research communities that have adopted computational methods, labeled computational reproducibility [5, 14-16]. These voices call for new standards of scientific communication that include digital scholarly objects such as data and code, asserting that the traditional research article alone fails to capture the computational details and other information necessary for others to replicate the findings. Irreproducible computational results from genomics research at Duke University crystallized attention to this issue [17]. As a result the Institute of Medicine of the National Academies published a report in 2012 recommending new standards for clinical trials approval for computational tests arising from omics-based research [18]. The report recommended for the first time that the software associated with a computational test be fixed at the beginning of the approval process, and made "sustainably

available." In December of 2012 a workshop on "Reproducibility in Computational and Experimental Mathematics" produced recommendations regarding information to include with publications of computational findings, including access to code, data, and implementation details [19-22]. The distinction between these two types of reproducibility is important in order to understand their sources and appropriate solutions.

#### **Resolving Irreproducibility**

The reasons, and therefore the remedies, differ depending on the type of reproducibility. In the case of computational reproducibility, issues arises from an exogenous shift in the scientific research process itself -- the broad use of computation -- and the proposed solution seeks to extend the standards of transparency established for empirical science to the computational aspects of the research. In the case of empirical reproducibility, which lacks an obvious change to the underlying research process, we must look further.

Several reasons have been postulated for the reported lack of reproducibility in empirical research, beyond mistakes or misconduct such as outright fraud or falsification. Small study size, inherently small effect sizes, early or novel research without previously established evidence, poorly designed protocols that permit flexibility during the study, conflicts of interest, or the trendiness of the research topic have been previously suggested as contributing to irreproducibility in the life sciences [4]. Others include social reasons such as publication bias toward positive findings or established authors, or ineffective peer review [24]. Statistical biases may stem from misapplied methodology, incorrect use of p-values, a failure to adjust for multiple comparisons, or overgeneralization of the results. [25-27]. Statistical methods have

varying degrees of sensitivity to perturbations in the underlying data, and can produce different findings in replication contexts [28-29]. Many fields have been inundated with vast amounts of data, often collected in novel ways or from new sources, rapidly shifting the context within which statistical methods must operate. Developing a research agenda within the statistical community to address issues surrounding reproducibility is imperative.

#### **New Research Directions**

Addressing issues of reproducibility through improvements to the research dissemination process is important, but insufficient. Research directions that would contribute to resolving these new methodological questions could include: new measures to assess the reliability and stability of empirical inferences, including developing new validation measures; expanding the field of uncertainty quantification to develop measures of statistical confidence and a better understanding of sources of error, especially when large multi-source datasets or massive simulations are involved [30-31]; and detecting biases arising from statistical reporting conventions. In addition, advances in understanding how to best archive software and data for replication purposes, and the development of best research practices are essential. This is not an exhaustive list, but intended to jumpstart thinking about the importance a research agenda in reproducibility as it relates to developing, asserting, and interpreting statistical findings.

For students and others wishing to learn more about reproducible research further information is available my wiki page http://wiki.stodden.net/. For an example of teaching reproducible research, see Gary King's course website, where students replicate findings from a published article [32]. I have taught a similar course at Columbia [33].

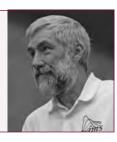
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### I Terence's Stuff: My 15 Minutes of Fame

Terry Speed has had a brush with fame. Winning the Australian Prime Minister's Prize for Science, he may have helped to raise the profile of statistics



recently won the Australian Prime Minister's Prize for Science. This was widely covered by the mass media, so I got a brief glimpse of what politicians and celebrities experience daily. I had a threeminute video made about me, I was on several national TV news shows, including THE NEWS...BUT NOT AS YOU KNOW IT (they led with He's written a bunch of internationally renowned theoretical papers that almost no-one has ever read, and ended asking Does having a beard help you in Science? —right on both counts.) National newspaper chains picked up the story, with photos [and he made it into a cartoon (see next page)—Ed], and I made many "appearances" on radio shows around the country. One newspaper ran a photo of me next to images of O. J. Simpson and Ronald Ryan, the last man executed in Australia. Most were well written and informative. The reaction from my fellow statisticians was very positive.

Let me begin by describing the slightly surreal process. Most of my interaction with the media took place in Australia's capital, Canberra, much in or around its Parliament House. Inside this building is a large press gallery, which has radio and TV studios. Most Australians live in capital cities a long way from Canberra, and that's where the majority of the news reporters live too. So I would be in a studio and the people to whom I was talking would be elsewhere ("We cross now to Terry Speed in our Canberra studio.") I'd have an ear-piece in one ear, and then look, smile and gesture animatedly at a red dot in the dark room, listening to my interviewers through that one ear. Not easy.

As for my "live" radio appearances, they could take place anywhere: in a studio, outside the Parliament, in my hotel, or in a car in between, for I'd be talking into a cell phone. Interviews with newspaper reporters were easier: they too were on a phone, but they weren't broadcast live. On only two occasions out of a very large number did I actually meet a journalist face-to-face.

So much for the words. What about the images? Well, I re-learned one thing I knew from past experience: all images in the media are contrived in some way or another. I suppose that showing us as we really are is unutterably boring. There were the obligatory "nerd shots" of me and a colleague staring at a terminal, me leafing through a book (Fisher's Collected Papers!), writing on a whiteboard or a glass wall or door. I'd be asked to walk slowly, look to the ceiling and then move my head slowly downwards, turn this way or that, hold my glass of champagne up to the others. Stretching out my hands or arms was good, looking serious was bad, and of course everything was repeated many times.

Was it all worthwhile? One thing was clear: *lots* of people saw, heard or read about my prize-winning. My wife and I take our morning coffee in one place on weekdays, a different place on Saturdays, and a third place on Sundays. The baristas at all three places knew my news, and were pleased to share in

it. The same was true for my bread store, and many other places. One can only be impressed with the reach of the mass media. I got emails from people I know but haven't seen for over 50 years. All of the above and presumably many more saw the word

"statistician" (or "maths whiz", "number cruncher" or "jack of all trades") in close proximity to "science" and "PM's prize". Can this be bad? One story was headed Is it possible to add statistics to science? You can count on it. There were many more-or-less accurate descriptions of what I do. The message in Tukey's remark that "the best thing about being a statistician is that you get to play in everyone's backyard" really got through. I hope that might inspire some young people to stick with maths and take up statistics. What was especially gratifying was the response from colleagues, summarized in this extract from an email: There seems to be a general glow of happiness in the math/ stat community ... for the general recognition of stats/math in the sciences.

I conclude that my media exposure was well worth it.

Will this blip have any lasting effect? That is hard to tell at this stage: my experience had no controls! I have been approached to help inspire school-kids to stick with maths and science, I have been asked to let myself to be considered for TEDxSydney 2014, and more like this. What will constitute lasting success? A weekly or daily Statistics show, a Statistics channel, a Statistics network? Clips on YouTube, one of which goes viral? Or, an increase in math/stat enrolments?

I'll wait and see.

They say the camera never lies, but as Terry discovered, media images are contrived



#### **Crikey!** Is that Terry Speed in a cartoon?

Terry Speed featured in a cartoon in the Australian magazine Crikey by cartoonist First Dog on the Moon, http://www. crikey.com.au/author/ firstdog/

For anyone needing a pointer: Tony Abbott is the Australian Prime Minister; Tim Flannery was head of the recently disbanded Climate Commission. Terry Speed, with his enormous brain full of sciencey numbers (and beard) probably needs no introduction...

Reproduced with permission from www.crikey.com.au Tony Abbott has awarded the Prime Minister's Prize for Science to...

Tim Flannery!

Ahahahaha no just kidding, Tony is going to have Tim Flannery killed.





Tony gave the prize to the excellently named Terry Speed! Prime Minister Tony can do this sort of thing now because he is Prime Minister and he has all the prizes.

Terry Speed is a world leader in bioinformatics and has an enormous brain full of sciencey numbers.

TERRY (NOTE



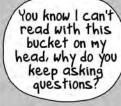
Tony understands how important numbers are. How important are they? So important.

Here are some now.

97% of scientists agree that there is "unequivocal" evidence that humans are the main driver of the 0.89C rise in average temperature since 1900. True!



However over the last few years 32% of stories in the Australian media have dismissed or questioned the idea that climate change is anthropogenic. Also 100% true.





These are the kind of numbers that will annoy 100% of the same out of 68% of Australians on twitter



84% of people reading this might bury 90% of their face into 100% of their hands

Or perhaps they may even smack 5% of their head at high speed into 2% of the surface of their desk



In 2012, 45% of the articles in the Herald Sun and the Daily Telegraph pooh-poohed climate science. Only 1% of News Corparticles mentioned peer-reviewed science.



100% of News Corp editors don't care if they're wrong they just want to win. And they are.

News Corp released this statement:

News Corp and its newspapers do accept the scientific consensus. There is no company edict on the line to take, editorial control rests with the editors.



WELL MAYBE IT'S TIME THERE WAS A COMPANY EDICT! DID THAT EVER OCCUR to you?



Some of this "research" was done by the Australian Centre for "Independent" Journalism

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Philadelphia, PA 19104-2688 USA
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www.siam.org • siam@siam.org



American Statistical Association 732 North Washington Street Alexandria, VA 22314-1943

Phone: (703) 684-1221 · Toll-free: (888) 231-3473 Fax: (703) 684-2037 · Email: asainfo@amstat.org

### IMS-ASC 2014 meeting: Sydney, Australia

### Australian Statistical Conference in Conjunction with the IMS Annual Meeting July 7–10, 2014, Sydney, Australia

w http://www.ims-asc2014.com/

#### **Registration now open**

On behalf of the Statistical Society of Australia and the Institute of Mathematical Statistics, the organising committee invite you to attend the joint Australian Statistical Conference & IMS Annual Meeting, to be held 7–10 July, 2014, at the Australian Technology Park in Sydney, Australia.

Delegates from all areas of statistics will join with world class Australian and international statisticians and mathematicians to benefit from the excellent opportunities for presentations on a wide range of topics recognizing the role that statistics plays in all aspects of modern life. The conference objectives are to:

- · attract world class statisticians to share their knowledge and expertise,
- inform delegates about new work and developments in statistics, probability and mathematical statistics,
- provide an opportunity for professionals from all of these areas to network, present and discuss ideas.

#### **Speakers**

A high caliber contingent of keynote speakers will be brought together at this premier event: **ASC:** 

James Brown, University of Southampton; Adrian Baddeley, University of Western Australia; Sheila Bird, Cambridge University; Rob Tibshirani, Stanford University

#### IMS:

Thomas G. Kurtz, University of Wisconsin-Madison; Peter Donnelly, University of Oxford; Terry Lyons, University of Oxford; Nina Gantert, Technische Universität München; Martin Hairer, University of Warwick; Timo Seppalainen, University of Wisconsin-Madison; Matthew Stephens, University of Chicago; Harrison Zhou, Yale University

#### **Themes**

The conference will also feature a wide-ranging program incorporating the following themes:

Bayesian Statistics, Bioinformatics, Biostatistics, Computational and Asymptotic Statistics, Causal inference, Dirichlet form theory, Econometrics, Environmental Statistics, Experimental designs, Filtering theory, Finance and Physics, Financial Statistics, Forecasting, Functional data analysis, Genomics, Graphical models and networks, Gaussian processes, High-dimensional statistics, Heavy tail phenomenon, Infinite dimensional analysis, Large-scale inferences, Large deviations, Limit theory, Levy processes, Long range dependence, Malliavin calculus, Mathematical statistics, Markov processes, Measure-valued processes, Multivariate statistics, Nonparametric statistics, Non local operators, Official statistics methodologies, Particle systems, Percolation probability on trees and graphs, Probability, Random matrices, Random surfaces, Robust statistics, Sample surveys methodology, SLE Stochastic Analysis, Spatial statistics, Stochastic differential equations, Stochastic optimization, Stochastic models in biology, Stochastic networks, Stochastic processes, Stochastic/statistical modeling, Statistical computing, Statistical learning, Time series.

For more information about the conference, please visit the website, www.ims-asc2014.com



#### Register now: ASC-IMS 2014

You can register now for the meeting (the early bird registration deadline is February 28) with or without lunches. As an IMS member you receive a discount on registration rates: see

www.ims-asc2014.com/registration-page/

### I IMS meetings around the world

#### IMS co-sponsored meeting

Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data Conference Honoring Professor Malay Ghosh

May 29-31, 2014

University of Maryland, College Park, USA

w http://www.jpsm.umd.edu/ghosh

IMS Representative on Program Committees: Gauri S. Datta
Invited speakers: William R. Bell, Jim Berger, Nikolay Bliznyuk, Sudip Bose, Brad Carlin,
Sanjay Chaudhuri, Ming-Hui Chen, Cynthia Clark, Bertrand Clarke, Mike Daniels, Anirban
DasGupta, Dipak Dey, Hani Doss, Robert E. Fay, Ralph Folsom, D.A.S. Fraser, Edward
George, Jayanta Ghosh, Peter Hall, Jim Hobert, Myron Katzoff, Kshitij Khare, Rod Little,
Thomas Louis, Bani Mallick, Glen Meeden, Isabel Molina, Domingo Morales, Carl Morris,
Rahul Mukherjee, Nitis Mukhopadhyay, Ralf Munnich, Danny Pfeffermann, J.N.K. Rao,
Nancy Reid, Christian P. Robert, Judith Rousseau, Sanat Sarkar, Nathaniel Schenker, Joseph
Sedransk, Pranab Sen, Thomas Severini, Bimal Sinha, Bikas Sinha, Cidambi Srinivasan, Muni
S. Srivastava, Dongchu Sun, Changboo Wu, Zhihua Xu, James Zidek

### IMS co-sponsored meeting

9th World Congress on Probability and Statistics July 11–15, 2016 Toronto, Canada

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.

#### At a glance:

forthcoming IMS Annual Meeting and JSM dates

#### 2014

#### **IMS Annual Meeting:**

Sydney, Australia, July 7–10, 2014 ims-asc2014.com

JSM: Boston, MA, August 2-7, 2014

#### 2015

#### **IMS Annual Meeting**

@ JSM: Seattle, WA, August 8–13, 2015

#### 2016

#### **IMS Annual Meeting:**

Toronto, Canada, July 11–15, 2016

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

#### 2017

#### **IMS Annual Meeting**

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

#### 2018

#### **IMS Annual Meeting:**

TBD

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

#### IMS sponsored meeting

#### JSM 2014: August 2-7, 2014, Boston, USA

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

JSM Program Chair: Jean Opsomer, Colorado State University. IMS Invited Program chair: Nancy Reid, University of Toronto. IMS Contributed Program chair: Bertrand Clark, University of Nebraska–Lincoln.

Abstract submission opens December 3 (see key dates below).

#### Key dates:

December 3, 2013–February 3, 2014: Online submission of abstracts, invited posters, introductory overview lectures, topic and regular contributed abstracts

March 31-April 17, 2014: Online Abstract Editing Open

May 1, 2014: Registration & Housing Open (early-bird registration deadline May 29; housing deadline July 2)

### Joint Statistical Meetings dates, 2015–2018

#### 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

#### IMS co-sponsored meeting

#### XIII CLAPEM: Congreso Latino-americano de Probabilidad y Estadística Matemática September 22–26, 2014

#### Cartagena de Indias, Colombia

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

IMS Rep: David Aldous, Berkeley.

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

The XIII CLAPEM will include three short courses, six plenary conferences, eighteen thematic sessions, contributed talk sessions and poster sessions.

#### **Short courses**

Bin Yu, Department of Statistics, University of California, Berkeley, USA.

Alison Etheridge, Department of Statistics, University of Oxford, UK.

Paul Embrechts, Department of Mathematics, ETH Zurich, Switzerland.

#### Plenary speakers

Gerard Biau, Université Pierre et Marie Curie, France.

Sourav Chatterjee, Courant Institute of Mathematical Sciences, USA.

Carenne Ludeña, Universidad Central de Venezuela.

Thomas Mikosch, University of Copenhagen, Denmark.

Roberto Imbuzeiro Oliveira, IMPA, Brazil.

Victor Rivero, CIMAT, México.

The Invited thematic session titles can be found at www.clapem.unal. edu.co

#### **Abstract Submission**

The deadline for abstract submission for the contributed talk and poster sessions is March 13, 2014. All contributing authors will be notified by May 1st, 2014, whether their abstract has been accepted.

#### **Financial support**

There will be a limited number of partial supports for students who wish to attend the congress. The deadline for both registration and application for support is March 13, 2014. For more information, please visit: www.clapem.unal.edu.co

Looking forward to see you in Cartagena!

The organizing committee

#### IMS sponsored meeting

## 2015 IMS-China International 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

t +44 20 79556767

We are pleased to announce that the fifth IMS-China International Conference on Statistics and Probability 2013 will be held in Kunming, China, from 1–4 July, 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 http:// www.2015imschina.com/ contains updated information and the contact details.

#### IMS co-sponsored meeting

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

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

Registration is expected to open in January with a tentative deadline of April 7, 2014. Funding is available to support local expenses of some advanced graduate students and young researchers. Applications for funding will be accepted during the registration process.

#### Main Lecturers

Three main lecturers will each give six 75-minute lectures:

Gerard Ben Arous (New York University)

Eyal Lubetzky (Microsoft Research, Theory Group), *Time-space* information percolation for the stochastic Ising model

Jeremy Quastel (University of Toronto), *The Kardar-Parisi-Zhang* equation and universality class

Other speakers will be invited to give short talks.

### More IMS meetings around the world

#### IMS co-sponsored meeting

#### Seminar on Stochastic Processes 2014 March 26–29, 2014 La Jolla, CA, USA

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

Contact: Jason Schweinsberg e jschwein@math.ucsd.edu
The Seminar on Stochastic Processes (SSP) in 2014 will be held at
the University of California at San Diego on March 26–29, 2014.
The local organizers will be Patrick Fitzsimmons, Amber Puha,
Jason Schweinsberg, and Ruth Williams. The invited speakers will
be Rodrigo Banuelos (Kai Lai Chung Lecturer), Sandra Cerrai, Neil
O'Connell, Sebastien Roch, and Ramon van Handel. Tutorial lectures
aimed at new researchers will be given by Vladas Sidoravicius in the
afternoon of Wednesday, March 26, the day before the main SSP
program begins.

#### IMS co-sponsored meeting

### Workshop on Finance, Probability and Statistics (FPS) July 2–5, 2014

#### University of Technology, Sydney (UTS)

w http://www.qfrc.uts.edu.au/IMS-FPS-2014

IMS Representative(s) on Program Committees: X. Guo, T. L. Lai This, the Fourth IMS-FPS workshop, is a satellite workshop to the joint Australian Statistical Conference & IMS Annual Meeting, which will be held in Sydney from 7–10 July. The previous IMS-FPS workshops were held in 2011 at Columbia University, in 2012 at the University of California at Berkeley and in 2013 at the National University of Singapore. The goal of the workshop is to bring together leading academic experts, practitioners and junior researchers, which will highlight important contributions to mathematical and computational finance made through the use of statistics and probability.

The workshop topics include, but are not limited to:

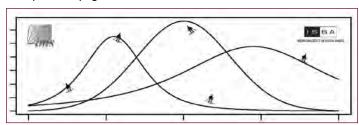
- Computational and simulation methods in finance and risk management
- Credit and liquidity risk
- · Energy and weather derivatives
- Financial time series and econometrics
- · High frequency trading: data, models and strategies
- Volatility models

Please see the website for details.

#### IMS co-sponsored meeting

#### MCMSki IV January 6–8, 2014 Chamonix Mont-Blanc, France

w http://www.pages.drexel.edu/~mwl25/mcmski/



The fifth joint international meeting of the IMS and ISBA (International Society for Bayesian Analysis), nicknamed "MCMSki IV", will be held in Chamonix Mont-Blanc, France, from Monday, January 6 to Wednesday, January 8, 2014. The meeting, the first for the newly-created BayesComp section of ISBA, will focus on all aspects of MCMC theory and methodology, including related fields like sequential Monte Carlo, approximate Bayesian computation, Hamiltonian Monte Carlo. In contrast with the earlier meetings, it will merge the satellite Adap'ski workshop into the main meeting by having parallel invited and contributed sessions on those different themes, as well as poster sessions on both Monday and Tuesday nights. In addition, a one-day post-conference satellite workshop on Bayesian nonparametrics, modelling and computations ("BNPski)" will be held in the same location on January 9th, 2014.

Please see our conference website, http://www.pages.drexel. edu/~mwl25/mcmski/ for more information, including links to the preliminary program, lodging and travel information, and our conference registration page. The early-bird registration deadline has passed; to register see the website above.

We look forward to welcoming you in Chamonix this January! Brad Carlin, Antonietta Mira, and Christian Robert MCMSki IV conference co-organizers

#### IMS co-sponsored meeting

#### 16th IMS New Researchers Conference Boston, Massachusetts July 31–August 2, 2014

w TBC

The purpose of the conference is to promote interaction and networking among new researchers in probability and statistics.

#### IMS co-sponsored meeting

#### 37th Conference on Stochastic Processes and their Applications July 28-August 1, 2014

**Buenos Aires, Argentina** 

Montréal Canada

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

SPA 2014: Call for Contributed Sessions

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

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

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

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

#### David Spiegelhalter's public lecture at JSM in Montréal

To commemorate the 300th anniversary of the publication of Jacob's Bernoulli's seminal work Ars Conjectandi, the Bernoulli Society, the Institute of Mathematical Statistics (IMS), and the Statistical Society of Canada (SSC) presented a public lecture as part of the Joint Statistical Meetings (JSM) in Montréal on August 7, 2013. Entitled "From gambling to global catastrophe: metaphors and images for communicating numerical risks", the lecture was presented by David Spiegelhalter, Winton Professor for the Public Understanding of Risk, University of Cambridge. He addressed a number of topics, from statistical illiteracy as illustrated in the media, to the interpretation of hazard ratios in a medical context, to a metaphor for expressing risks through the enumeration of possible futures. With great talent and good humour, David delighted an audience of several hundred. While there were many participants from JSM, a good number of people from the general public also attended, including many people teaching statistics at the CEGEP level (in the province of Québec, Canada, students attend CEGEP for two years between high school and the three years of a Bachelor degree at the university level). Since Montréal is a bilingual city, the SSC translated

> the lecture into French (thanks go to Jean-François Plante for the outstanding translation and adaptation) and showed it on a second screen. A journalist from Radio-Canada interviewed David to complete a report on statistics as part of JSM

and the International Year of Statistics for a radio science program in French. So, from many different points of view, this public lecture was a great success. By Christian Léger, SSC Past-President

### ENAR, 2014-2016

#### IMS sponsored meeting

2014 ENAR/IMS Spring Meeting March 16-19, 2014 Baltimore, Maryland, USA

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

#### IMS sponsored meeting

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

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

•••••

#### IMS sponsored meeting

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

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

#### IMS co-sponsored meeting

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

#### IMS sponsored meeting

2014 WNAR/IMS Annual Meeting June 15-18, 2014 Honolulu, Hawaii, USA

w http://www.wnar.org/

The 2014 WNAR/IMS meeting will be June 15-18, in Hawaii. It will be held at the Conference Center of the University of Hawaii at Manoa, in Honolulu, HI.

#### IMS co-sponsored meeting

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

### I More IMS meetings around the world

#### IMS co-sponsored meeting

#### 9th ICSA International Conference December 20–23, 2013 Hong Kong, China

w http://www.math.hkbu.edu.hk/ICSA2013/ IMS Rep: Elizaveta Levina, Department of Statistics, University of Michigan

The 9th ICSA International Conference will be held at Hong Kong Baptist University, Hong Kong. The theme is "Challenges of Statistical Methods for Interdisciplinary Research and Big Data"

#### **Plenary Speakers**

Raymond Carroll, Texas A&M
University
Ching-Shui Cheng, University of
California, Berkeley and Academia Sinica
Hengjian Cui, Capital Normal University
[Some Developments in High-dimension
Statistical Testing]
Peter Hall, Melbourne University
[Methodology for Nonparametric
Deconvolution when the Error
Distribution is Unknown]
Tze Leung Lai, Stanford University
[Covariate Bandit Theory and Its
Applications]

Howell Tong, London School

of Economics [On Conditionally Heteroscedastic AR Models with

### Thresholds] Pao-Lu Hsu Award.

Congratulations to Xiao-Li Meng from Harvard University, Jianqing Fan from Princeton University, and Bin Yu from University of California at Berkeley for being the first recipients of the Pao-Lu Hsu Award. This award recognizes their excellent scholarly accomplishments in statistical research as well as outstanding contributions to the development of sound statistics in Chinese communities. An official award ceremony with special presentations by the award recipients will be held at this conference.

#### IMS co-sponsored meeting

Third IMS Asia Pacific Rim Meetings June 30–July 3, 2014 Taipei, Taiwan

NEW website http://ims-aprm2014.ntu.edu.tw/

The third IMS Asia Pacific Rim Meetings will take place in Howard International House (http://intl-house.howard-hotels.com/), Taipei, Taiwan, during the period Monday, June 30–Thursday, July 3, 2014. This meeting series provides an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim. It also promotes communications and collaborations between the researchers in this area and those from other parts of the world.

The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications. For more information, you may contact the program chairs: Byeong U. Park (bupark@stats.snu.ac.kr) and Feifang Hu (fh6e@virginia.edu).

The conference website has been recently changed to http://ims-aprm2014.ntu.edu.tw/Call for Papers:

Submission of contributed papers and posters starts from November 15 to December 31, 2013. All participants (including distinguished lecturers, discussants, invited speakers) who would like to give a talk or present a poster must submit an abstract. Only online submission will be accepted. The abstract should not exceed 400 words. Late submission will not be accepted. The abstracts should be submitted in PDF format only, using either of the abstract templates provided at http://ims-aprm2014.ntu.edu.tw/CP.php





### I Other meetings around the world

#### UAB's 3rd Annual NHGRI-funded Short Course on Next Generation Sequencing: Technology & Statistical Methods December 16–19, 2013, Birmingham, AL

w http://www.soph.uab.edu/ssg/nhgri\_r25/thirdshortcourse
The University of Alabama at Birmingham's Section on Statistical
Genetics is pleased to announce the 3rd Annual NHGRI-funded
Short Course on Next Generation Sequencing. Focusing on next-generation sequencing technology, which generates an unprecedented
wealth of data, this four-day course will offer an interactive program
to enhance researchers' ability to understand and use statistical
genetic methods, as well as implement and interpret sophisticated
NGS data analyses.

## 3rd Stochastic Modeling Techniques & Data Analysis Conference June 11–14, 2014 Lisbon, Portugal

w http://www.smtda.net/

The Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA) main objective is to welcome papers, both theoretical or practical, presenting new techniques and methodologies in the broad area of stochastic modeling and data analysis. An objective is to use the methods proposed for solving real life problems by analyzing the relevant data. Also, the use of recent advances in different fields will be promoted such as for example, new optimization and statistical methods, data warehouse, data mining and knowledge systems, computing-aided decision supports and neural computing. Particular attention will be given to interesting applications in engineering, productions and services (maintenance, reliability, planning and control, quality control, finance, insurance, management and administration, inventory and logistics, marketing, environment, human resources, biotechnology, medicine, ...).

For more information, abstract/paper submission and special session proposals please visit the conference website.

#### 34th International Symposium on Forecasting June 29–July 2, 2014 Rotterdam, The Netherlands

w http://forecasters.org/isf/

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

## 13th Winter School on Mathematical Finance January 20–22, 2014

**Lunteren, The Netherlands** 

w http://staff.science.uva.nl/~spreij/winterschool/winterschool.html Contact: Peter Spreij e spreij@uva.nl Minicourses by Pierre Henry-Labordère and Eckhard Platen, special invited lectures by Jesper Andreasen, David Hobson and Agnès Sulem, four short contributions and a poster session.

### PLS 2014: 8th International Conference on Partial Least Squares and Related Methods

May 26-28, 2014

Paris, France

w http://www.pls14.org/

Following a tradition established in 1999, and after PLS'09 in Beijing and PLS'12 in Houston, the 8th International Symposium on PLS and Related Methods will take place in Paris, jointly organized by CNAM and ESSEC Business School. This eighth edition will focus on original methodological contribution in both PLS Regression, PLS Path Modeling and their related methods with application in areas and disciplines related to management, social sciences, chemometrics, sensory analysis, industry and life sciences including genomics.

## 2014 Mid-Atlantic Genetic Epidemiology and Statistics (MAGES) Conference: Integrated Systems Biology Analytical Methods for Epidemiological Studies of Complex Traits

May 30, 2014

Philadelphia, PA

w http://www.med.upenn.edu/magesconference/index.shtml
Advances in genomic technology and significant decrease in the
associated costs are driving progress in genetic studies for disease
gene identification. Studies of whole exome and genome sequences
of complex traits in large samples will become increasingly common.
Other sources of high-dimensional information, including expression,
epigenetic, metabolic and microbiomic data, are also being commonly
collected in disease and control samples. To fully understand the complex bases of human disease, all of these factors should be properly
considered in a unified analytical framework, together with epidemiological data on environmental exposures and other risk factors.

To discuss how to address the analytical challenges presented by these sources of data, the Center for Genetics and Complex Traits of the Perelman School of Medicine at the University of Pennsylvania is organizing this conference.

NEW

### More meetings around the world

## Computational Methods for Jump Processes July 7–9, 2014

Coventry, United Kingdom

w http://www2.warwick.ac.uk/fac/sci/statistics/crism/workshops/jumps/

The aim of this workshop is to highlight the recent advances in the estimation and the simulation of jump diffusions. The most recent achievements in inference of jump diffusions will be considered, such as series approximation, perfect simulation algorithms, sequential Monte Carlo methods and spectral based simulation methods.



Ljubljana, Slovenia

w http://www.law05.si/iwms/

The main theme of the workshop will be the interplay between matrices and statistics. IWMS will be organized in conjunction with 7th Linear Algebra Workshop (LAW'14) that will start on June 4.

#### First International Congress on Actuarial Science and Quantitative Finance June 17–20, 2014 Bogotá, Colombia

w http://www.matematicas.unal.edu.co/icasqf/

e icasqf\_fcbog@unal.edu.co

The First International Congress on Actuarial Science and Quantitative Finance is going to be held in Bogotá, Colombia, organized by National University of Colombia. The emphasis of the event is equally distributed between finance and actuarial science.

The event would consist of plenary sessions of invited speakers, oral sessions of contributed talks and poster sessions. A day of the congress would be dedicated to practitioners and all the talks for the given day would be delivered by practitioners. In addition there would be short courses in topics of interest in actuarial science and quantitative finance, given by some of the invited speakers. Invited speakers include Hansjoerg Albrecher, Université de Lausanne; Richard Davis, Columbia University; Monique Jeanblanc, Université d'Évry Val-d'Essonne; Steve Haberman, City University London; David Ingram, Willis Re; Stéphane Loisel, Universite Claude Bernard Lyon 1; Fabio Mercurio, Blomberg; Ajay Subramanian, Georgia State University; Carlos Vázquez Cendón, Universidad de la Coruña; Shaun Wang, Georgia State University.

Deadline for abstract submission for oral communications and posters: February 15, 2014.

### PIMS Summer School in Probability June 2–27, 2014

University of British Columbia, Vancouver, Canada

w http://www.math.ubc.ca/Links/ssprob14/

Contact: Ed Perkins e perkins@math.ubc.ca

Probability Summer School at U. British Columbia featuring 4-week courses by Elchanan Mossel (Influences and noise stability in product space) and Asaf Nachmias (Random walks on random fractals). Short courses will be given by Alison Etheridge (Stochastic models of evolution), Allan Sly (Phase transitions for random constraint satisfaction) and Ofer Zeitouni (Log correlated Gaussian fields and branching random walks). Support for accommodation is available for some participants—see webpage for information.

#### Computational Nonlinear Algebra June 2–6, 2014

Institute of Computational and Experimental Research in Mathematics (ICERM) at Brown University, Providence, RI.

w http://icerm.brown.edu/tw-14-3-cna

Over the last two decades, algebraic and numerical techniques for nonlinear problems have begun a steady and relentless transition from mostly academic constructions, to widely used tools across the mathematical sciences, engineering and industrial applications. The workshop will bring together participants from many diverse fields including computer vision, cryptography, optimization and control, partial differential equations, robotics, and quantum computation, with the common interest in nonlinear algebraic computations. The main goal is to assess the state of the art, to stimulate further progress, and to accelerate developments by bringing together these diverse communities and have them share computational challenges and successes. For a list of event speakers, please go to our website.





The National Institute for Mathematical and Biological Synthesis, NIMBioS, brings together researchers from around the world to collaborate across disciplinary boundaries to investigate solutions to basic and applied problems in the life sciences. Participation in the following NIMBioS workshops is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for workshop attendees.

# NIMBioS Investigative Workshop: Predictive Models for Ecological Risk Assessment April 28–30, 2014 NIMBioS at the University of Tennessee, Knoxville

**w** http://www.nimbios.org/workshops/ WS\_era.html

#### Application deadline: January 20, 2014

Objectives: A major challenge in assessing the impacts of toxic chemicals on ecological systems is the development of predictive linkages between chemically-caused alterations at molecular and biochemical levels of organization and adverse outcomes on ecological systems. This investigative workshop will bring together a multi-disciplinary group of molecular and cell biologists, physiologists, ecologists, mathematicians, computational biologists, and statisticians to explore the challenges and opportunities for developing and implementing models that are specifically designed to mechanistically link between levels of biological organization in a way that can inform ecological risk assessment and ultimately environmental policy and management. The focus will be on predictive systems models in which properties at higher levels of organization emerge from the dynamics of processes occurring at lower levels of organization.

#### NIMBioS Investigative Workshop: Animal Social Networks March 6–8, 2014

#### NIMBioS at the University of Tennessee, Knoxville

**w** http://nimbios.org/workshops/WS\_socialnet Application deadline: December 2, 2013

Objectives: The structure and functioning of social networks is of rapidly growing interest in evolutionary biology. While modern network analysis offers many sophisticated techniques, most were developed for extremely large networks, not for the smaller networks most commonly found in non-human social systems. Furthermore, biological systems change through time, and many questions of fundamental importance involve network dynamics. Thus, there is currently a need for modern network analysis techniques that are specific to these systems and issues. This workshop will explore problems and opportunities raised by small (tens to hundreds of individuals) social networks as they develop over time, with special focus on three issues: 1) how temporal dynamics affect network function and emergent properties, 2) the response of the network to perturbations such as births, deaths, immigration and emigration from the social group, 3) the tension between a focus on network structure (e.g., importance of roles and network centrality) and process (e.g., flow of information, disease transmission). The workshop will bring together empiricists interested in a diversity of animal social groups (ants, fish, birds, mammals) and quantitative scientists (network scientists, mathematicians, computer scientists, physicists) interested in the special problems posed by the dynamics of small social networks.

### NIMBioS Investigative Workshop: Modeling Contamination of Fresh Produce April 24–25, 2014

#### NIMBioS at the University of Tennessee, Knoxville

w http://www.nimbios.org/workshops/WS\_produce.html

Application deadline: January 20, 2014

Objectives: Food-borne diseases associated with fresh produce continue to cause serious difficulties for public health in North America. As globalization has broadened the food supply chain and increased its complexity, more sophisticated methods of surveillance are needed at key links to ensure the safety of fresh produce. In particular, recent studies have identified the sanitization juncture as well as packaging and shipping as important players that can promote contamination or even cross-contamination of produce. Focusing on each of these areas, our investigative workshop will pursue four goals:

- Develop novel models that capture contamination and pathogen growth dynamics involved in sanitization, packaging and shipping.
- 2) Discuss and develop multi-scale models that connect these supply chain links to form a global picture.
- 3) Explore how these new models can aid in more relevant data collection to test and inform model predictions at both the local and global levels.
- 4) Provide a venue for collaboration among mathematical modelers, food technologists, statisticians, microbiologists, and industrial and government agency representatives in order to synthesize knowledge in a way that establishes modeling as an indispensable tool for pathogen surveillance and control in the fresh produce industry.



### **Employment Opportunities around the world**

#### Canada: Scarborough, ON

#### Dept. of Computer & Mathematical Sciences, University of Toronto Scarborough

Assistant Professor Statistics http://jobs.imstat.org/c/job.cfm?site\_ id=1847&jb=15257350

#### Kazakhstan: Astana

#### **Nazarbayev University**

All Ranks (Professor, Associate, Assistant) http://jobs.imstat.org/c/job.cfm?site\_ id=1847&jb=15115433

#### Saudi Arabia: Thuwal

### KAUST (King Abdullah University of Science and Technology)

Faculty Positions in Statistics http://jobs.imstat.org/c/job.cfm?site\_ id=1847&jb=15165848

#### **Hong Kong**



#### THE CHINESE UNIVERSITY OF HONG KONG



Applications are invited for:-

#### **Department of Statistics**

#### Professor(s) / Associate Professor(s) / Assistant Professor(s)

(Ref. 1314/047(408)/2)

The Department invites applications for faculty post(s) at all levels. Applicants should have (i) a PhD degree in statistics or a related field; (ii) high-quality research output; and (iii) a good track record in teaching. Those with exceptionally strong credentials may be considered for appointment at higher levels as Professor or Associate Professor. Review of applications will begin in January 2014 and will continue until the posts are filled.

#### Salary and Fringe Benefits

Salary will be highly competitive, commensurate with qualifications and experience. The University offers a comprehensive fringe benefit package, including medical care, a contract-end gratuity for appointments of two years or longer, and housing benefits for eligible appointees. Further information about the University and the general terms of service for appointments is available at <a href="http://www.per.cuhk.edu.hk">http://www.per.cuhk.edu.hk</a>. The terms mentioned herein are for reference only and are subject to revision by the University.

#### **Application Procedure**

Please send a cover letter, full curriculum vitae, statement of research and teaching, and copies of up to five recent publications (in .pdf format) to the Department of Statistics by e-mail to <code>statdept@sta.cuhk.edu.hk</code>, preferably by December 31, 2013. Please also arrange three letters of recommendation to be forwarded by referees directly to <code>statdept@sta.cuhk.edu.hk</code>. The Personal Information Collection Statement will be provided upon request. Please quote the reference number and mark 'Application – Confidential' on cover.

#### **Singapore**

### National University of Singapore, Department of Statistics and Applied Probability Faculty Positions

Applications are invited for regular positions in Statistics. A PhD in Statistics or a related field is required. The appointments can be in any area of Statistics at any level. For appointment at Associate Professor or Professor level, the applicant should have an outstanding record in research, and demonstrated leadership in teaching and service. For appointment at Assistant Professor level the applicants should have demonstrated potential for excellence in research, teaching and service. There is no deadline for applications but the search will continue until all positions are filled. Applicants should send an application letter and a CV and arrange for at least THREE reference letters to be sent directly to the Department. Applications should be mailed by post or via e-mail to: Search Committee, Department of Statistics and Applied Probability,

National University of Singapore, 6 Science Drive 2, Singapore 117543

E-mail: stasec@nus.edu.sq

NUS offers internationally competitive remuneration, generous research support and funding, relocation assistance and other benefits. The Department of Statistics and Applied Probability has close to 30 faculty, making us one of the largest Departments in Asia. We provide a stimulating environment for our Faculty to develop professionally.

For more information about the University, Faculty of Science,

Department and terms of service, visit our websites:

University: http://www.nus.edu.sg/

Faculty of Science: http://www.science.nus.edu.sg/

Department: http://www.stat.nus.edu.sg/

Terms of Service: http://www.nus.edu.sg/careers/potentialhires/

workinginnus/benefits.html

#### **Qatar: Education City, Doha**

#### **Carnegie Mellon Qatar Teaching Position**

Applications are invited for a teaching-track faculty position at Carnegie Mellon Qatar in Education City, Doha. This position emphasizes undergraduate teaching primarily, but also involves a combination of course development and/or research. All areas of statistics are welcome.

See http://www.stat.cmu.edu (email: hiring@stat.cmu.edu).

Send CV, relevant transcripts, teaching statement, and three recommendation letters to: *Search Committee, Statistics, Carnegie Mellon University, Pittsburgh, PA 15213* or hiring@stat.cmu.edu.

Women and minorities are encouraged to apply. AA/EOE.

#### **Singapore**

#### Singapore University of Technology and Design

Faculty Members (Stochastics)

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15020752

#### **Spain: Barcelona**

#### **Universitat Pompeu Fabra**

Tenure Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15229575

#### **Switzerland: Lausanne**

#### Swiss Federal Institute of Technology, Lausanne (EPFL)

Postdoctoral/Doctoral Positions in Statistics/Applied Probability at EPFL

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15023029

#### Taiwan: Taipei

#### **Academia Sinica**

#### **Institute of Statistical Science**

#### **Regular Research Positions**

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14714864

The Institute of Statistical Science, Academia Sinica, is seeking candidates for regular research positions at the level of assistant, associate or full research fellow available in 2014. Candidates in all areas of Statistics will be considered. Candidates should have a PhD degree in statistics or related fields. Application materials must include (1) a curriculum vitae, (2) three letters of recommendation, and (3) representative publications and/or technical reports. Additional supporting materials such as transcripts for new PhD degree recipients may also be included. Except for the letters of recommendation, electronic submissions are encouraged. Applications should be submitted to

Dr. Hsin-Chou Yang

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: hsinchou@stat.sinica.edu.tw

Applications should be received by December 31, 2013 for consideration.

#### **United Kingdom: Coventry**

#### **University of Warwick**

Research Fellows

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15113750

#### **United Kingdom: Coventry**

#### **University of Warwick**

Research Fellow

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15328804

#### **United States: Auburn, AL**

#### **Auburn University**

Director of Statistical Consulting

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15113881

#### **United States: Tempe, AZ**

#### **Arizona State University**

Associate or full Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15249559

#### **United States: Berkeley, CA**

#### University of California, Berkeley, Department of Political Science

Assistant or Associate Professor - Quantitative Methods http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15057468

#### **United States: Berkeley, CA**

#### University of Berkeley, California, Department of Statistics

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15071951

#### **United States: Davis, CA**

#### University of California, Davis

Assistant Professor in Computational and Statistical Plant Biology http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15275637

#### **United States: Davis, CA**

#### University of California, Davis, Department of Statistics

Tenured/tenure-track open rank faculty position http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15407334

#### United States: Fullerton, CA

#### **California State University, Fullerton**

Tenure Track Faculty Position - Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15257495

#### **United States: Los Angeles, CA**

#### **UCLA**, Department of Statistics

Open-ranked Faculty

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15232360

#### **United States: Los Angeles, CA**

#### **University of Southern California, Department of Mathematics**

Tenure-track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15084172
The Department of Mathematics in the Dana and David Dornsife
College of Letters, Arts, and Sciences of the University of Southern
California in Los Angeles, California, seeks to fill a tenure-track
Assistant Professor position with an anticipated start date of August
2014.

Candidates with research interests in analysis, with an emphasis on computational methods and/or statistics, will be considered. Candidates should have demonstrated excellence in research and a strong commitment to graduate and undergraduate education. A doctoral degree is required at the time of appointment.

To apply, please submit the following materials: letter of application and curriculum vitae, including your e-mail address, telephone and fax numbers, preferably with the standardized AMS Cover Sheet. Candidates should also arrange for at least three letters of recommendation to be sent, at least one of which addresses teaching skills. Please submit applications electronically through MathJobs at www. mathjobs.org. As an alternative and only if necessary, materials can be mailed to:

Search Committee
Department of Mathematics
Dornsife College of Letters, Arts and Sciences
University of Southern California
3620 Vermont Avenue, KAP 104
Los Angeles, CA 90089-2532.

In order to be considered for this position, applicants are also required to submit an electronic USC application; follow this job link or paste in a browser:

https://jobs.usc.edu/applicants/Central?quickFind=72260

Review of applications will begin November 15, 2013.

Additional information about the USC Dornsife's Department of Mathematics can be found at our web site http://dornsife.usc.edu/mathematics/

USC strongly values diversity and is committed to equal opportunity in employment. Women and men, and members of all racial and ethnic groups are encouraged to apply.

#### **United States: Los Angeles, CA**

#### **University of Southern California/Marshall School of Business**

Open Rank - Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15276186

#### **United States: Los Angeles, CA**

#### UCLA

UCLA Department of Mathematics Faculty Positions 2014-15 http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15122762

#### **United States: Santa Cruz, CA**

#### **UC Santa Cruz**

Assistant Professor of Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15122781

#### **United States: Stanford, CA**

#### **Stanford University, Department of Statistics**

Assistant Professor and/or Stein Fellow http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14970734

#### **United States: Stanford, CA**

#### **Stanford University, Department of Statistics**

Associate or Full Professor http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14970717

#### **United States: Fort Collins, CO**

#### Colorado State University, Department of Statistics

Open Rank Special Appointment Faculty Statistical Consultant http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15084039

#### United States: Fort Collins, CO

#### **Colorado State University, Department of Statistics**

Special Appointment Assistant Professor http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15123321

#### **United States: Fort Collins, CO**

#### **Colorado State University, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15123312

#### **United States: Golden, CO**

#### Colorado School of Mines

Assistant or Associate Professor http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15160758

#### **United States: New Haven, CT**

#### **Yale University**

#### **Assistant Professor of Statistics**

Yale University department of Statistics invites applications for a faculty position at the rank of Assistant Professor tenure track or Gibbs Assistant Professor, beginning July 2014. Academic rank will be offered based on the applicant's record of excellence in research and teaching. The Department seeks expertise in the theory and practice of Statistics with a significant data-driven component in research and teaching activities. Ample opportunities exist for collaboration and cooperative teaching with faculty in computer science, biological sciences, social sciences, physical sciences and engineering, as well as for participation in Yale's programs in Computational Biology and Bioinformatics and in Applied Mathematics. Applications are encouraged from women and underrepresented minority scholars.

The Department encourages excellence in teaching, and faculty members teach a broad range of courses at both graduate and undergraduate levels. Applicants should submit a letter of application, curriculum vita, a statement of research and teaching interests, the name and contact information for references, and arrange for three letters of reference to be submitted. Applications and letters should be submitted online at https://academicjobsonline.org/ajo/jobs/3446. Questions should be directed to faculty-positions@yale. edu. Evaluation of applicants will begin December 10, 2013, but the position will remain open until filled.

More information our department can be found at http://statistics.yale.edu/.

Search Committee, Yale University Department of Statistics P.O. Box 208290, New Haven, CT 06520-8290 Yale University is an AA/EEO Employer.

#### **United States: Storrs, CT**

#### **University of Connecticut, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15256654

#### **United States: Washington, DC**

#### **Georgetown University**

Associate Professor of Statistics and International Affairs http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15188820

#### **United States: Newark, DE**

#### **University of Delaware, Department of Mathematical Sciences**

Assistant Professor of Probability

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15196814

#### **United States: Atlanta, GA**

#### Georgia State University, School of Public Health

Open Rank Professors, Biostatistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15508835

#### **United States: Atlanta, GA**

#### Georgia State University, School of Public Health

Open Rank Research Professors, Biostatistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15508743

#### **United States: Dunwoody, GA**

#### State Farm Mutual Automobile Insurance Company

Research Statistician

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14484113

#### United States: Ames, IA

### Iowa State University, Greenlee School of Journalism & Communication

Open Rank: Data-Driven Advertising & Public Relations http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15081895

#### **United States: Ames, IA**

#### **lowa State University, Departments of Mathematics and Statistics**

Assistant or Associate Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14938998

#### **United States: Iowa City, IA**

#### **University of Iowa, Department of Biostatistics**

Tenure-track faculty positions

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14158228

#### United States: Champaign, IL

#### University of Illinois at Urbana-Champaig, Department of Statistics

Open Rank Faculty Position in Biostatistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15123117

#### United States: Champaign, IL

#### University of Illinois at Urbana-Champaign, Department of Statistics

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15123088

#### **United States: Chicago, IL**

#### **University of Chicago Booth School of Business**

Assistant/Associate Professor of Econometrics and Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=7210804

#### **United States: Chicago, IL**

#### **University of Chicago, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15329622

#### **United States: West Lafayette, IN**

#### **Department of Statistics, Purdue University**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15249256

#### **United States: Cambridge, MA**

#### **Harvard University Statistics Department**

Assistant Professor, Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=11096713

#### **United States: Worcester, MA**

#### **Worcester Polytechnic Institute**

Tenure Track Position - Machine Learning

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15133446

#### **United States: Boston, MA**

#### **Boston University, Department of Mathematics and Statistics**

Assistant Professor in Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14878821

#### **United States: College Park, MD**

#### **University of Maryland**

Assistant / Associate Professor (Tenure Track)

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15399872

#### **United States: Ann Arbor, MI**

#### **University of Michigan**

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14070106

#### **United States: Chapel Hill, NC**

#### University of North Carolina at Chapel Hill

Research Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15189155

#### United States: Charlotte, NC

#### **UNC Charlotte**

Assistant Professor, Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15071306

#### **United States: Raleigh, NC**

#### **North Carolina State University, Department of Statistics**

Assistant Professor - Tenure Track

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15071448

#### United States: Research Triangle Park, NC

#### **SAMSI**

Deputy Director

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=13989039

#### **United States: Las Cruces, NM**

#### **New Mexico State University**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15055077

#### **United States: Binghamton, NY**

#### **Binghamton University**

Assistant Professor, tenure track

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15114544

#### **United States: Ithaca, NY**

#### **Cornell University**

Faculty Positions-School of ORIE

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=14781530

#### **United States: Ithaca, NY**

#### **Cornell University**

Asst or Assoc Professor Biological Statistics

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15257493

#### **United States: Corvallis, OR**

#### **Oregon State University, Department of Statistics**

Assistant/Associate/Full Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15114786

#### **United States: Eugene, OR**

#### **University of Oregon**

Assistant, Associate, or Full Professor Quantitative Biology http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15114763

#### United States: Danville, PA

#### **Geisinger Health System**

Research Investigators

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15344823

#### **United States: Pittsburgh, PA**

#### **Carnegie Mellon University: Teaching Professor Position**

Applications are invited for the position of Teaching Professor, rank (Assistant, Associate or Full) to be determined. The Department of Statistics, Carnegie Mellon University is seeking a passionate, master teacher to contribute to our thriving, modern undergraduate and graduate programs. The successful candidate will be expected to have a strong and successful teaching record, demonstrate excellence in statistical pedagogy, and an active research agenda. This position emphasizes teaching, student advising, curriculum development, and supervising collaborative research projects. PhD in statistics, biostatistics or related area required. See http://www.stat.cmu.edu or email hiring@stat.cmu.edu for more details. Send CV, relevant transcripts, teaching and research statements, and three recommendation letters to: Teaching Faculty Search Committee, Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA or hiring@stat.cmu.edu. Application screening begins immediately, continues until positions closed. Women and minorities are encouraged to apply. AA/EOE.

#### **United States: Pittsburgh, PA**

#### Carnegie Mellon University: Tenure-track/Visiting position

Applications are invited for possible tenure-track and visiting positions. Carnegie Mellon offers a collegial faculty environment, emphasizing a combination of disciplinary and cross-disciplinary research and teaching. All areas of statistics are welcome, and joint appointments with other units in the Pittsburgh area are possible. We especially encourage women and minorities to apply. Details at http://www.stat.cmu.edu (e hiring@stat.cmu.edu). Application screening begins immediately and continues until positions closed. Send CV, research papers, relevant transcripts and three letters of recommendation to: Chair, Faculty Search Committee, Department of Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA. AA/EOE.

#### **United States: University Park, PA**

### Penn State University Leader in Statistics Education

The Department of Statistics at Penn State seeks a leader in statistics education at any level; a tenure-track appointment is possible if appropriate. See ad at www.stat.psu.edu for further details about the multiple opportunities for involvement in the educational mission of the Department. Applications accepted online at www.mathjobs. org until the position is closed. A PhD in statistics or a related field is required. Employment requires successful completion of background check(s) in accordance with University policies. Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

#### **United States: Philadelphia, PA**

#### Wharton Department of Statistics, University of Pennsylvania

Assistant, Associate, or Full Professor http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15428584

#### **United States: Brookings, SD**

#### **South Dakota State University**

Assistant Professor of Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15110535

#### **United States: Austin, TX**

#### The University of Texas at Austin

Assistant Professor, Statistics http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15016138

#### **United States: Houston, TX**

#### Roque Wave Software, Inc.

Statistician

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=13444846

#### **United States: Salt Lake City, UT**

#### **Dept of Mathematics, University of Utah**

**Faculty Positions** 

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15427539

#### **United States: Fairfax, VA**

#### **George Mason University**

Open Rank Faculty Appointment http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15123327

#### **United States: Seattle, WA**

### University of Washington, Departments of Statistics and Computer Science and Engineering

Open-Rank Tenure or Tenure-Track Position http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15320695

#### **United States: Madison, WI**

#### **University of Wisconsin-Madison, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15319202

#### **United States: Madison, WI**

#### University of Wisconsin-Madison, Department of Statistics

Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site\_id=1847&jb=15329256

### **International Calendar of Statistical Events**

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

#### **December 2013**

December 1–5: Mandurah, Western Australia. Biometrics by the Canals: The International Biometric Society's Australasian Region Conference 2013 w http://www.biometricsociety.org.au/conferences/Mandurah2013/

December 2–4: Oviedo, Spain. EUROFUSE2013 on Imprecision and Uncertainty in Preference Modeling and Decision Making w http://eurofuse2013.uniovi.es/

December 8–13: Atlantic City, NJ, USA. 69th Annual Deming Conference on Applied Statistics w http://www.demingconference.com/

December 11–14: Simons Institute, UC Berkeley, USA. **Big Data** and **Differential Privacy w** http://simons.berkeley.edu/programs/bigdata2013

Conference on Recent Advances in Experimental Designs w http://maths.gzhu.edu.cn/siced2013/

December 15–19: Durham, NC, USA. **OBayes 2013 w** http://bayesian.org/sections/OB/obayes-2013-celebrating-250-years-bayes

December 16–18: Pune, Maharashtra, India. International Conference: Role of Statistics in the Advancement of Science and Technology w http://stats.unipune.ac.in/Conf13.html

December 16–19: Birmingham, AL. UAB's 3rd Annual NHGRI-funded Short Course on Next Generation Sequencing: Technology & Statistical Methods w http://www.soph.uab.edu/ssg/nhgri\_r25/thirdshortcourse

International Conference w http://www.math.hkbu.edu.hk/

December 28–31: CRRao AIMSCS, India. Statistics 2013: Socio-Economic Challenges and Sustainable Solutions w www.statistics2013-conference.org.in

#### January 2014

January 6-8: Chamonix, France. MCMSki IV w http://www.pages.drexel.edu/~mwl25/mcmski/

January 17–18: Gainesville, Florida, USA. Workshop on Dimension Reduction and High Dimensional Inference w http://www.stat.ufl.edu/symposium/2014/index.html

January 20–22: Lunteren, The Netherlands. 13th Winter School on Mathematical Finance w http://staff.science.uva. nl/~spreij/winterschool/winterschool.html

#### February 2014

February 3–7: SAMSI, Research Triangle Park, NC. LDHD:
Topological Data Analysis w http://www.samsi.info/workshop/2013-14-ldhd-topological-data-analysis-february-3-7-2014

February 20–21: SAMSI, Research Triangle Park, NC. Education and Outreach: Undergraduate Workshop w http://www.samsi.info/workshop/undergraduate-workshop-february-20-21-2014

February 24–26: SAMSI, Research Triangle Park, NC. LDHD: Statistical Inference in Sparse High-Dimensional Models: Theoretical and Computational Challenges w http://www.samsi.info/workshop/2013-14-ldhd-statistical-inference-sparse-high-dimensional-models-theoretical-and-computati

#### March 2014

March 4–7: Ulm, Germany. 11th German Probability and Statistics Days w http://www.gpsd-ulm2014.de/

March 6–8: NIMBioS at the University of Tennessee, Knoxville. NIMBioS Investigative Workshop: Animal Social Networks w http://nimbios.org/workshops/WS\_socialnet

March 6–8: Ulm, Germany. Conference on Modelling, Analysis and Simulation in Economathematics w http://graduiertenkolleg.gpsd-ulm2014.de/

March 7–9: Dallas, Texas, USA. **Ordered Data Analysis, Models and Health Research Methods:** An International Conference in Honor of H.N. Nagaraja for his 60th Birthday **w** http://faculty.smu.edu/ngh/hnnconf.html

March 16–19: Baltimore, Maryland. 2014 ENAR/IMS Spring Meeting. w http://www.enar.org/meetings.cfm

March 17–19: Knoxville, Tennessee, USA. **NIMBioS Investigative Workshop: Vectored Plant Viruses w** http://www.nimbios.org/workshops/WS\_plantviruses

#### **April 2014**

April 24–25: NIMBioS at the University of Tennessee, Knoxville. NIMBioS Investigative Workshop: Modeling Contamination of Fresh Produce w http://www.nimbios.org/workshops/WS\_produce.html

April 28–30: NIMBioS at the University of Tennessee, Knoxville. NIMBioS Investigative Workshop: Predictive Models for Ecological Risk Assessment w http://www.nimbios.org/workshops/WS\_era.html

#### May 2014

May 26–28: Paris, France. PLS 2014: 8th International Conference on Partial Least Squares and Related Methods w http://www.pls14.org/

May 29–31: University of Maryland, College Park, USA.
Frontiers of Hierarchical Modeling in Observational Studies,
Complex Surveys and Big Data: Conference Honoring Professor
Malay Ghosh w http://www.jpsm.umd.edu/ghosh

May 30: Philadelphia, PA. 2014 Mid-Atlantic Genetic Epidemiology and Statistics (MAGES) Conference: Integrated Systems Biology Analytical Methods for Epidemiological Studies of Complex Traits w http://www.med.upenn.edu/magesconference/index.shtml

#### **June 2014**

June 2–6: Institute of Computational and Experimental Research in Mathematics (ICERM) at Brown University, Providence, RI. Computational Nonlinear Algebra w http://icerm.brown.edu/tw-14-3-cna

June 2–6: Będlewo, Poland. 11th International Conference on Ordered Statistical Data w http://bcc.impan.pl/14OrderStat/

June 2–27: University of British Columbia, Vancouver, Canada. PIMS Summer School in Probability w http://www.math.ubc.ca/Links/ssprob14/

June 8–12: Ljubljana, Slovenia. 23rd International Workshop on Matrices and Statistics (IWMS) w www.law05.si/iwms

June 11–14: Lisbon, Portugal. 3rd Stochastic Modeling

Techniques and Data Analysis Conference w http://www.smtda.net/

June 15–18: Honolulu, Hawaii. 2014 WNAR/IMS Annual Meeting w TBC

June 15–18: Portland, OR, USA. 2014 ICSA and KISS Joint Applied Statistics Symposium w http://www.statkiss.org/icsakiss2014

June 16–26: Búzios, Brazil. Pan-American Advanced Study Institute on Spatial Statistics w http://www.stat.washington.edu/peter/PASI/PASI 2014.html

June 17–20: Bogotá, Colombia. First International Congress on Actuarial Science and Quantitative Finance w http://www.matematicas.unal.edu.co/icasqf/

June 23–25: Center for Mathematical Sciences, University of Cambridge, UK. Probability and Statistics in High and Infinite Dimensions: Conference on the occasion of Evarist Giné's 70th Birthday w http://www.statslab.cam.ac.uk/~nickl/Site/2014.html

June 29–July 2: Rotterdam, The Netherlands. 34th

International Symposium on Forecasting w http://forecasters.org/icf/

Ims June 30–July 3: Taipei, Taiwan. Third IMS Asia Pacific Rim Meetings NEW WEBSITE http://ims-aprm2014.ntu.edu.tw/

June 30-July 3: Athens, Greece. 8th Annual International Conference on Mathematics Education & Statistics Education w http://www.atiner.gr/edumatsta.htm

#### **July 2014**

July 1–4: Montpellier, France. **International Statistical Ecology** Conference w http://isec2014.sciencesconf.org/

July 2–5: University of Technology, Sydney. Workshop on Finance, Probability and Statistics w http://www.qfrc.uts.edu.au/IMS-FPS-2014

July 7–9: Huquan Hotel, Mile, Yunnan, China. Building Statistical Methodology and Theory 2014: In honor of Jeff Wu's 65th birthday w http://www.stat.purdue.edu/~sunz/Jeff\_2014/index.html

July 7–9: Coventry, UK. Computational Methods for Jump Processes w http://www2.warwick.ac.uk/fac/sci/statistics/crism/workshops/jumps/

July 7–10: Sydney, Australia. 2014 IMS Annual Meeting with Australian Statistical Conference w http://www.asc-ims2014.com/

### **International Calendar** continued

#### July 2014 continued

July 20-August 1: Cornell University, Ithaca, NY. 10th Cornell Probability Summer School w http://www.math.cornell.edu/~cpss/

July 28 – August 1: Buenos Aires, Argentina. 37th Conference on Stochastic Processes and Applications w http://mate.dm.uba.ar/~probab/spa2014/

July 31 – August 2: Boston, MA. 16th New Researchers
Conference w TBC

#### August 2014

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

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

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

#### September 2014

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

#### **June 2015**

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

#### **July 2015**

China International Conference on Statistics and Probability whttp://www.2015imschina.com

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

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

#### August 2015

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

#### March 2016

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

#### **July 2016**

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

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

#### **July 2017**

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

#### **July 2018**

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

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know.

You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at http://www.imstat.org/submit-meeting.html

We'll list them here in the Bulletin, and on the IMS website too, at www.imstat.org/meetings

#### Membership and Subscription Information

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#### IMS Bulletin

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

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1:	January/February	December 1	December 15	January 1
2:	March	February 1	February 15	March 1
3:	April/May	March 15	April 1	April 15
4:	June/July	Мау 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



### January/ **February** 2014

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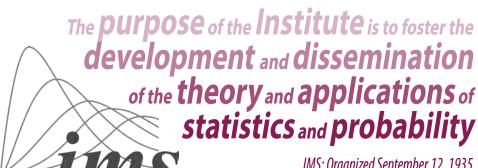
# **DEADLINES** submissions

### December 1, then February 1

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## Journal

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