# BCASA NEWSLETTER

# **Boston Chapter of the American Statistical Association**

Serving

Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont

Volume 33, No. 1, September 2014

Homepage: http://www.amstat.org/chapters/boston

E-Mail: BostonChapterASA@gmail.com

SCHEDULED EVENTS & MEETINGS			
Wednesday, September 24, 2014	Bentley University and Boston Chapter of INFORMS Lecture	Waltham, MA	
	(Strategic R&D project portfolio planning - approaches, techniques, tools)		
Tuesday, September 30, 2014	BCASA Evening Lecture Series: A Conversation with Bob O'Neill	Cambridge, MA	
October 2-5, 2014	IAFOR North American Conference on Business and Public Policy	Providence, RI	
Wednesday, October 15, 2014	BCASA Evening Lecture Series: The Surprising Evolution of	Cambridge, MA	
-	Probability	-	
Thursday, October 24, 2014	Harvard SPH Lagakos Distinguished Alumni Award Lecture	Boston, MA	
Saturday, November 1, 2014	New England Isolated Statistics Meeting	Newton, MA	
Thursday, November 6, 2014	BCASA Evening Lecture Series: Infographics	Cambridge, MA	
November 20-25, 2014	PQR Conference - Integrative Approaches to Understand Allelic Function	Boston, MA	
Saturday, December 6, 2014	Mini-Symposium and Banquet to Celebrate ASA 175th Anniversary	Boston, MA	

Event schedule at the chapter website: http://www.amstat.org/chapters/boston

Detailed announcements appear later in this newsletter. All events are announced in advance to members on our email list. We are currently planning events for the coming year. If you have suggestions please contact Program Chair John McKenzie, mckenzie@babson.edu.

# PROGRAM CHAIR REPORT

### John McKenzie

This is my second report as Program Chair. Below is a summary of the Chapter's events for the year beginning in September of 2013. I also want to thank the many volunteers who gave generously of their time and facility space during the past year.

The ASA's second largest chapter continues to be one of its most active chapters. In the past year it has organized the following 11 events (seven lectures, two panels, one meeting, and one Potluck Dinner and Holiday Party, and sponsored two events (one Meeting with a Meeting and one DataFest).

September 30, 2013: "Big Data: A Perspective on Their Current Uses and Potential Future Uses" by Mike Horrigan, at Smith College, hosted by Nicholas Horton

November 2, 2013: "18th New England Isolated Statisticians Meeting (NEISM18) organized by Bob Goldman and John McKenzie, at the College of the Holy Cross, hosted by Ed Soares

November 13, 2013: "Regressions Gone Wrong: Why Many Reports of Regression Analyses Mislead" by David C. Hoaglin, at Harvard Medical School, hosted by Shelley Hurwitz

January 15, 2014: "A Model for Scaling Healthcare Systems Engineering Nationally: The Medicare/Medicaid: Innovation Center Demonstration Project" by James C, Benneyan, at Northeastern University, hosted by Andrew Lo and Les Servi (co-sponsored with the Boston Chapter of INFORMS)

We have also agreed to publicize with the Boston INFORMS Chapter each other's events. I continue to look forward to working with Victor Lo and Les Servi in the future.

January 25, 2014: Annual Winter Potluck Dinner and Holiday Party at Walker Memorial at MIT, hosted by Tom Lane

February 26, 2014: "What do Twinkies and the Mosteller Statistician of the Year Have in Common?" by Kathy Monti, Mosteller Statistician of the Year Honoree, at Simmons College, hosted by Bob Goldman

March 26, 2014: "Creating a Data Science Course", by Joe Blitzstein, Rob Carver, and Rapael Irizarry, at Harvard University, hosted by the Harvard Statistics Department

March 29-30, 2014: "2014 Five College DataFest", at the University of Massachusetts at Amherst, organized by Ben Baumer and Andrew Bray

April 16, 2014: "ASSISTments, Educational Software for Students of Mathematics and Statistics" by Neil T. Heffernan III and Eric Simoneau, at Buckingham Browne & Nichols, hosted by Al Coons (co-sponsored with the Northeastern Section of the Mathematical Association of America)

May 9, 2014: "The Sabermetric Revolution: Assessing the Growth of Analytics in Baseball" by Ben Baumer, at Wheelock College, hosted by Sam Cook

June 19, 2014: "Seminar on Essential Concepts for Causal Inference in Randomized Experiments and Observational Studies", by Donald B. Rubin, at Biogen Idec, hosted by Stacy Lindborg, Gilmore O'Neill, and Jim MacDougall

August 3, 2014: "Technology's Impact on Statistics Education: Past, Present, and Future" by Tim Hesterberg, Marcello Pagano, Roxy Peck, and Paul Velleman, at 2014 Joint Statistical Meetings, organized by John McKenzie

#### Also greeters

I look forward to another year of chapter events and hope that you will be able to attend many of them.

# **EVENING LECTURE SERIES**

### A Conversation with Bob O'Neill

# Robert O'Neill, Ph.D. is the Senior Statistical Advisor of the Office of Translational Sciences at the Center for Drug Evaluation and Research (CDER), Food and Drug Administration.

Date: Tuesday, September 30, 2014

Time: Light Dinner: 6:00 pm; Presentation: 7:00 pm

**Location:** Kendall Square Marriott, Two Cambridge Center, 50 Broadway, Cambridge, MA 02142 (Boston Marriott Cambridge)

Host: Miganush Stepanians, Prometrika LLC

Directions, Transportation, Parking, and Site Map: http://www.marriott.com/hotels/maps/travel/boscb-boston-marriott-cambridge/

Public Transportation: MBTA Red Line Kendall Square/ MIT Station

Cost: Dinner: \$8 for chapter members; \$10 for non-members; students free. Presentation: free.

**Registration:** <u>http://bcasa2014oneill.eventbrite.com</u>. Registration requested by September 28. With limited available space, early registration is encouraged.

#### Abstract:

Dr. O'Neill will briefly discuss aspects of the past, present, and future of regulatory statistics in an interview format with Dr. Scott Evans. Topics will include: Dr. O'Neill's view of challenging issues of the future (e.g., the impact of personalized medicine, drug safety assessment, streamlining of randomized clinical trials), key challenges for the FDA during his tenure, and training in regulatory statistics and decision making. Plenty of time will be left for questions and comments from the audience.

#### Speaker Biography:

Robert O'Neill, Ph.D. is the Senior Statistical Advisor and formerly the Director of the Office of Biostatistics at the Center for Drug Evaluation and Research (CDER), Food and Drug Administration (FDA). His office oversaw the statistical review of submitted drug applications and was responsible for setting statistical policy. Dr. O'Neill was the ICH FDA topics leader for two guidances, E9 and E5. He is a Fellow of the American Statistical Association (1985) and the Society for Clinical Trials (2013), the 2002 recipient of the Marvin Zelen Leadership Award in Statistical Science, and the 2004 Lowell Reed Lecture Awardee from the American Public Health Association. Dr. O'Neill recently developed a course entitled "Statistical and Quantitative Methods for Pharmaceutical Regulatory Science" with the inaugural delivery in the spring of 2014 at the Harvard School of Public Health.

# **EVENING LECTURE SERIES**

#### The Surprising Evolution of Probability

#### Herbert I. Weisberg, Ph.D., President of CAUSALYTICS, LLC

Date: Wednesday, October 15, 2014
Time: Light Dinner: 6:15 pm; Presentation: 7:00 pm
Location: Room 705, Science Center, Harvard University, Cambridge, MA
Directions, Transportation, Parking, and Site Map: <u>http://www.harvard.edu/visitors/directions</u>
Cost: Dinner: \$8 for chapter members; \$10 for non-members; students free.
Presentation: free.
Registration: http://bcasa2014weisberg.eventbrite.com. Registration requested by October 13.

#### Abstract:

The basic concept of probability is now universally accepted as the appropriate mathematical measure of uncertainty. However, this modern understanding is in fact historically very recent, and evolved gradually from an earlier, and quite different, perspective. In his new book, *Willful Ignorance: The Mismeasure of Uncertainty*, Herb Weisberg traces the evolution of modern probability and its momentous effects on statistics and scientific thought. In this talk, Herb will explain how his intellectual journey has led him to the provocative conclusion that traditional statistical methods are due for a major overhaul. He will then entertain questions. Finally, copies of the book will be available for sale, signed by the author.

#### Speaker Biography:

Dr. Weisberg received his B.A. in Mathematics from Columbia and Ph.D. in Statistics from Harvard. He has had a long career as a statistical consultant, and published three books related to statistical theory and practice. Herb is a former president of the BCASA (1976-1979) and a Fellow of the ASA. Along with Victor Pontes, he is currently involved in the development and marketing of innovative methods for predictive analytics.

# **EVENING LECTURE SERIES**

## Infographics

#### Gareth Cook, Editor of the Best American Infographics Series

Date: Thursday, November 6, 2014 Time: Light Dinner: 6:30 pm; Presentation: 7:00 pm Location: Buckingham Browne & Nichols School, 80 Gerry's Landing Road, Cambridge, MA <u>https://maps.google.com/maps?daddr=80+Gerrys+Landing+Rd%3F,+Cambridge,+MA+02138</u> Cost: Dinner: \$8 for chapter members; \$10 for non-members; students free. Presentation: free. Registration: http://bcasa2014cook.eventbrite.com. Registration requested by November 3.

#### Abstract:

Infographics or information graphics is defined as graphic visualizations of information, data or knowledge intended to present complex information quickly and clearly. On his website, the speaker states that "We find ourselves in the era of big data, a time when information moves faster than ever, and infographics provide us with quick, often influential bursts of insight—into the environment, politics, social issues, health, sports, arts and culture, and more. The Best American Infographics captures the finest examples, from the past year, of this mesmerizing new way of seeing and understanding our world". In this presentation Gareth will explain how he selected the displays for the best-selling Best American Infographics of 2013 and the recently published Best American Infographics of 2014 volumes. Then he will entertain questions from the attendees. Copies of his books will be available for sale, signed by the editor.

#### Speaker Biography:

Gareth Cook is an American journalist and editor, whose work has appeared in numerous publications, including *The New York Times Magazine*, and *Wired*. In addition to being the series editor of The Best America Infographics series, Gareth is the editor of *Mind Matters*, Scientific American's neuroscience blog. In 2005 he was awarded a Pulitzer Prize for Explanatory Reporting in 2005. It was for "explaining, with clarity and humanity, the complex scientific and ethical dimensions of stem cell research" as the science reporter of *The Boston Globe*. Gareth was one of the founders of the *Boston Globe*'s Ideas section, and its editor from 2007 to 2011. The Brown University graduate is now a freelance writer.

#### Strategic R&D Project Portfolio Planning - Approaches, Techniques, Tools Vladimir Shnaydman, ORBee Consulting

**Date:** Wednesday, September 24, 2014 6:30 pm Informal Welcome & Snacks 7:00 pm Lecture No charge.

#### Location:

Smith 122, Bentley University 175 Forest Street Waltham, MA 02452 Directions to Smith Building: http://uxpaboston.org/wp-content/uploads/2012/03/Bentley\_DrivingDirections.pdf Map: https://www.bentley.edu/files/campus-map-2012.pdf (Building #6)

#### Abstract:

Portfolio planning is critical for developing long-term company strategy. The goal is to select "right" portfolio of internal and external R&D projects for funding, align company strategy and limited resources, optimize resource utilization, and manage portfolio risk to buffer the organization against unfavorable events. Such factors as insufficient/uncertain data and each company's unique business environment could contribute to the complexity of portfolio planning. It is also hard to validate modeling results due to a long planning horizon, and highly dynamic nature of business.

Importance of portfolio planning and its complexity dictates application of advanced techniques based on Operations Research methodology. OR-based portfolio planning models are much more efficient than most "simplistic" and sometimes inaccurate techniques.

The presentation will include:

- Overview of approaches and tools for portfolio planning, their advantages and disadvantages
- Portfolio planning methodology overview based on combined usage of optimization and simulation models to
  maximize portfolio value and balance it across strategic goals, resources and risk. (Optimization model (MIP) is
  used for portfolio selection, and simulation model for portfolio risk assessment and analysis of risk mitigation
  strategies. Portfolio simulator also includes animation of portfolio workflow.)
- Case studies and tools illustrating presented approach are related to portfolio planning for biopharmaceutical companies

#### **Speaker Biography:**

Vladimir Shnaydman, Ph.D., is President of ORBee Consulting (508-881-0314,

<u>Vladimir.shnaydman@orbeeconsulting.com</u>). Vladimir has BS & MS Electrical Engineering & Computer Science, MS in Applied Mathematics & Operations Research, and Ph.D. in Engineering. He contributed to many industries such as biotechnology, computer networking, data storages, water resources planning and management, telecommunications, transportation, and others. Dr. Shnaydman published more than 50 papers. He is co-author of three books.

Jointly co-sponsored by Bentley University (Virtual Analytics Symposium) and Boston Chapter of Institute for Operations Research and the Management Sciences (BC INFORMS).

## Myrto Lefkopoulou Distinguished Lecture

Date: Thursday September 18

You are cordially invited to attend the annual Myrto Lefkopoulou Distinguished Lecture to be held on September 18, 2014, at 4:00 pm in The Kresge Building, Room G2, Harvard School of Public Health.

"Discovery Research with Electronic Medical Records"

Our speaker will be Tianxi Cai, ScD Professor of Biostatistics Department of Biostatistics Harvard School of Public Health. The Department of Biostatistics, Harvard School of Public Health would very much be honored by your presence. There will be a short coffee & tea period at 3:30 pm and a reception to follow in Sebastien's Café.

If you could kindly RSVP by September 10th to Meagan Plante: mplante@hsph.harvard.edu

For more info click here: www.hsph.harvard.edu/biostats/events/awards/myrto/

## 19th New England Isolated Statisticians Meeting (NEISM19)

The 19th New England Isolated Statisticians Meeting (NEISM19) will be held on Saturday, November 1, 2014. The meeting will take place at Boston College in Newton, Massachusetts. This annual event is a wonderful opportunity for statisticians isolated (usually, but not always, in mathematics departments) to discuss topics related to teaching statistics. The organizers would particularly like to encourage new statistics teachers and instructors who have not attended previous NEISMs to come to NEISM19. The event is sponsored by the Boston Chapter of the American Statistical Association and is free. We ask only that participants pay for their own transportation. If you know of someone who may be interested in this event, please do forward this notice to them. Please register for NEISM19 by Friday, October 24, at the latest. Space is limited and so we urge you to register ASAP. For further information or to register, simply email Bob Goldman (robert.goldman@simmons.edu) or John McKenzie (mckenzie@babson.edu).

### Mini-Symposium and Banquet to Celebrate ASA 175th Anniversary

Every 25 years, from when the Association began celebrating its anniversaries in 1914, there has been a major event near its birth day, November 27, in its birthplace, Boston. This year will be no different. On Saturday, December 6, there will a mini-symposium and banquet to celebrate the Association's 175th anniversary. It will be similar to the sesquicentennial celebration of December 9, 1989. First, there will be a symposium at one of the area's colleges or universities during the day. A highlight of the symposium's luncheon will be the announcement of the 2015 Mosteller Statistician of the Year. The original name of this award was the Boston Chapter Statistician of the Year; its first recipient was Fred Mosteller, who was honored at the 1989 luncheon. In the evening there will be celebratory banquet to conclude the day. Joining us at this historical event will be ASA President Nat Schenker.



# **BCASA REGION MEETINGS**

### The IAFOR North American Conference on Business and Public Policy 2014

Thursday, October 2 - Sunday, October 5 Providence, Rhode Island 2014 Conference Theme: "The Data-Enriched Enterprise"

The International Academic Forum in conjunction with its global university and institutional partners is proud to announce the Inaugural North American Conference on Business and Public Policy.

Hear the latest research, publish before a global audience, present in a supportive environment, network, engage in new relationships, experience the US, explore Boston, New York and New England, and join a global academic community. For more info click here: <u>nacbpp.iafor.org</u>

### PQG Conference - Integrative Approaches to Understand Allelic Function

Thursday, November 20 - Friday, November 21 Boston, Massachusetts

The Program in Quantitative Genomics at the Harvard School of Public Health, jointly with the HSPH Department of Biostatistics and the Department of Biostatistics and Computational Biology at the Dana-Farber Cancer Institute, will host its 8th two-day conference on November 20-21, 2014, at the Joseph B. Martin Conference at Harvard Medical School in Boston, MA.

The conference will be entitled "Integrative Approaches to Understand Allelic Function" and will seek to examine the use of evolutionary functional genomics, statistical genetics, and integrative approaches to understand the function of rare and common human alleles. We will discuss the interdisciplinary challenges of data analysis involved. We seek to engage scientists working in experimental, clinical, and computational epigenomics in a discussion centered on three important topics: 1. High-throughput strategies to understand non-coding allelic functions 2. Integrative approaches to interpret the function of non-coding alleles 3. Integrative approaches to interpret the function of coding alleles.

The conference schedule includes time for scientific presentations, as well as a poster session for submitted abstracts.

Three abstracts will be selected for Stellar Abstract Awards and to be presented as 15-minute platform talks. Each of these speakers will receive an award of up to \$500 for travel assistance or other conference expenses.

For more info click here: www.hsph.harvard.edu/2014-pqg-conference

## 2015 NCTM Annual Meeting & Exposition

Effective Teaching to Ensure Mathematical Success for All

Boston Convention & Exhibition Center April 15 – 18, 2015

Join thousands of education professionals for the nation's premier math education event. Go beyond the classroom to examine the innovative ideas that can improve the quality of learning for every student. 700+ Sessions on Trends in Mathematics Education

- Insights into implementation and assessment of the Common Core State Standards for Mathematics
- Best practices from experts in mathematics education
- New ideas to integrate mathematics into other disciplines and support student learners
- Collaborate and expand your professional network

For more information, please visit http://www.nctm.org/Boston/

### **AAPOR 70th Annual Conference**

Thursday, May 14 - Sunday, May 17 Boston, Massachusetts

Plan to join your public opinion and survey research colleagues for more than three days of extensive learning and networking at the AAPOR 70th Annual Conference -- the premier event for survey and public opinion researchers from around the globe. Attendees will be immersed in the latest trends, innovations and research in the field. In keeping with long-standing AAPOR tradition, the 2015 conference will be rich with discussion on the shaping of public opinion and the consequences for individuals and collectives.

For more info click here: tinyurl.com/ko4bg4r

### 2015 International Conference on Health Policy Statistics

The International Conference on Health Policy Statistics (ICHPS), sponsored by the American Statistical Association (ASA), will be held in Providence, RI from October 7 to 9, 2015. Online submission of workshop or invited session proposals will be open until October 20, 2014. For more information about the conference, please visit <a href="http://www.amstat.org/meetings/ichps/2015/index.cfm">http://www.amstat.org/meetings/ichps/2015/index.cfm</a>

# **NEWS & ANNOUNCEMENTS**

## **Record-Breaking Joint Statistics Meeting**

The 2014 Joint Statistics Meeting (JSM) in Boston set two attendance records. First, it was most attended at 6,809, breaking the previous record of 6,804 at the 2009 JSM in Washington, DC. Second, it was the smallest record-breaking margin. The additional five attendees were two less than the previous margin of seven. It is noteworthy that this attendance is much larger than the attendance the last time the event was held in Boston in 1992. In addition, the DC event was also an IMS annual meeting, but not so this year in Boston.

## **Election Results**

The annual election of chapter officers was held at our event on Tuesday, July 1. The various officer positions have staggered terms. The following were elected to the positions with terms starting in January of 2015:

- Jim MacDougall, President
- John McKenzie, Program Chair (re-elected)
- Ching-Ti Liu, Webmaster (re-elected)
- Ming Yang, Newsletter Editor (re-elected)

Thanks to these volunteers for stepping forward to keep our chapter running.

And a special thanks to Tom Lane (outgoing President) for his past and continuing superb service.

### **Council of Chapters Representative**

Jim MacDougall has served as our representative to the Council of Chapters for several years. Now that he has been elected president starting in January of 2015, we have the opportunity to appoint a replacement representative. This position requires attendance at a Council of Chapters meeting each year at JSM, plus occasional other paperwork during the year. It's not a burdensome job, and it's a great way to contribute to the local chapter and make connections with colleagues from other chapters.

Anyone interested in this position should contact Jim MacDougall (jamesmacdougall@comcast.net) or Tom Lane (tlane@alum.mit.edu).

### **Local Fellows**

Several local statisticians were included among the 61 people named Fellows of the ASA this year:

- Mark Glickman, Boston University School of Public Health
- Shelley Hurwitz, Harvard Medical School and Brigham & Women's Hospital
- Tor Devin Tosteson, Dartmouth Geisel School of Medicine
- Tyler J. VanderWeele, Harvard University

Mark, Shelley, and Tor are also members of the Boston Chapter. Congratulations to them all.

### **ASA's Public Relations Campaign**

The ASA has launched a public relations campaign to elevate public and media awareness of statistical science and change the public's perception of statisticians. For more information about the campaign, please visit http://thisisstatistics.org.

## Two Awards Presented to BCASA Members at 2014 JSM

Dominique Haughton, Professor of Statistics at Bentley University, is the recipient of the Council of Chapters Award for the Boston Chapter. The award was announced at the meeting of Council of Chapters of the American Statistical Association.

Nicholas Horton, Professor of Statistics at Amherst College is the recipient of the 2014 Mu Sigma Rho William D. Warde Statistical Education Award. The award was presented during the meeting of the Statistics Education Section of the American Statistical Association.

Congratulations Dominique and Nick!

## Michael Daniels, ScD '95, to Receive Lagakos Alumni Award from Department of Biostatistics at Harvard

The Department of Biostatistics announces that Dr. Michael Daniels will be this year's recipient of the 3rd annual Lagakos Distinguished Alumni Award. Dr. Daniels will be presented with the award and will deliver a lecture on Thursday, October 23rd, preceding the kickoff of the 2014 HSPH Alumni Weekend.

This award honors the career of Professor Stephen Lagakos by recognizing Department alumni whose research in statistical theory and application, leadership in biomedical research, and commitment to teaching have had a major impact on the theory and practice of statistical science.

Dr. Daniels completed his dissertation under the direction of Dr. Constantine Gatsonis in 1995. After faculty appointments at Carnegie Mellon and the Iowa State University, Dr. Daniels was recruited to the Department of Statistics at the University of Florida where he was promoted to full professor in 2007 and served as Chair from 2008-2012. He recently joined the University of Texas at Austin, where he is currently a Professor in the Department of Integrative Biology and the newly formed Department of Statistics and Data Sciences. In August of 2014 he became the inaugural chair of the Department of Statistics and Data Sciences. He is also currently the Chair of the Biometrics Section of the ASA and is on the ENAR Regional Committee. In 2007 he was elected a Fellow of the ASA.

The Lagakos Distinguished Alumni Award is being given in recognition of Dr. Daniel's achievements and innovation in statistical methodology, his commitment to education and mentoring, and his leadership and service to the statistical community.

The lecture and award ceremony will take place on Thursday, October 23, 2014 at 4 pm in Kresge G2 at HSPH with a reception to follow. All are invited. Further talk information will follow. This event is free. Registration required. Please RSVP at: <u>http://alumni.sph.harvard.edu/s/1319/02-</u> HSPH/social.aspx?sid=1319&gid=2&pgid=252&cid=1962&ecid=1962&crid=0&calpgid=61&calcid=753

### Nominations for Mosteller Statistician of the Year

Every year, the chapter honors a distinguished statistician with our Mosteller Statistican of the Year Award. The honoree may be from academia, industry, or government. The winner is selected based on contributions to the field of statistics or on service to the statistical community, particularly to the local area and the Boston Chapter. Typically the award winner makes a presentation and receives the award at a banquet in February.

The time has come again. Consider nominating a deserving candidate. Please forward your nomination nominations by Friday, October 3, 2014 to Tom Lane, <u>tlane@alum.mit.edu</u>. Include a brief description of your candidate's qualifications for the award. Voting will take place at a subsequent Planning Committee meeting.

The award holder for the previous year was Katherine Monti. You can see the complete list of past winners at <a href="http://www.amstat.org/chapters/boston/awards.html">http://www.amstat.org/chapters/boston/awards.html</a>.

#### Mu Sigma Rho

It's not too early to start thinking about your outstanding statistics students and considering nominating them for membership in Mu Sigma Rho. Both undergraduate and graduate students can be nominated. Information can be found at <a href="http://math.smith.edu/~nhorton/msr.html">http://math.smith.edu/~nhorton/msr.html</a> or by contacting Liam O'Brien at <a href="http://obs.edu">lobrien@colby.edu</a>. Although the deadline isn't until March 1, 2015, nominations are accepted anytime.

#### **Planning Committee**

Chapter activities are run by a core group known as the Planning Committee. Please consider joining us. The committee is open to all interested chapter members, regardless of whether they are also members of the ASA. We meet approximately every six weeks to plan upcoming events of the chapter. Dinner is provided. For more information contact Chapter President Tom Lane, tlane@alum.mit.edu.

## Event Funding: Request For Proposals (RFPS)

The Boston Chapter of ASA is accepting proposals for supplementary support funding to plan and conduct events with a statistical theme. Qualified events include short courses and other educational events but are not limited to these. The RFP is open until further notice.

Proposal requirements and additional information:

- Proposals should be no more than 3 pages in length with 2 pages being a description of the program, date and time, program sponsors, location and information on parking or public transportation, targeted audience/expected attendees, rationale for why the program is important and will be attractive to potential attendees, and people responsible for program planning and conduct. The last page is a budget plan.
- Funding for up to \$750 can be requested.
- The event must be open to all chapter members.
- The event must be advertised in the chapter newsletter.
- It is expected that the BCASA is not the only resource supporting the event (e.g., a department or other sponsor should be involved in organization or nominal fees to attendees should be charged).
- Any fees charged to attendees should be reasonable, with special discounts for students. The expectation is that the event will be affordable to statisticians.
- A report of the event must be submitted to BCASA upon completion of the event with possible publication of the event in the BCASA newsletter. The report should include an estimate on the number of attendees, attendee comments, an evaluation of the program, and a financial summary.
- Unused funds should be returned to the BCASA.
- Proposals will be reviewed by members of the Planning Committee of the BCASA. Applicants will be contacted shortly after the Planning Committee meeting that follows application submission.
- Questions should be directed to Scott Evans, Ph.D. (evans@sdac.harvard.edu).
- Proposals should be electronically submitted at least 6 weeks prior to the program to Scott Evans, Ph.D. (evans@sdac.harvard.edu).

## The 2014 New England Statistics Symposium (NESS): A Big Success

The 28<sup>th</sup> annual New England Statistics Symposium (NESS) was hosted by the Department of Biostatistics at the Harvard School of Public Health on April 26, 2014. NESS is intended to foster statistics and its applications by promoting research in statistics; provide an educational opportunity for students and others to learn about statistical methods and applications; encourage collaboration and the exchange of ideas among statisticians from academia, industry, and government; and provide a forum to discuss important issues in the statistics profession.

The 2014 NESS had record-breaking attendance with more than 260 pre-registrants, a diverse high-quality program consisting of 2 keynote speakers, 3 short courses, 12 invited sessions, 6 contributed sessions, a poster session, and a student paper competition.

Alan Agresti was the first keynote speaker. He discussed the "Rising of academic statistics and biostatistics with a focus on New England", a fitting topic given the historical significance of this year for the statistics profession (the 175<sup>th</sup> anniversary of the ASA which began in Boston in 1839). In addition to his well-known work in categorical data, Dr. Agresti is the coeditor of a book "Strength in Numbers: The Rising of Academic Statistics Departments in the U. S." and is no stranger to New England (he owns a home in the Boston area and has an appointment as a visiting professor in the Harvard Statistics Department).

The other keynote speaker was Dr. LJ Wei from the Harvard School of Public Health. Dr. Wei's reputation as a worldrenowned statistical methodologist is matched only by his reputation for humor and entertaining stories. Dr. Wei discussed moving beyond the comfort zone in practicing translational statistics, and offered many compelling observations made throughout his career.

NESS featured three interesting, informative, and well-attended short courses. John Buonaccorsi (University of Massachusetts/Amherst) offered Measurement Error and Misclassification, Cyrus Mehta and Charles Lui (Cytel, Inc.) offered Adaptive Designs for Confirmatory Trials, and Han Liu (Princeton University) offered Analysis of Big Data.

The Program Committee organized 12 wonderful invited sessions with diverse themes, including: Prospective Routine Medical Product Safety Surveillance: the FDA Mini-Sentinel System, New Statistical Methods in Personalized Medicine, Performance Evaluation and Measurement in Sports, Statistical Issues in Infectious Disease Research, Statistics in Oncology Clinical Trials, Innovations in Statistics Education, Latest Advances in Sequential Analysis with Applications, Career Development, Innovations in Comparative Effectiveness Research, Business Statistics, Sequential Statistical Analysis for Large Networks and Big Data, Statistical Inference for Networks and Stochastic Models, Bayesian Applications in Genetics, Applications in High Dimensional Data, Statistical Methods, Applications in Genetics, Applications for Network Data, and Applications in Clinical Data. The Program Committee consisted of: Luis Carvalho, Mark Glickman, Fangxin Hong, Nick Horton, Tom Lane, Lingling Li, Mingfei Li, Xihong Lin, Sherri Rose, Sachiko Miyahara, Aleksey Polunchenko, Lihui Zhao, and Cory Zigler.

The Student Paper Competition Committee reviewed approximately twenty student paper submissions. The Committee was extremely impressed with the quality of the student submissions. Four student awards were given: Elham Azizi (Boston University Bioinformatics) for the paper "Learning Modular Structures from Network Data and Node Variables", Thiago Costa (Harvard University Department of Applied Mathematics) for the paper "Local Algorithm to Estimate Graphons by Stochastic Blockmodels Approximation", Peng Ding (Harvard University Department of Statistics" for the paper "A Paradox from Randomization-Based Casual Inference", and Ian Johnston (Boston University Department of Math and Statistics) for the paper "Hierarchical Gene-Proximity Models for Genome-Wide Association Studies". The Student Paper Competition Committee was chaired by Dianne Finkelstein with Nick Horton, John Quackenbush, David Schoenfeld, and Lorenzo Trippa as members.

NESS featured more than 50 contributed abstracts and an engaging and interactive poster session. Sachiko Miyahara led the collection of the contributed abstracts and organized the contributed sessions. Elham Azizi, Saran Vardhanabhuti, Ming Yang, Daniel Klein, Ana Ciconelle, and Grace Montepiedra assisted with the contributed sessions. A very engaging and

interactive poster session further highlighted contributed work such as: Connecting Point Level and Gridded Data in the Analysis of Climate Extremes, Quantifying the Bias from Preferential Sampling in Air Pollution Studies, Modeling Recovery Curves with Application to Prostatectomy, A Predictive Model of Maize Yield in the Midwest United States, Item Response Theory for Genetic Mapping in Rheumatoid Arthritis, A Multiresolution Semi-Markov Process Model for Predicting Basketball Possession Outcomes, and The National Effect of Marijuana Legalization.

The NESS leadership wishes to express great appreciation for the very generous support from several donors: Boehringer-Ingelheim, Boston Chapter of the American Statistical Association, Cytel, Frontier Science Research and Technology Foundation, and Prometrika. Naitee Ting led these fundraising efforts that helped to enhance the 2014 NESS program.

The NESS dinner was hosted by Osaka Japanese Sushi & Steak House in Brookline, MA and featured a wonderful variety of Japanese foods. Jeanne Jiang led the dinner organization efforts. There were many great stories about the history of statistics in the New England area.

Meagan Plante (assisted by Shaina Andelman and Carolynn Ingals) led many of the organizational efforts including registration, website development, and document preparations. Meagan's efforts played a large role in the success of the 2014 NESS.

New England features a broad and diverse array of statisticians working to improve the profession as well as improve our ability to use data to make decisions. NESS remains an effective vehicle to help bring this group together on an annual basis.

Scott Evans

2014 NESS Executive Committee Chair

Note: This article also appears on the July 2014 issue of AmSTAT News.

## Eighth Annual Meeting Within a Meeting (MWM) Held During 2014 JSM

The American Statistical Association (ASA) sponsored a two-day Meeting Within a Meeting (MWM) statistics workshop for middle and high school mathematics and science teachers on Tuesday, August 5, and Wednesday, August 6, at the annual 2014 Joint Statistical Meetings (JSM) in Boston, Massachusetts.

Eighteen middle school and thirty high school teachers, administrators, and mathematics educators attended the workshops that addressed statistical concepts taught in middle and high school. The MWM workshops emphasize the growth of statistical literacy and thinking as teachers explore problems that require them to formulate questions; collect, organize, analyze, and draw conclusions from data; and apply basic concepts of probability. A follow-up program is planned that will help keep the teachers who attended MWM and the ASA in contact via webinars and email.

Middle-school teachers attended workshop sessions on both Tuesday and Wednesday and participated in discussions about formulating statistical questions, univariate analysis of measurement data focusing on measures of center and spread, using random sampling, bivariate measurement data analysis and categorical data analysis, investigating patterns in data and free K-12 statistics education resources, including the ASA poster competition. The MWM program schedule is available online at <u>www.amstat.org/education/mwm</u>.

The three sessions in the high-school program on Tuesday included discussions about statistical questions and study design, displaying and summarizing categorical and quantitative data, and using randomization tests to make inferences and justify conclusions. High-school teachers were given the option on Wednesday to attend the second day of the middle-school workshop (to see what should be taught before students reach high school) or attend statistics education sessions at the Joint Statistical Meetings. Some also attended the Beyond AP Statistics (BAPS) Workshop (www.amstat.org/education/baps), which was held in conjunction with JSM on August 6.

Katherine Halvorsen planned the MWM program. Rebecca Nichols, ASA Director of Education, managed the website, the registration and evaluation procedures, and the logistics of setting up and advertising the conference. Sharon Hessney and the Boston Chapter were very helpful in spreading the word among Massachusetts educators. Boston Chapter members joined participants for coffee before the workshops convened each day.

## DataFest Held at University of Massachusetts-Amherst

This past spring, the Boston Chapter sponsored the inaugural Five College DataFest, held at the University of Massachusetts, Amherst. Over 60 undergraduates from across the five institutions - Amherst, Hampshire, Mt. Holyoke, Smith, and UMass - competed to gain insights into a rich and complex data set that was provided by the energy efficiency company Gridpoint. The event spanned a full weekend and culminated in short presentations by each team to a panel of judges consisting of Becky Sweger from the National Priorities Project, Davit Khachatryan from Babson College, and Jay Emerson from Yale University. The students were encouraged to devise their own angle on their analysis, from creating appropriate research questions to communicating their findings in a clear and compelling manner. Guiding them through this process were graduate students and faculty members from the Five Colleges as well as working data professionals from across the region. Prizes were awarded for "Best in Show", "Best Use of External Data", and "Best Garbage Detection".

The Five College event was one of five that occurred across the country, joining UCLA, Duke, Emory, and Princeton. More details on the events can be found in the Amstat News article, "Big Data goes to College" (http://magazine.amstat.org/blog/2014/06/01/datafest) and the recent President's Corner column, "A Festival of Data: Student Perspectives" (http://magazine.amstat.org/blog/2014/09/01/sept2014-pres-column/). As of this summer, Datafest has a permanent home at the ASA and work is underway to develop materials to assist any institution that is interested in hosting their own event. If you are interested in hosting DataFest at your own institution, please contact Andrew Bray at Mt. Holyoke College, Ben Baumer at Smith College, or Rob Gould at UCLA.



Winners of the Best Garbage Detection category at the Five College DataFest—William Froehlich (left) and Jonathan Jordan (middle) of Amherst College—are honored by (second from left) Davit Khachatryan, Babson College assistant professor of statistics/analytics; (second from right) Jay Emerson, Yale University associate professor of statistics; and Becky Sweger, director of data and technology for the National Priorities Project.



Four Hampshire College students—Justin Baldwin (left), Adam Blaustein Rejto (third from right), Grusha Prasad, and Elaine Wang—win in the Best Use of External Data category at the Five College DataFest. Also pictured are (second from left) Davit Khachatryan, Babson College assistant professor of statistics/analytics; Jay Emerson, Yale University associate professor of statistics; and Becky Sweger, director of data and technology for the National Priorities Project.



Smith College students (front row, from left) Dana Udwin, Michele Handy, Deirdre Fitzpatrick, Maja Milosavljevic, and Sara Stoudt show off their certificates for winning Best in Show/Best Visualization at the Five College DataFest. Also pictured (back row, from left) are Davit Khachatryan, Babson College assistant professor of statistics/analytics; Becky Sweger, director of data and technology for the National Priorities Project; and Jay Emerson, Yale University associate professor of statistics.

# JOB OPPORTUNITIES

## Faculty in Biostatistics (Tenure-Track, Open Rank) Division of Biostatistics & Epidemiology Department of Public Health School of Public Health and Health Sciences University of Massachusetts/Amherst

The Biostatistics Program seeks a tenure track faculty (open rank) with demonstrated experience in developing an extramurally funded research program in biostatistical methods, with application to areas such as clinical trials, survey research, epidemiology/public health, and addressing analysis needs for application in big data including medical informatics, neuroimaging, bioinformatics, and genomics.

#### **Responsibilities:**

The successful candidate will join the faculty in the Division of Biostatistics and Epidemiology, Department of Public Health. Responsibilities will include research and, especially, collaborative research; teaching, primarily at the graduate level but possibly also at the undergraduate level; and advising masters and doctoral students enrolled in our MS, MPH, and PhD programs. Preference will be given to candidates with a track record of securing federal research funding and current funding, with application to areas such as clinical trials, survey research, epidemiology/public health, and addressing analysis needs for application in big data including medical informatics, neuroimaging, bioinformatics, and genomics. Applicants should have a strong commitment to teaching and advising undergraduate/graduate students, and mentoring junior faculty. Rank and salary will be commensurate with qualifications and experience.

The Department of Public Health is a highly collaborative group of active researchers in a variety of areas, including: biostatistics methods, epidemiology, community-based research, clinical trials, nutrition, environmental health, genomics, population genetics and bioinformatics. The Division of Biostatistics and Epidemiology has an active teaching/research faculty consisting of seven biostatisticians and eight epidemiologists. Program members collaborate extensively with faculty from the School of Public Health and Health Sciences, other departments on campus, the University's Medical School, and Baystate Medical Center.

**Qualifications:** Candidates for this position must meet the following minimum requirements:

- Terminal degree (PhD, DrPH) in biostatistics or related field of study;
- Evidence of experience as principal investigator of independent and collaborative research <u>or</u> evidence of independent and collaborative research potential;
- Strong record of peer-reviewed publication;
- Excellent oral and written communication skills; and
- Demonstrated interest and ability in teaching at the undergraduate or graduate level.

#### How to Apply:

Interested candidates should apply through Interview Exchange <u>http://umass.interviewexchange.com/candapply.jsp?JOBID=50138</u> by submitting their curriculum vitae, description of research and teaching interests and the name of three references. The application review process will begin September 2, 2014 and continue until the position is filled. Anticipated start date is September, 2015.

The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members. The University seeks to increase the diversity of its professoriate, workforce and undergraduate and graduate student populations because broad diversity is critical to achieving the University's mission of excellence in education, research, educational access and service in an increasingly diverse globalized society. Therefore, in holistically assessing many qualifications of each applicant of any race or gender we would factor favorably an individual's record of conduct that includes students or colleagues with broad, diverse perspectives, experiences and backgrounds in educational, research or other work activities. Among other qualifications, we would also factor favorably experience overcoming or helping others overcome barriers to an academic career or degree

#### Visiting Position Available at Amherst College

Applications are invited for a one-and-a-half-year visiting position in Statistics at the rank of Assistant Professor, with possible renewal for one more year, beginning January 1, 2015. Amherst College is an equal opportunity employer and encourages women, persons of color, and persons with disabilities to apply. The College is committed to enriching its educational experience and its culture through the diversity of its faculty, administration, and staff.

Responsibilities include teaching a range of undergraduate statistics courses (two per semester) and helping with the comprehensive evaluation of senior majors in statistics. Applicants must hold a Ph.D. in statistics or a closely related field and have broad intellectual interests and a strong commitment to excellence in research and in undergraduate teaching in statistics. Submit cover letter, curriculum vitae, list of publications, research statement, teaching statement, and at least three letters of recommendation, including at least one specifically addressing teaching, to MathJobs.Org. Applications received by September 15, 2014, will be guaranteed consideration. See

https://www.amherst.edu/academiclife/dean\_faculty/faculty\_hiring/employment

for details of the position, and <u>www.amherst.edu/academiclife/departments/mathematics</u> for details about the department. Questions can be addressed to <u>mathstats@amherst.edu</u>.

Amherst College is a private undergraduate liberal arts college for men and women, with 1,800 students and more than 200 faculty members. Located in the Connecticut River Valley of western Massachusetts, Amherst participates with Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts in the Five-College Consortium.

#### **Multiple Positions at PAREXEL**

PAREXEL, a global CRO, is actively looking for entry-level, senior and principal level biostatisticians to work remotely or at a PAREXEL office in the U.S. For more information, please visit http://www.parexel.com/company/careers/

# BCASA REGION STATISTICS SEMINARS

Below is a list of the regional statistics (& mathematics) and biostatistics departments that often offer statistics seminars, along with URLs for each department and its seminars. It your institution would like to appear on this list, please contact John McKenzie (mckenzie@babson.edu).

Boston University College of Arts & Sciences Department of Mathematics & Statistics <u>http://www.bu.edu/stat/</u> <u>http://www.bu.edu/stat/seminar/</u>

Boston University School of Public Health Department of Biostatistics <u>https://sph.bu.edu/Biostatistics/department-of-biostatistics/menu-id-617603.html</u> <u>https://sph.bu.edu/Biostatistics/seminars/menu-id-617654.html</u>

Brown University Division of Applied Mathematics <u>http://www.dam.brown.edu/</u> <u>http://www.dam.brown.edu/dam\_seminars.shtml</u>

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Brown University School of Public Health Department of Biostatistics <u>http://www.stat.brown.edu/</u>

Harvard University Department of Statistics <u>http://statistics.fas.harvard.edu/</u> <u>http://statistics.fas.harvard.edu/calendar</u>

Harvard University School of Public Health Department of Biostatistics http://www.hsph.harvard.edu/biostatistics/ http://www.hsph.harvard.edu/biostatistics/seminars-events/

University of Maine Department of Mathematics & Statistics <u>http://umaine.edu/mathematics/</u> <u>http://umaine.edu/mathematics/colloquium-schedule/</u>

University of Massachusetts Amherst School of Public Health and Health Sciences Department of Mathematics and Statistics <u>https://www.math.umass.edu/</u> <u>https://www.math.umass.edu/~gile/Seminar/</u>

University of Massachusetts Amherst School of Public Health and Health Sciences Department of Biostatistics http://www.umass.edu/sphhs/biostatistics

University of New Hampshire Department of Mathematics & Statistics <u>http://www.math.unh.edu/</u> <u>http://www.math.unh.edu/seminars</u>

University of Rhode Island Department of Computer Science and Statistics http://www.cs.uri.edu/

University of Vermont College of Engineering and Mathematical Sciences Department of Mathematics & Statistics <u>http://www.uvm.edu/~cems/mathstat/</u>

Worchester Polytechnic Institute Department of Mathematical Sciences <u>http://www.wpi.edu/academics/math/</u> <u>http://www.wpi.edu/academics/math/news.html</u> The BCASA Newsletter is published four times during the academic year and is emailed to current BCASA members. Send comments or suggestions to any of the individuals listed below.

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