

# BCASA NEWSLETTER

## Boston Chapter of the American Statistical Association

*Serving*

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

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

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SCHEDULED EVENTS & MEETINGS		
Saturday, January 24, 2015	<b>Annual Winter Potluck Dinner and Party</b>	Lexington, MA
Tuesday, February 17, 2015	<b>Mosteller Statistician of the Year Banquet</b>	Boston, MA
Tuesday, February 24, 2015	Bentley University and Boston Chapter of INFORMS Lecture (Data Science for Workforce Optimization: Reducing Employee Attrition)	Waltham, MA
Wednesday, March 4, 2015	<b>BCASA Evening Lecture Series: Gambling and Statistics: Beyond the Games</b>	Boston, MA
March 20-22, 2015	NEDSI 2015 Conference	Cambridge, MA
Late March 2015	<b>Short Course: Time Series Analysis with Applications</b>	Boston, MA
March 27-29, 2015	Five-College DataFest	Amherst, MA
Thursday, April 2, 2015	L. Adrienne Cupples Award Event	Boston, MA
April 15-18, 2015	2015 NCTM Annual Meeting & Exposition	Boston, MA
May 14-17, 2015	AAPOR 70th Annual Conference	Boston, MA
Friday, May 22, 2015	Marvin Zelen Memorial Event	Boston, MA
Saturday, September 26, 2015	New England Symposium on Statistics in Sports	Cambridge, MA
October 7-9, 2015	2015 International Conference on Health Policy Statistics	Providence, RI

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](mailto:mckenzie@babson.edu).

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## ***PRESIDENTS' REPORT***

This month the President's Report is a Presidents' Report. My term as president concluded in 2014, and Jim MacDougall begins his term in 2015.

It has been my privilege to have been president for the last four years. I hope to continue as an active member of the planning committee into the future. If you are on our mailing list, you may continue to get e-mail from me. If you are not, just send me a note at [tlane@alum.mit.edu](mailto:tlane@alum.mit.edu) and we will correct that oversight.

It has been an exciting time for the chapter, especially in the last two years. During 2013 we celebrated the International Year of Statistics, and some of our chapter events picked up on that theme. During 2014 we hosted the Joint Statistics Meetings here in Boston. We also held a day-long symposium in December to commemorate the 175th anniversary of the founding of ASA in Boston. Thanks very much to John McKenzie and Bob Goldman for working with me on putting that together. I hope everyone will be sure to attend our award banquet in February, where we will have four special anniversary awards in addition to our annual Mosteller Statistician of the Year award.

I am very pleased that Jim MacDougall is taking over as president. Jim has been an active planning committee member for many years, and he has served as our representative to the Council of Chapters. He also arranged some of our most popular events of recent years -- a short course on Bayes methods by Brad Carlin and a conversation with Bob O'Neill.

Take it away, Jim. I hope you will have as much fun with this as I have had.

-- Tom Lane

I would like to extend a heartfelt thanks to Tom for the fantastic service he has provided over the past 4 years as President of the Boston Chapter. Great job Tom.

At the 175th Anniversary Celebration at Simmons College last month there was a poster with pictures and snippets of information on the BCASA presidents, from Carroll W. Doten (the 1st president) up to Tom Lane. It was wonderfully made, beautifully illustrating the path of the chapter from 1928 to 2014 (kudos to Dominique Haughton for creating this poster). I look forward to working with all of you in continuing the Boston Chapter's journey.

If you didn't get a chance to see the poster I believe it will be on display at the Boston Chapter ASA Winter Pot-Luck Party, hosted by Greta Ljung, on January 24th (additional details to this event are provided in this newsletter and the BCASA website). I am looking forward to seeing you there!

The Boston Chapter has many events and activities upcoming in 2015, and we could definitely use your help to make them happen. There are many ways to contribute, from participating in the program committee meetings, helping organize or host an event, or becoming a chapter officer. Please contact myself or any of the Boston Chapter officers if you are interested in assisting the chapter.

I would like to welcome Mingfei Li who has volunteered to be our Council of Chapters Representative and look forward to working with her and the other BCASA officers.

-- Jim MacDougall

## Boston Chapter Concludes 175th Anniversary Celebrations with Future of Statistics Symposium and Banquet



On Saturday, December 6, 2014, the Boston Chapter of the ASA held a symposium and banquet to celebrate the 175th anniversary of the founding of the ASA in Boston on November 27, 1839. The event was held at Simmons College, only a few miles from the original ASA meeting place on 15 Cornhill. The event attracted over 80 attendees, primarily from New England. The theme was the Future of Statistics.

Participants in the symposium were welcomed by Tom Lane, the president of the Boston Chapter. This was followed by a brief history of the chapter presented by Dominique Haughton of Bentley College.

The symposium featured six panel discussions. Three focused directly on the future of statistics education—at the K-12 level, at the undergraduate level, and at the graduate level. A parallel sequence of panel discussions focused on the future of statistics in sports, the future of statistics in the health sciences, and the future of statistics in industry and consulting. All six of the panel discussions were lively, thought-provoking, and well-attended. At each panel, attendees were asked to record what they regarded as the most intriguing forecast made by the panelists. Here are the most popular choices:

Panel	Most Interesting Forecasts
Future of Statistics in K-12 Education	Technology from tables to MOOCs will have a continuing impact. There will be increased needed teacher support and training. More statistics will be taught in K-12. An open question is what kind? Conceptual vs. Formulas.
Future of Statistics in Undergraduate Education	Non-statistical data science topics, such as computer programming, visualization, and algorithmic methods, will be added to the curriculum. Multiple tracks for statistics majors and minors will exist. There will be greater emphasis on communication of results and collaboration with others.
Future of Statistics in Graduate Education	Programs will include both mathematical and interdisciplinary training (with real experience in the corporate world, including ethical standards). An increased emphasis on design will occur. There will be a convergence of statistics, analytics, computer science, and causality studies.
Future of Statistic in Sports	Many more micro-experiments will be undertaken. The use of radio-frequency identification (RFID) tags will increase.
Future of Statistics in the Health Sciences	Challenge of reproducibility of results will be addressed. There will a shift from generalizing to wide populations to aiming at narrow groups or individuals. There will be increased study of chronic diseases.
Future of Statistics in Industry and Consulting	Adaptive clinical designs in pharmaceutical statistical consulting will get bigger. Consulting will continue to start with a conversation. More pharmaceutical firms will collaborate on clinical trials.

At the symposium luncheon, Ronald Wasserstein, Executive Director of the ASA, presented greetings from the Association. After this greeting, Tom Lane announced that Scott Evans, Senior Scientist at the Harvard University School of Public Health, was the recipient of the 2015 Mosteller Statistician of the Year Award. Scott will be presented with the award at a banquet on February 17, 2015.



Opening Session



2007-2010 BCASA President Dominique Haughton and her History of the Boston Chapter through its Presidents



ASA Executive-Director Ron Wasserstein and BCASA President Tom Lane



Future of Statistics in the Health Sciences Panelists Robert Goldman, Arlene Ash, and Scott Evans, and Eugenie Coakley, Chair



ASA President Nat Schenker



Banquet Speaker Nick Horton

To celebrate the anniversary, the Boston Chapter named four prominent statisticians as 175th Anniversary Awardees. The awardees were Herman Chernoff, George Cobb, Herbert Weisberg, and John McKenzie. The event organizers made a special effort to preserve a record of this historic occasion with many photographs, including photos of past Mosteller Award winners and past presidents of the Boston Chapter.

Between the end of the symposium and the beginning of the banquet, attendees were invited to watch two historically significant videos: *The ASA Sesquicentennial Statistical Science: 150 Years of Progress*, (<http://youtu.be/g004gbfzAUE>), and *The Seven Pillars of Statistical Wisdom* by Stephan Stigler, ([https://www.youtube.com/watch?feature=player\\_embedded&v=vBcmBvlqkKU](https://www.youtube.com/watch?feature=player_embedded&v=vBcmBvlqkKU)).

The evening events began with a cash bar followed by a splendid banquet. Then the attendees received evening greetings from Boston Chapter President Tom Lane and ASA President Nat Schenker. The highlight of the banquet was an historical address given by Nicholas Horton, Professor of Statistics at Amherst College. He spoke on “Challenges and Opportunities for Statistics and Statistical Science (Looking Forward, Looking Back)”. The address was warmly received and capped a long, but memorable, celebration.

Further details about the event including panel participants and additional photographs can be found at the website of the Boston Chapter of the ASA at <http://www.amstat.org/chapters/boston>.

Robert Goldman, Tom Lane, and John McKenzie, Boston Chapter Future of Statistics Symposium and Banquet to Celebrate the 175th Anniversary of the ASA Planning Committee

## **EVENTS & MEETINGS**

### **Annual Winter Potluck Dinner and Party**

**Date:** Saturday, January 24, 2014

**Time:** 6:30 p.m. - 9:00 p.m.

**Location:** 14 Fairfield Drive, Lexington

**Directions:** Greta Ljung and her husband Bret’s home is about 1 mile from Massachusetts Avenue in Lexington Center. To get there, take Grant Street that starts next to the Post Office on Massachusetts Avenue. Follow Grant Street for about four blocks and make a right turn onto Saddle Club Road. After a couple hundred feet, angle right onto Brookwood Road and make a left turn onto Fairfield Drive shortly thereafter. Their home is at the very end of Fairfield Drive and you'll see the lights as you come down the road.

This is a wonderful opportunity to renew contact with some members of the BCASA statistical community and meet other members for the first time.

**Registration:** Information and sign-up for your potluck items by Thursday January 22 at <http://www.luckypotluck.com/cgi-bin/display/potluck.pl?id=142047463634507400768>

Drinks, plates, and so forth will be provided.



## Mosteller Statistician of the Year Banquet

### Battling Superbugs with Statistical Thinking: Using Endpoints to Analyze Patients Rather than Patients to Analyze Endpoints

Scott Evans, Ph.D., M.S.  
Harvard University

**Date:** Tuesday, February 17, 2015

**Time:** Social 6:00 pm, Dinner 6:30 pm, Presentation 7:00 pm

**Location:** Kotzen Room, Beatley Library and Lefavour Hall, Simmons College, 300 The Fenway, Boston, MA

**Directions:** <http://www.simmons.edu/about-simmons/contact-us> (includes map and directions)

**Parking:** \$6 with registration

**Registration:** <http://bcasa2015feb.eventbrite.com> by February 11

**Cost:** Dinner: \$20 for chapter members; \$25 for non-members; students free. Presentation: free.

#### Abstract:

Superbugs, “nightmare bacteria” that have become resistant to our most potent antibiotics, are one of our most serious health threats. In the United States, at least 2 million people annually acquire serious bacterial infections that are resistant to antibiotics, originally designed to treat those infections. Resistance undermines our ability to fight infectious diseases and presents increased risk to vulnerable patient populations, including those with HIV, cancer, renal failure, as well as patients requiring surgery, neonatal care, and intensive care. In September of 2014, President Obama issued an Executive Order outlining a national strategy for combating antibiotic-resistant bacteria.

I will discuss: (1) a novel strategy (Response Adjusted for Days of Antibiotic Risk, RADAR) for the design and analysis of antibiotic stewardship clinical trials, and (2) a new study and paradigm for diagnostic studies of antibiotic susceptibility/resistance.

RADAR: Unnecessary antibiotic use is unsafe, wasteful, and leads to emergence of resistance. Antibiotic stewardship trials are limited by noninferiority (NI) design complexities (e.g., NI margin selection, constancy assumption validity); competing risks of mortality and other outcomes; lack of patient-level interpretation incorporating benefits, harms, and their association; and feasibility issues (large sample sizes). RADAR is a novel strategy that effectively addresses these challenges. RADAR utilizes a superiority design framework and has 2 steps: (1) creation of an ordinal overall clinical outcome variable incorporating important patient benefits, harms, and quality of life, and (2) construction of a desirability of outcome ranking (DOOR) where (i) patients with better clinical outcomes receive higher ranks than patients with worse outcomes, and (ii) patients with similar clinical outcomes are ranked by AB exposure, with lower exposure achieving higher ranks.

Diagnostic Study: Rapid molecular diagnostic platforms are a promising tool for combating antibiotic resistance by informing early optimal antibiotic therapy and facilitating clinical trials through the identification of antibiotic-resistant bacteria. We evaluated four platforms by aggregating high-dimensional data from multiple genetic targets to discriminate susceptibility vs. resistance to 14 antibiotics in a blinded fashion in 196 *Escherichia coli* and *Klebsiella pneumoniae* isolates (two organisms rated “urgent” hazard level by the CDC). We defined susceptibility and resistance sensitivities and display them using Discrimination summary (DIM-SUM) plots. Susceptibility and resistance predictive values were plotted as a function of susceptibility prevalence to account for evolving resistance rates across geographic areas and time, allowing for broad applicability.

#### Award history:

Every year the Boston Chapter presents the Statistician of the Year award to a distinguished statistician who has made exceptional contributions to the field of statistics and has shown outstanding service to the statistical community. In 1997, this award was renamed the Mosteller Statistician of the Year award in honor of the 80th birthday of its first recipient, Fred Mosteller. Individuals from academia, industry, and government who have contributed to the Boston Chapter are considered for the award. For a list of past award winners, see <http://amstat.org/chapters/boston/awards.html>.

## **Bentley University and Boston Chapter of INFORMS Lecture Data Science for Workforce Optimization: Reducing Employee Attrition**

Pasha Roberts, Chief Scientist and Co-Founder, Talent Analytics, Corp.

Predictive methods are often seen in marketing, finance, and logistics. The use of these advanced methods for workforce analytics are an emerging and powerful domain for practice, with applications in talent selection, sourcing, training, development, planning, and optimization.

This presentation by Talent Analytics Chief Scientist Pasha Roberts will provide an overview of the advanced analytics field with a range of applications that are emerging in application to a company's largest and most important expense: their workers.

The presentation will review several case studies of talent analytics in practice. Predictive concepts such as survival analytics, uplift modeling, and ensemble models will be applied to tangible customer situations. In one case, a major financial services call center used predictive modeling to reduce attrition by over 30%, yielding a multi-million dollar savings.

- Analytics students will hear "front-line" stories from real analytics engagements, where theory meets the constraints of real business practice.
- Analytics managers will leave this session with a concrete understanding of the business value of talent optimization, showing how correlating "raw talent" to employee attrition can yield unprecedented results.
- Analytics practitioners will leave this session with a concrete understanding of the analytics approach and models used to reduce attrition.

**Date:** Tuesday, February 24, 2015

**Time:** Informal Welcome and Snacks 6:30 p.m.; Lecture 7:00 p.m.

**Location:** Center for Marketing Technology (CMT)

Morison Building, Bentley University

175 Forest Street,

Waltham, MA 02452

<http://www.bentley.edu/about/map>

**Cost:** Free

**Speaker Biography:** As Chief Scientist and Co-Founder, Pasha is responsible for architecture, development, and algorithms for Talent Analytics. He wrote the first implementation of the software over a decade ago, and today he continues to drive new features and platforms for the company. As is often found in data science, Pasha has decades of experience/education that span computing, quantitative, artistic, and business categories. Pasha holds a bachelor's degree in Economics and Russian Studies from The College of William and Mary, and a Master's of Science degree in Financial Engineering from the MIT Sloan School of Management. His thesis at MIT prototyped the application of advanced 3D graphics to massive financial "tick" datasets. He has founded two companies, WebLine Communications Corporation, a web-call center enterprise software company, and Lineplot Productions, a financial visualization/animation service company. Pasha's passion with Talent Analytics is to develop new analytics to focus business performance, and to extend the Talent Analytics model to a useful set of software platforms. He hopes to discover new information about people and the work they do, with every new project. Follow Pasha on twitter @PashaRoberts. <http://www.talentanalytics.com/talent-analytics-corp/leadership-team/>

## **EVENING LECTURE SERIES**

### **Gambling and Statistics: Beyond the Games**

Matthew Tom

Research Analyst

Cambridge Health Alliance Division and Addiction

**Date:** Wednesday, March 4, 2015

**Time:** Light Dinner: 6:15 pm; Presentation: 7:00 pm

**Location:** Activities East (ACE) 325 – The Alumni Room, Wheelock College, 200 The Fenway, Boston

#### **Campus Map:**

<http://www.wheelock.edu/Documents/About/FINAL%202014%20Printable%20Map%20with%20legend.pdf>

**Transportation:** If you are taking public transportation, the school is an easy walk from both the Fenway and Longwood stops of the Riverside branch of the Greenline. It is also about a 1 mile walk from Ruggles Station on the Orange line. Also, the 60, 65, 8 and 47 busses all stop on Brookline Avenue at Short Street (near Beth Isreal) and you can walk through the Simmons College residences (not through actual Simmons College).

**Parking:** Parking on The Riverway is free and there are no meters or time limits. At this time of the day and this time of the school year, the chances of finding a spot are actually not too bad. All other parking is Fenway/Kenmore resident only. If you do not find free parking, there are many garages, the recommended garage is behind Temple Isreal, which is located at Longwood avenue and Plymouth Street. It is only \$7 (flat rate) for evening parking. Another option is to park at the meters on Brookline avenue or Boylston Avenue near the Landmark Center. The meters are required until 8, so if you park at 6 it would be \$2.50 in quarters to park there. The last option is to park at your own risk in Brookline. Wheelock is right on the Brookline border and Brookline has free 2-hour parking on most streets. If you do this, Chapel Street (on map) has parking; it is about a 10 minute walk to campus.

**Registration:** <http://bcasa2015mar.eventbrite.com> by March 1

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

#### **Abstract:**

When most people hear the words “gambling” and “statistics” together, they envision blackjack card counters, fantasy sports pundits, or other experts with winning betting systems. For researchers in gambling studies, however, studying “gambling” often means investigating not the games themselves but closely related questions such as “How will opening a new casino affect the local economy?”; “Will legalizing more gambling platforms increase the number of pathological gamblers?”; and “How does gambling affect the brain?”.

In this talk, we will survey two studies. First, we will review a study suggesting that Pareto’s concepts of the “vital few” and the “trivial many” – often bundled as the 80/20 rule – apply to gambling. Surprisingly to some, it turns out that not all frequent gamblers screen positive for gambling-related problems. Second, we will review a study on casino employees’ beliefs and misconceptions about gambling and gambling-related problems. We will observe that employees can be separated into natural groups based on how well-informed they are on the science of addiction and gambling-related problems. To conclude, we will discuss future research opportunities for those interested in gambling studies.



## **NEDSI 2015 Conference**

The 2015 Northeast Decision Sciences Conference will be held March 20-22, 2015 at the Hotel Marlowe in Cambridge, MA – just across the Charles River from Boston. Registration will open on Thursday evening, March 19. Sessions will start on Friday morning, March 20 and continue through Sunday March 22 at noon. All attendees are invited to the Welcome Reception on Friday evening and the President's Reception and Award Ceremony Saturday evening. Further information is available at <http://nedsiconference.org/2015/>.

## **2015 Five College DataFest**

The second Five College DataFest will be held the weekend of March 27th and 29th at the University of Massachusetts in Amherst. DataFest is a nationally-coordinated competition that challenges undergraduates working in teams of up to five to extract meaningful insights from a rich and complex data set.

## **Boston University Department of Biostatistics Annual Award Day**

The Boston University Department of Biostatistics Annual Award Day will be held on April 2, 2015. At this event Professor of Biostatistics Sharon-Lise Normand of the Harvard School of Public Health will receive the 2015 L. Adrienne Cupples Award for Excellence in Teaching, Research and Service in Biostatistics.

## **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: <http://www.aapor.org/AAPORKentico/Conference/2015-Conference/>

## Marvin Zelen Memorial Event

The Harvard School of Public Health will host a memorial event for Marvin Zelen on May 22, 2015. At this event the school's Professor of Public Health and Biostatistics Nan Laird will receive the 2015 Marvin Zelen Leadership Award in Statistical Science.



**Harvard University – Saturday, September 26, 2015 – Cambridge, MA**

The **2015 New England Symposium on Statistics in Sports** will be a meeting of statisticians and quantitative analysts connected with sports teams, sports media, and universities to discuss common problems of interest in statistical modeling and analysis of sports data. The symposium format will be a mixture of invited talks, a poster session, and a panel discussion.

For more information, including photos, videos, programs, and technical slides from past NESSIS meetings, please visit our website at [www.nesis.org](http://www.nesis.org).

## 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. For more information about the conference, please visit <http://www.amstat.org/meetings/ichps/2015/index.cfm>

## **NEWS & ANNOUNCEMENTS**

### **New Council of Chapters Representative**

Mingfei Li of Bentley University is the chapter's new Council of Chapters representative. She replaces James MacDougall, to allow him to focus on his new role as BCASA President.

### **Nominations for Chapter Officers**

Several BCASA officer terms are up for election this year for terms starting on January 1, 2016. These are Vice-President, Secretary, and Treasurer (two-year terms) and Council of Chapters Representative (three-year term).

We typically hold elections at the final event of the academic year. If you are interested in nominating yourself or anyone else for these positions, please contact current President James MacDougall ([jamesmacdougall@comcast.net](mailto:jamesmacdougall@comcast.net)) or Past President Tom Lane ([tlane@alum.mit.edu](mailto:tlane@alum.mit.edu)). New volunteers are always welcome and greatly needed.

### **Congratulations to Judith Singer**

Judith Singer, senior vice provost for faculty development and diversity and James Bryant Conant Professor of Education at Harvard, is the recipient of the 13th annual Janet L. Norwood Award for Outstanding Achievement by a Woman in the Statistical Sciences ([www.soph.uab.edu/awards/norwoodaward](http://www.soph.uab.edu/awards/norwoodaward)). She accepted the award on September 10, 2014, at a ceremony at the University of Alabama at Birmingham, in which Judith made a presentation, entitled "Fostering the Advancement of Women in Academia".

### **Nick Horton Named the Recipient of the Robert V. Hogg Award**

Nick Horton, a Professor of Statistics at Amherst College and a local Chapter member, has been named the recipient of the 2014 Robert V. Hogg Award For Excellence in Teaching Introductory Statistics. The award was presented to Nick at the Joint Mathematics Meetings in San Antonio in January, at the business meeting of the MAA (Mathematical Association of America) Special Interest Group in Statistics Education.

### **Chapter Members to Participate in an Invited Panel Session at the ISI World Statistics Congress**

Four Chapter members will participate in an invited panel session at the International Statistical Institute (ISI) World Statistics Congress in Rio de Janeiro in July 2015. BCASA members Shelley Hurwitz, Katherine Halvorsen, David Schoenfeld, and Arlene Ash will join Jeffrey Dawson, Rochelle Tractenberg, and Martin Bland in presenting "Ethics in teaching and practicing statistics: Learning from real-life ethical dilemmas".

## **BU Student Chapter Program**

The ASA has recently launched a Student Chapter Program, and under the direction of faculty advisor, Professor Eric Kolaczyk. Boston University has the privilege of being a pilot chapter. Still in the beginning stages of development, the group hopes to create a community for students at BU interested in statistics, drawing from various schools and programs within the University. Student representatives from both the graduate and undergraduate programs in Mathematics and Statistics, as well as the graduate program in Biostatistics, have been meeting regularly to discuss the goals and future plans for the chapter. The group is working towards encouraging students to participate in data competitions and organizing and hosting professional development seminars, with the first being a workshop on Statistical Consulting. The BU Student Chapter also hopes to create networking opportunities for students by establishing more of a relationship with local companies and professionals in the statistics field. This group is excited about promoting interest in statistics, creating professional opportunities for students and is looking forward to the continued growth of this Chapter. For further information, please contact Presidents Matthew Morse ([mrmorse@bu.edu](mailto:mrmorse@bu.edu)) and Ben Shaffer ([bdshaff@bu.edu](mailto:bdshaff@bu.edu)).

## **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 <http://math.smith.edu/~nhorton/msr.html> or by contacting Liam O'Brien at [lobrien@colby.edu](mailto:lobrien@colby.edu). 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 James MacDougall, [jamesmacdougall@comcast.net](mailto:jamesmacdougall@comcast.net).

## ***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](mailto: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](mailto:evans@sdac.harvard.edu)).



# **JOB OPPORTUNITIES**

## **Harvard University Position Listing**

**Title:** Post-Doctoral Research Fellow (100% FTE; 2-year appointment)

**School:** Harvard School of Public Health

**Department/Area:** Department of Biostatistics / Center for Biostatistics in AIDS Research

### **Background:**

The Center for Biostatistics in AIDS Research (CBAR), in the Department of Biostatistics at the Harvard School of Public Health have an immediate opening for a Post-doc to work on statistical methods and applications for studies being conducted by the Antibacterial Resistance Leadership Group (ARLG). Investigators within CBAR have provided statistical leadership and support for clinical research networks for more than thirty years including infectious disease networks such as: the Adult AIDS Clinical Trials Groups (ACTG), the International Maternal Pediatric Adolescent AIDS Clinical Trials Group (IMPAACT), the Neurologic AIDS Research Consortium (NARC), and the Pediatric HIV/AIDS Cohort Study (PHACS).

The Statistical and Data Management Center (SDMC) for the ARLG Network, consists of the Statistical and Data Analysis Center (SDAC) in the Center for Biostatistics in AIDS Research (CBAR) and Frontier Science & Technology Research Foundation in Boston, MA, as well as a Data Management Center (DMC) located at the Duke Clinical Research Institute (DCRI) in Durham NC.

The SDAC is responsible for the statistical and central data management infrastructure activities of the ARLG. The primary areas of responsibility are supporting the ARLG research agenda with an infrastructure for statistics to facilitate the efficient and optimal design, conduct, interim data monitoring, analyses, and reporting of high quality clinical research studies. This is accomplished by providing an infrastructure and team of highly-experienced statisticians who are knowledgeable in aspects of infectious disease / antibacterial resistance (ID/AR), experienced with clinical research networks, and committed to collaborating with ARLG investigators in developing and managing the ARLG agenda.

### **Project Description:**

“Statistical Challenges in Clinical Trials and Diagnostic Studies of Antibiotic Resistance” The Post-doc will work with Dr. Scott Evans, Director of the Statistical and Data Management Center of the ARLG on statistical strategies for the design, data monitoring, analyses, and reporting of clinical trials and diagnostics studies of antibiotic resistance. Specific statistical issues may involve biomarker trial designs, master protocol development, diagnostic evaluation, longitudinal data issues, rank-based methods, and graphical displays, competing risk, multiplicity issues, composite endpoints, dynamic treatment regimes, and benefit: risk evaluation.

### **Qualifications:**

Candidates should have a doctoral degree in biostatistics or statistics with interest in clinical trials and diagnostic studies. A successful candidate will possess: (1) a sound understanding of the basic principles of the design, monitoring, and analyses of clinical trials and diagnostic studies, (2) excellent methodological and applied research skills, (3) interest in problems motivated by research in antibiotic resistance, (4) strong SAS programming and simulation abilities, (5) creativity, and (6) effective communication skills with an ability to work with a multi-disciplinary research team of scientists and clinicians.

### **Contact Information:**

For scientific inquiries, please contact Dr. Scott Evans ([evans@sdac.harvard.edu](mailto:evans@sdac.harvard.edu)). To submit application materials, please contact Jessica Clark ([jclark@sdac.harvard.edu](mailto:jclark@sdac.harvard.edu)) with CV and cover letter.

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

## **Massachusetts Institute of Technology (MIT)**

### **Statistics Faculty Position**

MIT is launching a cross-Institute center focusing on research and education in Statistics and Information Systems. Consequently, MIT is seeking candidates for faculty positions starting in September 2015 or thereafter. The appointment will be at the assistant or untenured associate professor level. The appointment will be made in partnership with another MIT department. In special cases, a senior faculty appointment may be possible. Faculty duties include teaching at the undergraduate and graduate levels, research, and supervision of student research. We will consider candidates with backgrounds and interests in the broad areas of Statistics ranging from fundamental theoretical focus to applications of Statistics in various domains in Engineering, Management, Sciences, Life Sciences and Social Sciences. Candidates must have a Ph.D. in Statistics, Engineering, Computer Science, Operations Research, Economics, Mathematics or a related field by the start of their employment.

Candidates must register with the [Faculty Search website](#) and must submit application materials electronically to this website. Candidate applications should include a description of professional interests and goals in both teaching and research. Each application should include a curriculum vitae and the names and addresses of three or more individuals who will provide letters of recommendation. Letter writers should submit their letters directly to MIT, preferably on the [website](#) or by mailing to the address below. Responses received by January 5, 2015 will be given priority.

Send all materials not submitted on the website to: [stats-search@mit.edu](mailto:stats-search@mit.edu)

*MIT is an equal opportunity employer. Women and underrepresented minorities are encouraged to apply.*

## **Department of Statistics, Harvard University**

### **Senior Lecturer on Statistics, Lecturer on Statistics**

The Department of Statistics at Harvard University invites applications for 1 or more non-ladder appointments in any area of statistics. Candidates should indicate which of the following 2 positions they are primarily interested in. All positions expected to begin 7/1/15. Applications received by 1/31/15 are guaranteed consideration.

**Senior Lecturer.** Will have demonstrated strong performance in small and large group statistical teaching, especially at the undergraduate level and a strong track record in developing statistical methods. The position includes teaching 3 undergraduate courses, advising senior theses, training instructional support staff (including leading our pedagogy course), coordinating departmental planning, and helping to shape and administer the undergraduate curriculum. The appointment is for an initial period of 5 years, renewable every 5 years after review. A doctorate in statistics or related field is required, and candidates preferably have at least 3 years of recent teaching experience at a research-intensive institution. We welcome applicants at different points in their careers, including those who wish to focus predominantly on teaching outstanding students and institution building, after a research focused career.

**Lecturer.** Will teach 4 undergraduate level courses annually and advise students at the undergraduate and Master's levels. A research record is required, including a doctorate by the start of the appointment in statistics or related field. Candidates should have demonstrated strong small and large group undergraduate teaching performance at a research-intensive university and have strong interests in statistical research. This is a 3-year appointment, subject to satisfactory performance, and is not renewable. Candidates who wish to fulfill this position on a part-time basis, perhaps combined with an appointment at a research institute, for example, are welcome to apply.

Applications should include a cover letter, a CV, teaching statement, and evidence of teaching excellence (e.g., course evaluations, if available), and at least 3 references to be sent to one of the following addresses:

Applicants interested in applying for Senior Lecturer should submit these materials, to <https://academicpositions.harvard.edu/postings/5787>.

Applicants interested in applying for Lecturer should submit these materials to <https://academicpositions.harvard.edu/postings/5785>.

Harvard University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

## **Harvard School of Public Health**

### **Biostatistician I**

Collaborate with medical researchers, senior statisticians and epidemiologists on national and international AIDS clinical trials of prevention, treatment, and management of HIV and its complications and co-infections in infants, children, adolescents, and pregnant or breastfeeding women.

Duties include clinical trial study review, forms design and review; stratification/randomization of studies; statistical programming, data analysis, and report writing under the mentorship and supervision of senior staff. Candidate will serve on internal CBAR committees.

The Center for Biostatistics in AIDS Research (CBAR) is an organization at the Harvard School of Public Health responsible for the design, monitoring, and statistical analysis of clinical trials for several clinical trials networks. These include the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) group and the largest HIV-related clinical trials network in the world, the AIDS Clinical Trials Group (ACTG). Results from these trials have helped to establish the paradigm for the prevention and management of HIV disease, forming the basis of current treatment guidelines and resulting in dramatic reductions in mother-to-child HIV transmission and AIDS mortality around the globe.

Please note: This position is currently grant-funded through November 30, 2020, with a strong likelihood of renewal. The grant has been successfully re-competed since 1989.

#### **Basic Qualifications:**

- MA/MS in Biostatistics or Statistics required.
- Education or work experience in analysis of clinical or biological data, and methods such as failure time and categorical data required.
- Must have experience with statistical software.

#### **Additional Qualifications:**

- 2-year MA/MS program preferred.
- Experience with SAS is preferred but will consider candidates with a strong background in other relevant packages (e.g. STATA, S-PLUS, R).
- Experience with Phase I or Phase I/II clinical trials a plus.
- Experience with MS Office (Word, Excel, PowerPoint) desirable.
- Candidate must have excellent written and verbal communication skills and work well as part of a collaborative research team.

#### **Application Instructions:**

All applications for this position must be submitted directly through the Harvard University Recruitment Management System website (<http://hr.harvard.edu/search-jobs>) using Auto Req ID 33244.

Attach unofficial copy of master's program transcript and email contact information for 3 professional references to resume when applying.

## **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. If your institution would like to appear on this list, please contact John McKenzie ([mckenzie@babson.edu](mailto:mckenzie@babson.edu)).

Boston University College of Arts & Sciences  
Department of Mathematics & Statistics

<http://www.bu.edu/stat/>

<http://www.bu.edu/stat/seminar/>

Boston University School of Public Health  
Department of Biostatistics

<https://sph.bu.edu/Biostatistics/department-of-biostatistics/menu-id-617603.html>

<https://sph.bu.edu/Biostatistics/seminars/menu-id-617654.html>

Brown University  
Division of Applied Mathematics

<http://www.dam.brown.edu/>

[http://www.dam.brown.edu/dam\\_seminars.shtml](http://www.dam.brown.edu/dam_seminars.shtml)

Brown University School of Public Health  
Department of Biostatistics

<http://www.stat.brown.edu/>

Harvard University  
Department of Statistics

<http://statistics.fas.harvard.edu/>

<http://statistics.fas.harvard.edu/calendar>

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

<http://umaine.edu/mathematics/>

<http://umaine.edu/mathematics/colloquium-schedule/>

University of Massachusetts Amherst School of Public Health and Health Sciences  
Department of Mathematics and Statistics

<https://www.math.umass.edu/>

<https://www.math.umass.edu/~gile/Seminar/>

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

<http://www.math.unh.edu/>

<http://www.math.unh.edu/seminars>

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

<http://www.uvm.edu/~cems/mathstat/>

Worcester Polytechnic Institute

Department of Mathematical Sciences

<http://www.wpi.edu/academics/math/>

<http://www.wpi.edu/academics/math/news.html>



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*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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