

# BCASA NEWSLETTER

Boston Chapter of the American Statistical Association  
Serving Maine, Massachusetts, New Hampshire, and Vermont

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Volume 28, No. 1, September 2009

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

Newsletter: [BCASANews@verizon.net](mailto:BCASANews@verizon.net)

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## Upcoming Events

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<b>September 23, 2009</b>	<b>Frontier Science</b>	<b>Alan Agresti: On the Development</b>
<b>6:30 pm</b>	<b>Boston, MA</b>	<b>of Categorical Data Analysis</b>
<b>September 26, 2009</b>	<b>Harvard University</b>	<b>New England Symposium on</b>
<b>9:00 am</b>	<b>Cambridge, MA</b>	<b>Statistics in Sports</b>
<b>October 14, 2009</b>	<b>Emmanuel College</b>	<b>Pre-University Training in</b>
<b>6:00 pm</b>	<b>Boston, MA</b>	<b>Mathematics and Statistics Around</b>
		<b>the Globe</b>
<b>November 14, 2009</b>	<b>Simmons College</b>	<b>George Cobb: Discrete Markov</b>
<b>10:00 am</b>	<b>Boston, MA</b>	<b>Models</b>
<b>December 8, 2009</b>	<b>BB&amp;N School</b>	<b>Al Ozonoff: Statistical Methods in</b>
<b>6:30 pm</b>	<b>Boston, MA</b>	<b>Public Health Practice</b>
<b>January 16, 2010</b>	<b>30 Lothrop Street</b>	<b>Annual Pot Luck Dinner and Party</b>
<b>6:00 pm</b>	<b>Newtonville, MA</b>	
<b>February 2, 2010</b>	<b>BU School of Public Health</b>	<b>John Buonaccorsi: Measurement</b>
<b>10:00 am</b>	<b>Boston, MA</b>	<b>Error</b>

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## EVENTS

### ***New England Symposium on Statistics in Sports (NESSIS)***

- Date: Saturday, September 26, 2009
- Time: 9:00 am to 5:00 pm
- Location: Science Center, Harvard University, Cambridge, MA
- Organizers: Mark Glickman: [mg@bu.edu](mailto:mg@bu.edu)  
Scott Evans: [evans@sdac.harvard.edu](mailto:evans@sdac.harvard.edu)
- Directions: <http://www.amstat.org/chapters/boston/nessis09.html>
- Fees: \$20 for students; \$40 for non-students
- Registration: You may register in advance, by mail. See instructions on the conference web site (above). You may also register on-site starting at 8:30 am at Lecture Hall C.

#### **Abstract**

The second biannual New England Symposium on Statistics in Sports will bring together statisticians and quantitative analysts associated with sports teams, sports media, and universities to discuss common problems in statistical modeling and the analysis of sports data. There will be talks, posters, and panel discussions. Proceedings will be published in a special issue of the *Journal of Quantitative Analysis in Sports* (JQAS).

The symposium is sponsored by the Harvard University Department of Statistics, the Section on Statistics in Sports of the American Statistical Association, the Boston Chapter of the American Statistical Association, and the Section on Operations Research in Sports of the Institute for Operations Research and the Management Sciences.

## **Panel Discussion**

### **Pre-University Training in Mathematics and Statistics Around the Globe**

- Date: Wednesday, October 14, 2009
- Time: 6:00 pm light dinner; 7:00 pm panel
- Location: Janet M. Daley Library Lecture Hall (within Cardinal Cushing Library), Emmanuel College, Boston, MA
- Directions: [http://www.emmanuel.edu/Tools\\_Navigation/Maps\\_and\\_Directions.html](http://www.emmanuel.edu/Tools_Navigation/Maps_and_Directions.html)  
Sharing of rides can be coordinated through the BCASA group on [Facebook](#) or [LinkedIn](#).
- Fees: Dinner \$9 for chapter members, \$12 for others. Panel is free.
- Registration: By October 9, 2009. <http://bcasa-edpanel.eventbrite.com/>.

#### **Abstract**

Diversity is a key characteristic of the United States workforce, especially in the field of statistics. Today, many students and statisticians in the U.S. attained their primary education outside the country. Differences in mathematical education around the world exist and may influence statistician's thought process and style of collaboration with colleagues. We explore differences and similarities in pre-university education in math and statistics worldwide. Panelists from China, France, India, and Romania will explore how their educational experiences helped shape the statistician they are today.

#### **Panelists**

Katherine Halvorsen, Smith College (Moderator)  
Guillaume Weisang, Bentley University  
Gheorghe Doros, Boston University  
Sandeep Menon, Boston University  
Lingling Li, Harvard University

## EVENING LECTURES

### *On the Development of Categorical Data Analysis*

Alan Agresti  
University of Florida

- Date: Wednesday September 23, 2009
- Time: 6:30 pm light dinner; 7:00 pm presentation
- Location: Frontier Science, 900 Commonwealth Ave, Boston, MA
- Directions: Frontier Science is at the intersection of Commonwealth Avenue and St. Paul Street. Please enter the building on St. Paul and go to the second floor, where someone will let you in. There is a Green Line (B) stop at this intersection. On-street parking is available on St. Paul and on Commonwealth. A Boston University parking Lot, which charges a fee, is across Commonwealth, on Buick Street.
- Fees: Dinner is \$9 for chapter members, \$12 for others. The talk is free.
- Registration: By September 19 <http://bcasa-agresti.eventbrite.com/>

#### **Abstract**

A non-technical survey of the development of the basic methods of categorical data analysis, starting with Karl Pearson's introduction of the chi-squared test in 1900, and focusing on the contributions of statisticians who introduced methods such as the odds ratio, logistic regression, and probit models, loglinear models, and Bayesian approaches. Several developments that occurred in Boston will be highlighted.

***Statistical Methods in Public Health Practice:  
Case Studies in Influenza and BioSurveillance***

Al Ozonoff  
Boston University School of Public Health

Date: Tuesday December 8, 2009

Time: 6:30 pm light dinner; 7:00 pm presentation.

Cost: Dinner is \$9 for chapter members, \$12 for others. The talk is free.

Location: Buckingham Browne and Nichols Upper School, 80 Gerry's Landing Road, Cambridge, MA.

Directions: <http://www.bbns.org/contact/directions>

Fees: By December 4, 2009 <http://ozonoff.eventbrite.com>

**Abstract**

Although modern statistical practice encompasses a large number of specializations both applied and theoretical, the earliest statisticians (called "statists") were primarily concerned with issues of state (i.e., demography and economics). The field of biostatistics in particular has deep roots in public health surveillance, which according to Stephen Thacker of the CDC "is the cornerstone of public health practice". In this talk, we will discuss some aspects of how statistical methods can support and enhance public health surveillance. After examining the historical connections between statistics and public health practice, we will briefly study some specific challenges and problems that arise in the surveillance of influenza and other respiratory disease. Finally, we will offer some thoughts about the importance and impact that we as statisticians might share within the community of public health practitioners.

## SHORT COURSES

### *Discrete Markov Models*

George Cobb

Mt. Holyoke College

Date: Saturday, November 14, 2009

Time: 10:00 am to 12:00pm and 1:00 pm to 4:00 pm

Location: Simmons College, 300 The Fenway, Boston, MA

Directions: <http://www.simmons.edu/overview/directions/>

Fees: \$50 for non-members, \$35 for members, \$25 for students.

Registration: By November 7, 2009 <http://bcasa-gcobb.eventbrite.com/>

Prerequisite: Course in matrix algebra

#### **Abstract**

This workshop springs from a radical premise: If we emphasize conceptual understanding and use computers to do the computing, we can often present “advanced” topics at an elementary level. In that spirit, I have developed a course (NSF # 0089004) aimed at sophomore math majors with no statistics background. The only prerequisite is matrix algebra. The course has been taught to that audience three times at Mount Holyoke, and as a senior capstone course at Grinnell and at Villanova. In the workshop I plan to cover five clusters of topics:

1. Darwin’s Finches: Discrete MCMC, Fisherian testing, classical confidence intervals, Metropolis-Hastings algorithm
2. Curricular issues and course overview
3. Political Killings in Kosovo: Bayesian estimation, efficiency of simulation strategies
4. Molecular alignment: the Gibbs sampler
5. Berkeley Bicycles: Hierarchical models

## ***Measurement Error: Models, Methods and Applications***

John Buonaccorsi  
University of Massachusetts Amherst

Date: Saturday, February 6, 2010

Time: 10:00 am to 4:00 pm

Location: Boston University School of Public Health, Boston, MA

Directions: <http://www.bu.edu/maps/?campus=medical>

Fees: \$50 for non-members, \$35 for members and \$25 for students (includes lunch)

Registration: By January 31, 2010 <http://bcasa-buonaccorsi.eventbrite.com/>

Prerequisites: course in applied regression analysis

### **Abstract**

This course will present an introductory and applied look at measurement error (including misclassification). The focus will be on the basic models used for measurement error, the impacts of measurement error on naive analyses that ignore measurement error, and an overview of techniques to correct for such error. Emphasis is on categorical models (for proportions and two-way) and on linear and non-linear regression, including binary regression. A number of examples and an overview of computing options will be presented.

## ANNUAL WINTER POTLUCK DINNER AND PARTY

Date: Saturday, January 16, 2010

Time: 6:00 pm

Location: Home of Katherine Monti, 30 Lothrop Street, Newtonville, MA

Directions:

Information: Please email Sue Perry [susan.perry@rhoworld.com](mailto:susan.perry@rhoworld.com). Give her (1) your name, (2) how many people will be in your party, (3) what you would like to bring (appetizer, entrée, side dish, salad, or dessert), and (4) how to be contacted by phone and email, so that you can be reached in case of weather problems.

Directions: Lothrop Street is off Crafts Street, between Washington Street and Watertown Street. Crafts Street is off Washington Street, between Pike Exit 17 and Walnut Street. The condo is at the end of Lothrop Street, on the right. Unit 30 is the unit closest to the road. The first few guests can park in the double bay associated with the condo (turn right into the condo driveway, then park behind the first garage on the right), or in one of the spaces at the far end of the condo lot, or in the driveway alongside the unit. Those who arrive later can park on Lothrop or Jennison Streets, or even Judkins Street, if necessary. Lothrop Street dead ends just past the condo. If there has been snow, parking may be tight since the streets are narrow.

In Case of Snow: In case of heavy snow, we will have to cancel or reschedule. The snow date is Saturday January 23, 2010 but we will cancel if there is too much snow build up to park safely. In the event of very light snow, we will party on! Please feel free to email [katherine.monti@rhoworld.com](mailto:katherine.monti@rhoworld.com) if you have questions or to give notice of last-minute changes. Check the chapter web site for cancellation and rescheduling information.



## AT JSM 2009

### New ASA Fellows

The three new ASA Fellows from our area are:

**Mark Chang**, AMAG Pharmaceuticals, Lexington, MA

**Robert J. Gray**, Harvard School of Public Health and Dana-Farber Cancer Institute, Boston, MA

**Gary King**, Harvard University, Cambridge, MA

### Wilks Award

**Lee-Jen Wei**, professor in the Department of Biostatistics at the Harvard School of Public Health, is the winner of the 2009 Samuel S. Wilks Award, one of the most prestigious ASA awards. The award, which was established in 1964, recognizes outstanding contributions to statistics. It was named after Samuel S. Wilks, a founding member of the Institute of Mathematical Statistics and, for 11 years, editor of the *Annals of Mathematical Statistics*.

### Waller Education Award

BCASA member Nicholas Horton received the Waller Education Award. The award was established in 2002 by former ASA Executive Director Ray Waller and his wife Carolyn to recognize excellence and innovation in teaching introductory statistics.

*Please join us in congratulating all five award winners!*

### Discussion of Ethics

BCASA Planning Committee member **Shelley Hurwitz** organized and chaired a panel on *Real-life ethical dilemmas encountered in the practice of statistics: Resolution leading to policy change*. Eminent statisticians in epidemiology, law, and government described personal ethical dilemmas they have faced. Then, after discussion and debate, they revealed how they solved these dilemmas. Peter Imrey, Mark Haug, and Barbara Bailar presented their ethical quandaries, Ingram Olkin and William Seltzer led the discussion. Don Bentley was the moderator. The session was so successful that the ASA Committee on Professional Ethics is planning another session on ethical dilemmas for JSM 2010. The ASA committee is also now collecting ethical scenarios to be used as a resource for the statistical teaching and practice. (All submissions will remain completely anonymous.) If you would like to contribute a scenario or to present an ethical dilemma at a future JSM session, please contact Shelley Hurwitz at [hurwitz@hms.harvard.edu](mailto:hurwitz@hms.harvard.edu).

## **Lobbying Efforts**

A lot of great lobbying took place on Capital Hill on the last day of JSM. A delegation consisting of Shelley Hurwitz, Vincent Carey, Christopher Schmid, Yifan Zhang, Arlene Ash, Scott Evans, HuyuanYang, Nick Horton, and Daniel Rudoy met with staffers at Senator Kennedy's and Senator Kerry's offices and at the offices of most House members from Massachusetts. The delegation advocated for increased statistical literacy in early and secondary education and more funding for basic research at NIH and NSF.

## **BCASA ON FACEBOOK**

BCASA is now on *Facebook*! Join the BCASA *Facebook* group for information and reminders about upcoming events and to connect with other BCASA members.

## **JOB OPPORTUNITY**

### ***Framingham State College: Tenure-Track Assistant Professor, Mathematics***

The Mathematics Department invites applications for a tenure-track position at the rank of Assistant Professor beginning September 2010. The successful candidate would teach courses throughout the mathematics curriculum including lower-level courses. The responsibilities include a teaching load of three four-credit courses per semester, advising, and service to the college community.

#### **Requirements**

Applicants must have a doctorate in mathematics, statistics, or mathematics education by September 1, 2010 or provide evidence of substantial progress toward completion, show evidence of a strong commitment to excellence in teaching and a commitment to continued scholarly and professional growth, and a strong commitment to working in an inclusive, diverse environment.

#### **Application Instructions**

Please submit a letter of application, a curriculum vita, a statement of teaching philosophy, a statement on current research and future research plans, and a completed AMS Standard Cover Sheet online at <http://framingham.interviewexchange.com/candapply.jsp?JOBID=15063> (pdf format is preferred).

Please also send official graduate transcript(s) and three letters of recommendation, at least one of which addresses teaching ability, to Dr. Sarah Mabrouk, Search Committee Chair, Department of Mathematics, Framingham State College, 100 State Street, Framingham, MA. 01701-9101. For consideration, all materials must be submitted/postmarked by *November 16, 2009*.

**Additional Information**

This position is contingent upon funding for academic year 2010/2011.

Framingham State College is a four-year liberal arts college serving a student population of approximately 6,100. Teaching is the primary mission of the college with a strong emphasis on integrating technology throughout the curriculum. The campus is located 20 miles west of Boston.

Framingham State College is an affirmative action/equal opportunity employer. Members of under represented groups and those committed to working in a diverse cultural environment are encouraged to apply.

## BCASA Officers

President	Dominique Houghton <i>Bentley University</i>
Program Chair	Maureen Mayer <i>Raytheon Corporation</i>
Vice-President	Audrey Eleanor Hendricks Baer <i>Boston University</i>
Secretary	Tsu-Min Yeh <i>Harvard School of Public Health</i>
Treasurer	Huichao Chen <i>Harvard School of Public Health</i>
Chapter Representative	James E. MacDougall <i>Ironwood Pharmaceuticals</i>
Past President	Scott Evans <i>Harvard School of Public Health</i>

## BCASA Committee Chairpersons

Education	Kerstin Allen <i>Rho Inc.</i>
E-mail List and Website	Tom Lane <i>MathWorks</i>
Membership	Maureen Mayer <i>Raytheon Corporation</i>
Publications	Shelley Hurwitz <i>Harvard Medical School</i>
Mu Sigma Rho	Nicholas Horton <i>Smith College</i>

## BCASA Newsletter

Editor	Stan Morse <i>University of Massachusetts Boston</i>
Program Announcements	Tom Lane <i>MathWorks</i>
Circulation Manager	Rui Wang <i>Harvard School of Public Health</i>

The *BCASA Newsletter* is published four times during the academic year and is emailed to all chapter members. Please send suggestions and comments to the editor, Stan Morse, at [BCASANews@verizon.net](mailto:BCASANews@verizon.net).