

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>

Newsletter: BCASANews@verizon.net

Upcoming Events

Tuesday, December 6, 2011	Buckingham, Browne & Nichols School, Cambridge	Lecture: Attrition Among College-Intending Low Income High School Graduates (Castleman/Page)
Saturday, January 21, 2012	MathWorks, Natick	Annual Potluck Dinner and Party
Saturday, March 3, 2012	Simmons College, Boston	Statistics Career Day for High School Students

REPORT OF PRESIDENT

We need you!

While the Boston Chapter of the ASA is one of the largest and most active chapters, a quick look at the list of officers, at the end of this newsletter, clearly shows that *we're short on officers*. In fact, we're in need of renewal in each of these areas:

Planning Committee. Chapter activities are the result of the efforts of our planning committee, which consists entirely of volunteers. Some of our most active committee members have recently moved, graduated, or cut back their involvement for other reasons. *We could use some new blood!* Our ranks include graduate students, retired professionals, academics, and people in industry, from both Boston and further afield. Please consider coming to one of our evening meetings. Enjoy a free meal and check us out. It's a great way to make connections.

Locations for Events. Chapter events are usually held at a handful of locations: mainly the Buckingham, Browne and Nichols School, Frontier Sciences, Simmons College, and the University of Massachusetts Medical School. But free meeting places are becoming harder to find. If you can offer us a place to hold one of our events--an evening lecture, daytime lecture, or weekend short course--please step forward.

Ideas for Events. Evening lectures have always been the heart of our program. But this newsletter highlights several events that have gone beyond our usual fare: a sports symposium that drew attendees from across the world, a meeting to encourage communication among academic statisticians in isolated locations, and a career day to give high school students a taste of life as a statistician.

If you would like to speak at one of our events, or have an idea for a topic or speaker or topic, please let us know. In this connection, please see the *Request for Proposals* below.

In the meantime, I thank all who participated in pulling together these events.

Tom Lane, President
tlane@alum.mit.edu

REQUEST FOR PROPOSALS

The BCASA is soliciting proposals for supplementary funds to help plan and conduct events with a statistical theme. Qualified events include, but are not limited to, short courses and other educational activities. This RFP is open until further notice.

Proposals should be no more than 3 *pages* in length. The first two pages should describe the proposed program, indicate why it is important, why it will be attractive to potential attendees, and who might be expected to attend. Also list who will be responsible for program planning and executing the program. As far as possible, also provide information on when and where the program will be held, other possible program sponsors, and information on parking and public transportation. The last page should include a budget.

- 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.
- The BCASA should not be the only sponsor.
- Any fees charged to attendees should be reasonable, with special discounts for students.
- 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.
- Unused funds should be returned to the BCASA.

Proposals and questions should be submitted to

Scott Evans evans@sdac.harvard.edu

Submit proposals *at least 6 weeks* prior to the date of the proposed event. All proposals will be reviewed by members of the Planning Committee.

2012 Statistician of the Year

The BCASA Mosteller Statistician of the Year award is presented annually to a distinguished statistician who has made exceptional contributions to the field of statistics and has shown outstanding service to the statistical community and the BCASA.

The 2012 Statistician of the Year for 2012 is Katherine Halvorsen of Smith College. Congratulations Katherine!!!

Previous recipients of the award are Fred Mosteller, 1990; Herman Chernoff, 1991; Marvin Zelen, 1992; Ralph D'Agostino, 1993; William DuMouchel, 1994; Don Rubin, 1995; Nan Laird, 1996; David Hoaglin, 1997; Richard Goldstein, 1998; Arlene Ash, 1999; Cyrus Mehta, 2000; Alan Gelfand, 2001; Alan Zaslavsky, 2002; John D. McKenzie, Jr., 2003; Louise Ryan, 2004; Mei-Ling Ting Lee, 2005; Carl Morris, 2006; LJ Wei, 2007; Richard DeVeaux, 2008; David Hosmer, 2009; Stephen Lagakos, 2010; and Xiao-Li Meng, 2011.

The award will be presented to Dr. Halvorsen in February at the yearly Statistician of the Year Banquet and Lecture. More information in the next newsletter!

Mu Sigma Rho Honorary Society

The BCASA encourages all faculty members teaching statistics in Massachusetts, Vermont, New Hampshire and Maine to consider nominating your students (both undergraduate and graduate) for membership in Mu Sigma Rho, the national honorary society for statistics.

What's in it for the students? Inductees receive a free membership in the American Statistical Association, the BCASA and a subscription to CHANCE. This is a great way to encourage careers in statistics for your top students, and tie them in to many useful resources, job opportunities and related articles.

What's in it for you? Nominating a student is an easy way for you to provide a pat on the back to your top students, and simplify getting them set up as student member of the ASA as well as the local chapter. Your name is listed on correspondence with students, and your school is also listed along with the name of the student.

The process is straightforward for both the nominator and the nominee. As nominator, you are asked to fill out a 1-page form per student, attach a transcript (unofficial is fine) and induction fees of \$5 per student. The student only needs to confirm their interest in having their name put forward.

More information and the nomination form can be found at

<http://www.math.smith.edu/~nhorton/msr.html>.

Completed forms and induction fee should be sent to

Liam O'Brien
Department of Mathematics
Colby College
Waterville, ME 04901-8858

Mu Sigma Rho officers for 2011-2013 are:

President: George McCabe
Vice President: Lynne Seymour
Secretary-Treasurer: Jackie Dietz
Directors at Large: Scott Evans, Chris Malone, and Bob Stephenson

Statistics Career Day 2012

We are very excited to announce Statistics Career Day for 2012 which will be held on Saturday, March 3 at Simmons College, Boston. We encourage AP Statistics students from Boston schools to participate in this event. Space permitting, students from neighboring area schools are also welcome.

We would like to request that AP statistics teachers who receive the newsletter spread the word and inform their students of this event. This year's event will be a half day and will focus on small interactive sessions in which seven or eight students will meet with a statistician who will discuss how he or she handled a real life statistical problem. We will also have a keynote speaker as well as a panel of graduate students and young professionals who will discuss what it's like to study statistics at the undergraduate and graduate level, how to decide where to go, funding opportunities, and job prospects.

Your participation will make a big difference. We are looking for a keynote speaker, graduate students, and academic and professional statisticians to help with the event: both those who helped with last year's event and new recruits.

Contact Miriam Chernoff:

mchernoff@sdac.harvard.edu.

EVENTS

ANNUAL WINTER POTLUCK DINNER AND PARTY

Date	Saturday, January 21, 2012
Time	6:00 pm
Location	MathWorks, 3 Apple Hill Drive, Natick, MA 01760
Directions	http://www.mathworks.com/company/aboutus/directions.html
Sign-up	By January 19, 2012 http://www.luckypotluck.com/potluck/BCASA2012Party

General Information

When you sign up, please provide your name, how many people will be in your party, and what you would like to bring (appetizer, entrée, side dish, salad, or dessert). Also, leave either phone or email contact information so that you can be reached in case of weather problems. However, the site has garage parking so a cancellation is unlikely. The sign-up web page also includes an area where you can leave messages, including offers of a ride or requests for a ride.

LECTURE

Stemming the Tide of Summer Melt: Investigating Summer Attrition Among College-Intending Low-Income High School Graduates

Benjamin L. Castleman and Lindsay C. Page
Harvard Graduate School of Education

Date	Tuesday, December 6, 2011
Time	6:15 pm light dinner; 7:00 pm lecture
Location	Buckingham Browne & Nichols School, 80 Gerry's Landing Road, Cambridge, MA 02138
Directions	http://www.bbns.org/contact/directions
Registration	By December 1, 2011 http://bcasa2011december.eventbrite.com/
Cost	Dinner \$8 chapter members, \$10 others. Lecture free.

Abstract

The summer after high school graduation is a largely unexamined stage of college access among under represented populations in higher education. We investigate a variety of evidence related to summer attrition among college-intending low-income high school graduates (a phenomenon commonly referred to as summer “melt”). In this paper, we first report on descriptive evidence related to summer melt nationally and in several large school districts across the United States. We find that summer melt is broadly generalizable and of sizeable magnitude, ranging from 10 to 40 percent, depending on the location and student population examined. We then provide evidence regarding the causal effect of providing college counseling to low-income students during the summer following high school graduation. Our findings indicate that providing active college counseling to low-income students during the

summer months leads to meaningful improvements in both the rate and quality of college enrollment. Given sample size and generalizability limitations from a first experimental study on summer counseling, we provide preliminary results from a second experiment, conducted recently with a larger and more representative sample of graduates from a large metropolitan school district. Taken collectively, our results indicate that practitioners and policy makers seeking to improve the flow of low-income students to and through college should further examine this crucial time period.

HIGHLIGHTS OF YEAR'S ACTIVITIES

New England Symposium on Statistics in Sports

The 2011 New England Symposium on Statistics in Sports (NESSIS) was held on September 24, 2011, at the Harvard University Science Center. The symposium format was a mixture of invited talks, a poster session, and a panel discussion. The 2011 NESSIS drew an international crowd of approximately 150 including attendees from Australia, England, the Netherlands, Spain, Brazil, Canada, and Iran and representative from a third of NBA teams. NESSIS was highlighted by a talk by J.P. Ricciardi, Special Assistant to the New York Mets and former General Manager of the Toronto Blue Jays. NESSIS also featured a panel consisting of Sam Hinkie, Executive Vice-President of Basketball Operations for the Houston Rockets; Roland Beech, Director of Basketball Analytics for the NBA Champion Dallas Mavericks; Kenny Atkinson, Assistant Coach of the New York Knicks; and Moderator Zach Lowe, NBA writer for the Sports Illustrated website SI.com. Other featured talks included a presentation by Sarah Rudd of On Football Research and Consulting, who was the recipient of the StatDNA Soccer Analytics Research Competition.

NESSIS was established by Mark Glickman and Scott Evans to enhance the communication and collaboration between statisticians and quantitative analysts connected with sports teams, sports media, and universities. The first NESSIS was held in 2007 and drew more than one hundred registrants. The enthusiasm for the 2007 NESSIS inspired a second NESSIS that was held in 2009. Continued enthusiasm inspired the 2011 NESSIS, and the symposium is intended to be held biannually. The reasons for running a sports statistics symposium are predicated on the need for advanced analytic methods in games and sports. The utilization of statistical methods in sports applications is growing rapidly. Sports teams use statistical analyses to

evaluate players and game strategies, and sports associations develop ranking and ratings systems of players and teams. The evolution of the application of statistics to sports continues to be enhanced with extensive collaboration and interaction between sports analysts and professional statisticians. Unfortunately, opportunities for this collaboration are still relatively uncommon, as academic statisticians often work in isolation developing statistical methods for sports applications, while sports organizations often do not have access to well-trained statistical expertise and cutting edge statistical tools for the analysis of sports data. The main goal of NESSIS is to bridge this gap.

NESSIS was sponsored by the Statistics in Sports Section of the American Statistical Association (ASA), the Boston Chapter of ASA, the Harvard University Department of Statistics, ESPN, StatDNA, SmartOdds, Salford Systems, and Sports Data Hub. Sony/Columbia Pictures also provided movie passes for an advance screening of *Moneyball* to local NESSIS participants. Proceedings of NESSIS will be published in a special issue of the *Journal of Quantitative Analysis in Sports*. Technical talk videos, photographs, and presentation slides from the event as well as previous NESSIS events are posted on the symposium web site

www.nesis.org

The NESSIS founders hope that the enthusiasm generated from NESSIS will increase the collaboration between academic statisticians and analysts connected with sports teams and will improve the quality of statistical design and analysis in sports. Future NESSIS events will continue to encourage the development of cutting edge statistical thinking in sports applications.

Submitted by Scott Evans and Mark Glickman

2011 Statistics Career Day

This year's Statistics Career Day was held on March 12 at the UMass Boston Campus Center. The event was planned to nurture interests in statistics among Boston high school students in AP statistics courses. How is statistics used in such fields as public health, finance, sports, and marketing? What are career prospects in the field? How can one actually become a real life statistician?

The day was structured around a keynote session, a panel with practicing statisticians and another panel with graduate students and young professionals in the field.

Students and teachers from several schools participated: John D. O'Bryant School of Mathematics and Science, English High, Brighton High, Boston Latin, Buckingham Browne and Nichols School. We had three wonderful keynote speakers: Lisa Sullivan and Mark Glickman of Boston University and Arnold Barnett of MIT. Lisa Sullivan discussed the use of statistics in health care and the high demand for statisticians in this area. Mark Glickman explored the use of statistics in sports, particularly in basketball. Finally, Arnold Barnett discussed the often inappropriate use of statistics in the mass media. He provided examples of misleading comparison and cases where the data presented did not actually answer the question at hand. Statisticians, he said, as well as the general public must be ever vigilant!

In the next session statisticians focused more narrowly on the use of statistics in various fields. Joe Blitzstein (Harvard University) examined bias and variance in the statistics of social media networks. Matt Calder (LightKeeper Advisors) discussed the role of statisticians on Wall Street. Steven Correia (Massachusetts Division of Marine Fisheries) described the use of statistics in fisheries management, particularly with reference to horseshoe crabs. Joe Massaro (Boston University) discussed how statistics are used in evaluating new drugs. Kathy Monti (Rho, Inc.) ended the sessions by summarizing an array of different projects on which she has worked, from designing a better "Twinkle" to evaluating drugs used to combat varied diseases.

After lunch students had very many questions about precisely how to plan for a career in statistics. Their questions were answered by a graduating student (Alane Izu, Department of Biostatistics, Harvard School of Public Health) and a young professional (Sachiko Miyahara, Harvard School of Public Health).

We circulated a survey to obtain feedback from the students. Responses to the question "what did you like the most" clearly indicate that they enjoyed the event. Some of their responses were – *"I liked the variety of topics that were covered"; "I liked the many presentations that give a different application of statistics to a different field"; "I really liked the presentations. I especially liked the [panel] with the 2 graduate students. It was really nice to listen to their personal thoughts and experiences"; "What I liked the most about the program was how they were able to explain [that] statistics is all around us"*.

Our sincere thanks to the BCASA and to the committee members for their help in planning the event and to the staff at UMass Boston. Thanks also to Anthony Lee for helping with registration. We are also indebted to Boston Public Schools Secondary Math department and MassInsight Education for contributing to this event. We would also like to thank Susan Devine and Smith Hanley Associates LLC for providing the Career Planning Tips handouts. Last but not the least, thanks to all the speakers, students, and teachers who participated in the event.

Miriam Chernoff, Lisa Mukherjee, Lijuan Deng, Sharon Hessney

JOBS ANNOUNCEMENT

Information regarding current openings at *PatientsLikeMe* is available at:

<http://www.patientslikeme.com/about/careers>

We currently have openings for the following positions:

- . **Clinical Research Coordinator**
- . **Experienced Ruby on Rails Developers**
- . **Marketing Associate**
- . **Principal Scientist, Biostatistics**
- . **Research Analyst**
- . **Usability Expert**
- . **You Tell Us**

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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.