BCASA NEWSLETTER

Boston Chapter of the American Statistical Association

Serving

Maine, Massachusetts, New Hampshire, and Vermont

SCHEDULED EVENTS

November 12, 2005	Short Course	Natick, MA
December 9, 2005	Daytime lecture	Worcester, MA
December 15, 2005	Evening lecture	Cambridge, MA
January 21, 2006	Winter Party	Newtonville, MA

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

Detailed announcements appear inside this newsletter. All events are announced to members by email in advance. We are currently planning events for the coming year. If you have suggestions please contact Program Chair Tom Lane.

SHORT COURSE

**Negative Binomial Regression:
Modeling Overdispersed Count Data**

**Joseph M. Hilbe
Adjunct Professor of Sociology and Statistics, Arizona State University
Professor Emeritus, University of Hawaii**

Date: Saturday, November 12, 2005

Time: 9:00 AM – 9:30 AM Check-in
9:30 AM – 2:30 PM Course (Lunch break around noon)

Cost: $80 for BCASA members, $135 for ASA members who do not belong to BCASA, $195 for non-members, and $45 for students. This will cover the cost of the course materials and lunch.

Location: The MathWorks
3 Apple Hill Drive
Natick, Massachusetts 01760

Directions: http://www.mathworks.com/company/aboutus/directions.html

Course Website: http://www.amstat.org/education/learnstat/nbr.cfm

Registration: Visit the course web site for registration instructions. After November 7, check with Tom Lane to see if seats are still available for on-site registration.

Abstract: The course will examine the history, theory, and varieties of negative binomial (NB) regression. Particular emphasis will be given to the nature and identification of overdispersion and how the various types of negative binomial models deal with it. Topics to be discussed:

- Derivation of the NB as 1) a Poisson-gamma mixture model, and 2) a member of the generalized linear models (GLM) family of distributions
- How to distinguish apparent from real overdispersion, and methods of accommodation in count response models
- Interpretation of the NB ancillary parameter
- Examination of the following varieties of NB: geometric, NB1, NB2, generalized NB, canonical NB, zero-truncated, zero-inflated, logit-NB hurdle, cloglog-NB hurdle, fixed effects, random effects, population averaged (GEE), random-intercepts, random-coefficients, hierarchical RE, and linear mixed NB models.
- Examination of Goodness-of-Fit tests for NB models; interpretation and evaluation of models
- Discussion of available software

Presenter: Since 1997 Dr. Hilbe has served as software reviews editor for *The American Statistician*. He was also the founding editor of the *Stata Technical Bulletin* (1991), was a biostatistical consultant to the Health Care Financing Administration (HCFA), and lead biostatistician for both NRMI-2 and FASTRAK, the U.S. and Canadian national cardiovascular registries respectively. Dr. Hilbe has lectured worldwide on topics related to generalized linear models, has authored some 70 journal articles and book chapters, and is co-author of Generalized Linear Models and Extensions (2001, Stata Press) and Generalized Estimating Equations (2003, Chapman & Hall/CRC). He is currently writing a book entitled "Negative Binomial Regression: Modeling Overdispersed Count Data" (2006, Cambridge University Press).

Program chair note: This course is co-sponsored by the ASA LearnSTAT program, offering continuing education opportunities intended to enhance statisticians' understanding of contemporary theory, methodology, and application of the science.

DAYTIME LECTURE

Sampling in a Data-Rich World

Fritz Scheuren
President
American Statistical Association

Date: Friday, December 9, 2005

Time: 11:00 AM - 12:00 PM

Location: Worcester Polytechnic Institute
Stratton Hall
Room 203
100 Institute Road
Worcester, MA 01609

Website: http://www.socialweb.net/Clients/WPI/index.lasso?id=34749

Abstract: The paradigm of sampling is shifting in business surveys in response to large operational data sets and cheap computing, combined with expensive (and necessarily) small samples. In this environment the role of randomization at inference inevitably has been increasingly overshadowed by the role of models and diagnostics that robustness and representativeness have achieved. Some history will be given of this movement and some new and old tools will be discussed, using a case study example from practice.

EVENING LECTURE

A Revealed Preference Ranking of U.S. Colleges and Universities

Caroline Minter Hoxby
Harvard College Professor and Allie S. Freed Professor of Economics
Harvard University

Date: Thursday, December 15, 2005

Time: 6:30 - 7:00 PM: Light dinner
7:00 - 8:00 PM: Lecture

Cost: Dinner is $8 for chapter members and students, $10 for others. The talk is free.

Location: Buckingham Browne and Nichols School
Pratt Room, Upper School
80 Gerry's Landing Road
Cambridge, MA 02138

Directions: http://www.bbns.org/directions.htm (use Upper School directions)

RSVP: By noon on Thursday, December 8 to Sue Perry at sperry@rhoworld.com. Please indicate whether you will attend the dinner.

Abstract: We show how to construct a ranking of U.S. undergraduate programs based on students' revealed preferences. We construct examples of national and regional rankings, using hand-collected data on 3,240 high-achieving students. Our statistical model extends models used for ranking players in tournaments, such as chess or tennis. When a student makes his matriculation choice from among colleges that have admitted him, he chooses which college "wins" in head-to-head competition. The model uses the information contained in thousands of these wins and losses. Our method produces a ranking that would be difficult for a college to manipulate. In contrast, it is easy to manipulate the matriculation rate and the admission rate, which are the common measures of preference that receive substantial weight in highly publicized college rating systems. If our ranking were used in place of these measures, the pressure on colleges to practice strategic admissions would be relieved.

Program chair note: Professor Hoxby's co-authors include chapter member Mark Glickman of Boston University, as well as Christopher Avery of Harvard University and Andrew Metrick of the University of Pennsylvania.

ANNUAL WINTER POTLUCK DINNER AND PARTY

At the home of Katherine Monti

Date: Saturday, January 21, 2006

Time: 6:00 PM

Location: 30 Lothrop Street
Newtonville, MA 02460

Phones:	617-721-1405 (cell)
	617-965-8000 x22 (work)
RSVP:	By January 19 to Sue Perry (sperry@rhoworld.com or 617-965-8000 x22).
	Please provide your name, how many people will be in your party, what you would like to bring (appetizer, entrée, side dish, salad, or dessert), and either phone or email contact information.
Directions:	For a map, click here. Lothrop is off Crafts Street between Washington Street and Watertown Street. Crafts is off of Washington Street, between Pike Exit 17 and Walnut Street.
	The condo is at the end of Lothrop, on the right. The first few guests can park in the double bay associated with the condo (turn right immediately after passing the condo), or in one of a few spaces at the far end of the condo lot, or alongside the condo, in the driveway. Those who arrive later can park on Lothrop or Jennison or even Judkins, if necessary. Lothrop deadends 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 light snow on the 21st, the show will go on; in case of moderate snow, we might reschedule to January 28. In case of very heavy show, we may cancel because the snow will still impede parking on January 28. Please feel free to call if you have questions. Check the chapter web site for cancellation information.

ANNOUNCEMENTS

Summer Internships

If your company would like to offer summer internships to students studying statistics or mathematics, the BCASA can help. We can announce the internship on our website, through our email list, and in the newsletter (next issue: January, 2006). Contact Katherine Monti for details.

BCASA Events Outside the Boston Area

The mission of the Boston Chapter of the ASA includes service to statisticians in all of Massachusetts, Maine, New Hampshire, and Vermont. Members from throughout our geographic region are encouraged to contact the Planning Committee with ideas for events (lectures, short courses, career nights, social events, etc.) that they are planning or would like the Chapter to consider planning in their area. The committee is happy to help with event planning, publicity, and in some cases funding. Please contact any planning committee member or any of the officers listed at the end of this newsletter.

Isolated Statisticians Meeting

The New England Isolated (Academic) Statisticians Meeting (NEISM) 2005 will be held at Bryant University in Smithfield, RI, on Saturday, November 12, 2005, from 9:00 a.m. to 4:30 p.m. For more information please contact the local arrangement coordinator: Phyllis Schumacher, pschumac@bryant.edu, (401) 232-6328.

Nominate a Student for Mu Sigma Rho

Mu Sigma Rho is the national honorary society for statistics. Its purpose is to encourage scholarly activity in statistics and to recognize outstanding achievement among undergraduate students in statistics. For further information, view the website http://www.math.smith.edu/~nhorton/msr.html.

JOB OPPORTUNITIES

SENIOR BIOSTATISTICIAN: Cubist Pharmaceuticals, Inc. (www.cubist.com) is headquartered in Lexington, Massachusetts. The Senior Biostatistician will support Cubist's clinical trial activities in accordance with industry standards for research, and relevant regulations and guidance documents. Working in conjunction with other study team members on pre-study planning, protocol development (in particular, the Statistical Section and sample size/power calculations), Statistical Analysis Plan preparation/review, oversight of the biostatistical activities of contractors and contract research organizations (CRO), data quality reviews, review of tables/listings/figures and clinical study reports. Some SAS programming is required and could include preparation of data distributions, tabulations and listings, and data analysis. The Senior Biostatistician will also support designated in-house projects. Responsibilities will include preparation of data tabulations and listings for ad hoc analysis requests, safety surveillance analyses, and PK and pharmacoeconomic data support. Education: A Master's degree (or higher) in a research field eg, statistics, biostatistics, epidemiology, psychology. Experience: A minimum of 6 years industry and/or CRO experience. A minimum of 3 years of experience in a pharma or biotech company is preferred. Please apply for this position at jobs@cubist.com and put the job title in the subject line.

FACULTY POSITION: The Department of Epidemiology and Biostatistics at the School of Public Health, University at Albany, State University of New York invites applications for a tenure-track Associate or Full Professor position in Biostatistics. The selected candidate will be expected to provide leadership within the Department's Division of Biostatistics, including the review and development of curricula and the recruitment of new faculty. This position also requires teaching graduate-level courses in Biostatistics and developing independent and collaborative research projects.   The School of Public Health is a joint venture of the University at Albany and the New York State Department of Health and is affiliated with Albany Medical College. In the Department of Epidemiology and Biostatistics there are ten full-time faculty of the University and approximately 30 additional faculty members who work full-time at the New York State Department of Health administering major health programs or studying scientific or policy-oriented public health problems of state and national significance. Opportunities for laboratory-based research collaborations exist with the University's Center for Excellence in Cancer Genomics as well as the Wadsworth Center, the nation's largest and most comprehensive state public health laboratory. Candidates are required to have a Ph.D. or its equivalent in Biostatistics or a Ph.D. in a related field. The candidate must also have experience in teaching, conducting health-related research and working with culturally diverse students and staff. The University at Albany is an Equal Opportunity/Affirmative Action/Immigration Reform and Control Act/American with Disabilities Act Employer. Review of applications will begin August 1, 2005, and continue until the search is completed. Salaries are competitive and rank will be commensurate with experience. Interested candidates should send a CV and a letter highlighting their interests and qualifications to: Nikki Malachowski, Assistant-to-Chair, Department of Epidemiology and Biostatistics, School of Public Health, State University of New York at Albany, One University Place, Rensselaer, NY 12144-3456

STATISTICAL SOFTWARE DEVELOPER: The MathWorks of Natick, MA, is seeking a creative statistician to help propose, plan, and develop the statistical programming tools we offer to our MATLAB customers. This includes the design, architecture, and development of statistical software and GUIs written in MATLAB and/or Java. The ability to work constructively in a team environment is vital. The candidate should have experience taking a project from concept to shipping. Qualifications include an M.S. with 3-5 years industry experience or a Ph.D.; expertise in computational math; experience with MATLAB, R, S-plus, or similar technical computing language; excellent written and verbal communication; ability to formulate realistic goals and meet commitments; and experience writing software for use by others. To apply, visit http://www.mathworks.com/company/jobs/. For more information contact Tom Lane, tlane@mathworks.com.

OFFICER AND COMMITTEE CHAIR REPORTS

President

I am pleased to report that the "state of the Chapter" is strong. Chapter membership increased 18% over the past year, to 460 members. We are now the 2nd largest Chapter of the ASA. Our financial situation is also strong. Thanks to the dedicated efforts of the Planning Committee, we continue to be a leader in developing and providing quality programs for members, including evening lectures, short courses, career days, and outreach initiatives. We encourage members to submit proposals for statistical programs such as short courses and conferences. The Chapter will consider working with other organizations in planning, advertising, and supporting New England area events.

I would like to stress that the Boston Chapter serves all of Massachusetts, Maine, New Hampshire, and Vermont. Although most members live in the greater Boston area, I particularly encourage members who live outside of the Boston area and are interested in organizing local events to contact the Chapter. I further urge educators to encourage students to joint the Chapter and the ASA. Membership allows students to interact with other statisticians and provides discounts for our educational events. Chapter membership for students is only $3. Finally, I would like to thank Michael Posner for his many years of dedicated service as Chapter Treasurer. We wish him well in his new position at Villanova University and welcome Rui Wang as our new Treasurer.

Submitted by Scott Evans

Education Committee Chair

The objective of the Education Committee is to make statistical information more accessible to statisticians and to introduce statistics to potential statisticians and lay-people. This year we held our first Saturday Career Day, in a beautiful conference room at Simmons College. The day started with attendees mingling and enjoying muffins, bagels, and other refreshments. Local professionals spoke about teaching statistics to high school students and about the use of statistics in clinical trials, industry statistics, insurance genomics research, industry, epidemiology, bioterrorism, and actuarial science. Over lunch, each speaker hosted a round-table discussion. Approximately 80 people attended, from many member states. Thanks go to our great group of speakers (David Bookston, Scott Evans, Susan Brogly, Mei-Ling Lee, Sue Rosenkranz, Maureen Mayer, Steven Wenner, Eynshteyn Averbukh, Greta Ljung, Torey Vizzo and Lori Judson); to Bob Goldman for arranging to hold the event at Simmons College; and to the Boston University Department of Biostatistics for sponsoring the event.

The Council of Chapters has asked local chapters to develop programs to support K-12 statistics education. In response, we are developing two new initiatives: Maureen Mayer is organizing a statistics fair for students in grades 3-6. This will include lots of fun activities related to measuring things and also include balloons and face painting. Rob Carver and Bob Goldman are working on an AP Stats Day! If you're interested in learning more about these projects or have ideas for additional programs, please contact me (kallen@rhoworld.com) or Scott Evans (evans@sdac.harvard.edu).

Submitted by Kerstin Allen

The BCASA Newsletter is published four times during the academic year and is emailed to current BCASA members. Send comments to any officer or newsletter production committee member.

BCASA OFFICERS

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