

# BCASA NEWSLETTER

## Boston Chapter of the American Statistical Association

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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		
March 31, 2017	Analytics without Borders Conference	Waltham, MA
March 31 – April 2, 2017	Five College DataFest	Amherst, MA
April 5, 2017	ASA Connecticut Chapter 2017 Miniconference	Bristol, CT
<b>April 8, 2017</b>	<b>Short Course: Introduction to Statistics for Spatio-Temporal Data</b>	<b>Cambridge, MA</b>
<b>April 21-22, 2017</b>	<b>The New England Statistics Symposium (NESS)</b>	<b>Storrs, CT</b>
<b>April 27, 2017</b>	<b>Statistics in Practice Panel Discussion</b>	<b>Boston, MA</b>
<b>May 5, 2017</b>	<b>Adaptive Designs in Clinical Trials</b>	<b>Cambridge, MA</b>
May 22-25, 2017	Modern Modeling Methods (M3) Conference	Storrs, CT
<b>May 2017</b>	<b>Annual Meeting and Lecture</b>	<b>TBD</b>
July 29 – August 3, 2017	Joint Statistical Meetings	Baltimore, MD
<b>September 23, 2017</b>	<b>2017 New England Symposium on Statistics in Sports</b>	<b>Cambridge, MA</b>

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 Fotios Kokkotos, [fkokkotos@hotmail.com](mailto:fkokkotos@hotmail.com)

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## *Greetings from New Hampshire and Vermont!*

The days are getting longer, the snow is melting, and spring is definitely on its way. With a new season approaching, we would like to take the opportunity to tell you about some recent and upcoming events in our area. The Statistics group at the University of New Hampshire is growing and our faculty members have been busy working on various statistical problems such as improved nonparametric curve estimation, statistical downscaling of climate change, optimal subsampling to enable large data analysis, spatio-temporal mapping of cyanobacteria for public health, flood prediction and extreme value theory.

On Saturday, October 21 we look forward to hosting a half-day statistics meeting at UNH to tell you about our latest work. The meeting will have the format of a mini-conference with half-hour presentations given by researchers from the area. We are hoping for good attendance by statisticians and researchers not only from Massachusetts and New Hampshire, but also from Maine and Vermont. As a further attraction, the event is scheduled to coincide with the peak season for beautiful fall colors in the region. Please mark your calendars and please come on up!

Exciting things are also happening in the western part of the state. The nation's first Department of Biomedical Data Science was recently established at Dartmouth College in Hanover. The mission of the new department is to advance research and education for the quantitative analysis of biomedical and health data and to promote Biomedical Informatics and Biostatistics as essential disciplines. The mentoring and academic development of faculty and the training and education of the next generation of data scientists are important parts of the mission. (For more detail, see News and Announcements below).

To consolidate regional activity, the statisticians at Dartmouth College are currently working to set up a regional group of ASA members from New Hampshire and Vermont. As part of the Boston Chapter, this group would offer a series of lectures and other program activities for researchers in our area. Although the driving distances tend to be long, we hope that some of these events would be attended by statisticians from Massachusetts and other states that belong to the Boston Chapter. We will also look into the possibility of hosting the New England Statistics Symposium (NESS) in our area in a not too distant future. As a more immediate step, we plan to appoint a representative from our area to serve on the BCASA Planning Committee. We also plan to provide regular updates about our activities in future newsletters.

We look forward to increased interaction and collaboration with statisticians in the Boston area. And we invite you all to visit us whenever you are in this area.

*Ernst Linder, UNH, and Zhigang Li, Dartmouth College*



# ***ASA Short Course: Introduction to Statistics for Spatio-Temporal Data***

**Instructor:** Professor Christopher Wikle, University of Missouri

**Date:** April 8, 2017

**Time:** 9:30 to 4:00 PM

**Location:** Harvard University, Science Center, 1 Oxford Street

**Room:** 309 Science Center

**Registration:** <http://bcasa2017Wikle.eventbrite.com>.

Registration requested by noon on Wednesday April 5. Limit: 60

**Cost:** \$25 for students, \$60 for Chapter members, \$70 for non-members. The fee includes lunch.

**Public Transportation (Recommended):** Harvard T station on the Red Line

**Parking:** Public parking is available in nearby garages.



**Abstract:** The course gives a contemporary presentation of spatio-temporal processes and data analysis, bridging classic ideas with modern hierarchical statistical modeling concepts. From understanding environmental processes and climate trends to developing new technologies for mapping public-health data and the spread of invasive-species, there is a high demand for statistical analyses of data that take spatial, temporal, and spatio-temporal information into account. This course presents a systematic approach to key quantitative techniques for the statistical analysis of such data that features hierarchical statistical modeling, with an emphasis on dynamical spatio-temporal models. The material follows the book by Cressie and Wikle, *Statistics for Spatio-Temporal Data (2011) - John Wiley and Sons, Hoboken, NJ*, but at a slightly lower level. Many examples will be included, along with some basic applications from various R packages.

**Prerequisite:** The course material assumes Masters level knowledge of probability and statistical inference and good understanding of matrix algebra.

**About the Instructor:** Christopher K. Wikle is Curators' Distinguished Professor of Statistics at the University of Missouri, with additional appointments in Soil, Environmental and Atmospheric Sciences and the Truman School of Public Affairs. He received a PhD co-major in Statistics and Atmospheric Science in 1996 from Iowa State University. He was research fellow at the National Center for Atmospheric Research from 1996-1998, after which he joined the MU Department of Statistics. His research interests are in spatio-temporal statistics applied to environmental, ecological, agricultural and federal survey applications, with particular interest in dynamics. Awards include elected Fellow of the American Statistical Association, Distinguished Alumni Award from the College of Liberal Arts and Sciences from Iowa State University, ASA ENVR Section Distinguished Achievement Award, the MU Chancellor's Award for Outstanding Research and Creative Activity in the Physical and Mathematical Sciences and the Outstanding Graduate Faculty Award from the UM Graduate School. His Wiley book on *Statistics for Spatio-Temporal Data*, co-authored with Noel Cressie, was the 2011 PROSE Award winner for excellence in the Mathematics Category by the Association of American Publishers and the 2013 DeGroot Prize winner from the International Society for Bayesian Analysis. He is Associate Editor for several journals and is one of six inaugural members of the Statistics Board of Reviewing

## ***2017 New England Statistics Symposium at University of Connecticut, April 21-22***

The 31st New England Statistics Symposium (NESS) will be hosted by the Department of Statistics, University of Connecticut, on April 21-22, 2017. We will be celebrating the 30th anniversary since the NESS was started at UConn in 1987! The purpose, as usual, is to bring together statisticians from all over New England and beyond to a central location to share research, discuss emerging issues in the field and network with colleagues.

The 2017 symposium will feature three short courses, two invited plenary talks, invited paper sessions, and posters. There will be a student paper competition and a student poster competition sponsored by our industrial partners. The invited sessions will include a presentation on “Complex Data/Network Modeling” chaired by Yuan Huang, Yale University, Big Data chaired by Haim Bar, University of Connecticut, and Bayesian Applications I High-Dimensional and Multivariate Modeling organized by Seongho Song, University of Cincinnati. The keynote speakers will be Xihong Lin from Harvard University and David Madigan from Columbia University. The three full-day (8:30 am-5:00 pm) short courses, to be held on Friday, April 21, are:

- 1) **Course 1:** Fitting Mixed-Effects Models Using the Julia Language: Douglas Bates, University of Wisconsin-Madison
- 2) **Course 2:** Practical Integrative Statistical Learning: Recent Developments and Case Studies: Kun Chen, University of Connecticut and Robert Aseltine, University of Connecticut Health Center.
- 3) **Course 3:** Subgroup Analysis and Treatment Scoring with Application in Precision Medicine: Menggang Yu, University of Wisconsin-Madison

### **Poster Session:**

Contributed posters are still being accepted; we have capacity for 60 posters.

### **IBM Student Paper Competition:**

Students are encouraged to submit papers for consideration of 3 student paper awards sponsored by the IBM Watson Research Center. Manuscripts need to be received no later than Monday, March 20, 2017. See details online.

### **Liberty Mutual Student Poster Competition:**

Students are encouraged to submit posters for consideration of 3-5 student poster awards sponsored by Liberty Mutual. Abstracts need to be received no later than Monday, April 3, 2017. See details online.

**Timelines and registration:** The on-line registration system is now open. Abstracts, posters, and student papers must be submitted by March 20. The registration fee is \$20 for students and \$40 for non-students. There is a separate short course fee of \$50 for students and \$250 for non-students, with a special discount for non-student CT State employees.

**Conference Organizers:** The 2017 NESS organizing committee consists of Professors Haim Bar, Jun Yan (chair), and Yuping Zhang. The webpage of the conference is at <http://ness.stat.uconn.edu>, with further details to be filled as they become known. Please mark your calendar and plan to attend. If you have any questions or suggestions, please contact Jun Yan at [jun.yan@uconn.edu](mailto:jun.yan@uconn.edu).

# ***Short Course on the Design and Monitoring of Adaptive Clinical Trials***

## ***A Practical Introduction with Examples and Software***

**Date and Time:** May 5, 2017, 9 a.m. – 5 p.m.

**Location:** Takeda Pharmaceuticals, 40 Landsdowne Street Cambridge

**Registration Fees:** \$150 non-members, \$125 Members and \$75 students

**Please register at:** <https://adaptivetrials2017.eventbrite.com>

**Registration Deadline:** April 14, 2017

**Note:** Organizers are also working on setting up a web meeting, with details to follow

When designing a clinical trial, it is important to investigate many different combinations of design parameters - including power, spending functions, timing of interim analyses, and enrollment rates - to discover the most efficient combination for the trial under consideration. This workshop will include hands-on training for East, the industry standard clinical trial design software tool. Attendees will learn how to design, monitor and simulate fixed, group sequential and adaptive trials with one arm, two or multiple arms, for binary, continuous or time-to-event endpoints. We will review other new features, including:

- extending available simulations through external calls to R functions
- computation of Bayesian power or probability of success (assurance)
- forecasting of enrollments and events

**Pre-requisites:** Attendees are expected to have basic knowledge of clinical trials, and a keen interest in adaptive designs.

**Software:** The attendees are expected to have East 6.4 installed on their computers before the seminar day. The Cytel Support Team and the event organizers will coordinate this effort, providing installation setup and the instructions to install the software well in advance of the seminar day.

### **Instructor Bios**

#### **Cyrus Mehta**

Cyrus Mehta is President and co-founder of Cytel Corporation and Adjunct Professor of Biostatistics, Harvard University. Cytel ([www.cytel.com](http://www.cytel.com)) is a leading provider of software, clinical services and strategic consulting on the design, interim monitoring and implementation of adaptive clinical trials, with offices in the United States, Europe and India. Dr. Mehta consults extensively with the biopharmaceutical industry on group sequential and adaptive design, offers workshops on these topics, and serves on data monitoring and steering committees for trials in many therapeutic areas including oncology, cardiology, neurology and metabolic disease. He has led the development of the StatXact, LogXact and East software packages that are widely used by the biopharmaceutical industry, academic research centers and regulatory agencies. He has over 100 publications in leading statistics and medical journals. He is a past co-winner of the George W. Snedecor Award from the American Statistical Association, is a Fellow of the American Statistical Association, and an elected member of the International Statistical Institute. He was named Mosteller Statistician of the Year by the Massachusetts Chapter of the American Statistical Association in 2000, and Outstanding Zoroastrian Entrepreneur by the World Zoroastrian Chamber of Commerce in 2002. He has received the Lifetime Achievement Award from the International Indian Statistical Association (2015) and the Distinguished Alumni Award from the Indian Institute of Technology, Bombay (2016).

#### **Charles Liu**

Charles Liu has been a statistician and product manager at Cytel for over 5 years. He has a research background in Psychology, Neuroscience, and Biostatistics. Charles earned a PhD in Psychology from the University of Melbourne, Australia.

**Hrishikesh Kulkarni**

Hrishikesh Kulkarni has been a statistician at Cytel for over 9 years. He earned his Master's Degree in Statistics from Department of Statistics, University of Pune, India. Since then, he is involved in products like East and other Cytel products.

**Acknowledgement:** Thanks to the generosity of Cytel Corporation, all proceeds will benefit the Boston Chapter of the American Statistical Association.

***Analytics without Borders Conference, Bryant University, March 31st, 2017***

The 2nd Analytics without Borders conference will be held at Bryant University (Smithfield, RI) on March 31<sup>st</sup>, 2017. This conference is a forum for all ways of analytics life to present and discuss analytics work, be it from corporate institutions, academia, government organizations etc. All groups will be able to interact with each other and thus build bridges between the different analytics constituencies.

Anyone who does anything with data is warmly invited to present their work. Sessions will include a blend of corporate, academic and government researchers and practitioners.

Registration will be open soon at <http://www.bentley.edu/analytics-without-borders>

Online submission for abstracts deadline is **March 10th, 2017**. The detailed information of abstract submission can be found at

<http://www.bentley.edu/analytics-without-borders/call-presentations-and-posters>

***2017 Five College DataFest, March 31-April 2***

Dates have been set for the 2017 Five College DataFest! The event will take place March 31 – April 2, 2017. Students from the five colleges, Smith, Mt Holyoke, Amherst, Hampshire, and UMass Amherst, are invited to participate. Registration will be open soon. More information can be found at <http://www.science.smith.edu/datafest/>

Just like last year, the Five College DataFest will be one of many DataFests around the country. Check the [ASA website](#) for the most up-to-date information on participating institutions.

## ***2017 Connecticut DataFest, March 31-April 2***

About 70 students from Wesleyan, Yale, UConn, Conn College, Trinity, and Lafayette will form teams (2-5 students per team) to tackle a surprise, large, and complex dataset. After two days of intense data wrangling, analysis, and presentation design, each team is allowed a few minutes and no more than two slides to impress a panel of judges. Prizes are given for Best in Show, Best Visualization, and Best Use of External Data.

Undergraduate students do the work, but the organizer is looking for consultants (graduate students, faculty, and industry professionals) to assist them. Consultants can help with technical issues, conceptual issues, or just act as sounding boards. We hope to use this as a way to help connect the data science and statistics community in Connecticut. We are looking for consultants to provide 2 (or more) hours of their time over the weekend. Please contact Valerie Nazzaro ([vnazzaro@wesleyan.edu](mailto:vnazzaro@wesleyan.edu)) with any questions.

## ***Connecticut Chapter 2017 Miniconference, April 5, 2017 Innovative Methods of Communicating Data and Statistics***

Living in a data-driven society, it is critical that statisticians and data scientists can communicate methods, results, and insights not only to other data experts but also to non-scientific audiences. This one day conference will explore innovative means of communicating data - from writing to speaking to engaging with others - in clear and exciting ways.

**Conference Location:** Double Tree by Hilton Hotel Bristol, 42 Century Drive, Bristol, CT

**Date:** Wednesday, April 5, 2017

**Register** for the conference at: <https://www.123signup.com/register?id=nnyry>

CT Chapter Member: \$55

Non-member: \$65

Student: \$25

### **Invited speakers include:**

Peter Bull, DrivenData: "Crowdsourcing Data for Good: Lessons from the social sector and how to get involved"

Dominic De Bellis, Boehringer Ingelheim Pharmaceuticals: "Making Sense of Numbers Requires Clear Language - Choose Your Words Carefully"

Cheryl Rykowski, CRE Solutions, Inc.: "Delivering WOW! - Top Ten Presentation Skills Tips"

Gregory Matthews, Loyola University Chicago: "Beyond Data Viz: Data Art"

David Oury, Bentley University: "Grass Roots Data Science"

For questions, please contact Jennifer McGinniss ([Jennifer.mcginiss@Boehringer-ingelheim.com](mailto:Jennifer.mcginiss@Boehringer-ingelheim.com))

## ***May Institute on Computation and Statistics for Mass Spectrometry and Proteomics***

**Location:** Northeastern University, Boston MA

**Date:** May 1-12, 2017

**Organizers:** Meena Choi and Olga Vitek

**Apply at:** <http://computationalproteomics.ccis.northeastern.edu/>

The application deadline was extended to February 15, but applications will still be taken after the deadline until the space is filled.

The institute has a modular format, and any subset of modules can be taken independently. The modules covering processing of raw mass spectrometric datasets with Skyline and OpenMS, basics of statistical analysis with R, advanced R, visualization of high-throughput biological datasets, and statistical methods for mass spectrometry and proteomics. A capstone project puts together the topics covered in the individual modules. The courses are taught by world experts in this field.

A limited number of tuition fee waivers and travel fellowships will be available for students and postdocs affiliated with academic institutions in the US.

The instructors are leading experts in this field, who contributed numerous experimental and computational methods and software. The target audience are both beginners and experienced scientists, who would like to strengthen their computational and statistical expertise. We also welcome computer scientists, bioinformaticians, data scientists, statisticians and engineers interested in learning about working with data from modern biotechnologies. The participants will have many opportunities to ask questions, and will be able to present their research.

Program Overview:

May 1-3 : Targeted proteomics with Skyline

May 1-3 : Proteomics and metabolomics with OpenMS

May 3-5 : Beginner's statistics in R

May 3-5 : Advanced R

May 8-10 : Statistics for quantitative mass spectrometry

May 8-10 : Visualization of biomolecular data

May 10-12 : Capstone – case studies in quantitative mass spectrometry

This program is supported by the 1R25EB023929-01 award from the National Institutes of Health, and by German Network for Bioinformatics Infrastructure. For further information please see: <https://computationalproteomics.ccis.northeastern.edu/>



## ***2017 Modern Modeling Methods Conference, May 22-25, at UConn***

The Modern Modeling Methods (M3) conference is an interdisciplinary conference designed to showcase the latest modeling methods and to present research related to these methodologies. The 7th annual M3 conference will be held May 22-25, 2017 at the University of Connecticut. The keynote speakers for the conference include Dr. Steven Boker (UVA) and Dr. Kenneth A. Bollen (UNC). In addition, Steven Boker will conduct a full day pre-conference workshop on Monday (May 22) on Dynamic Structural Equation Modeling. Kenneth Bollen will offer a half day post-conference workshop on Thursday (May 25), on Model implied instrumental variables using MIIVsem. In addition, Craig Enders will offer a 3-hour session on Wednesday afternoon (May 24) on Multiple Imputation for Multilevel Data. There is no additional charge to attend the featured double session. It is open to all conference attendees.

For more information about the conference, please go to <http://www.modeling.uconn.edu/>.

## ***2017 Joint Statistical Meetings (JSM) to be held in Baltimore, Maryland, July 29-August 3***

JSM is the largest gathering of statisticians held annually in North America. In regards to the program, it is also one of the broadest, with topics ranging from statistical applications to methodology and theory to the expanding boundaries of statistics, such as analytics and data science. JSM also offers a unique opportunity for statisticians in academia, industry, and government to exchange ideas and explore opportunities for collaboration.

With a focus on the 2017 theme, *Statistics: It's Essential*, the JSM program consists not only of invited, topic-contributed, and contributed technical sessions, but also poster presentations, roundtable discussions, professional development courses and workshops, award ceremonies, and countless other meetings and activities. Spanning the better part of a week, the 2017 JSM runs from Saturday, July 29, to Thursday, August 3, with the technical sessions beginning Sunday afternoon.

For further details about conference and key dates for conference participation and registration, please see <https://ww2.amstat.org/meetings/jsm/2017/conferenceinfo.cfm>

## ***2017 New England Symposium on Statistics in Sports (NESSIS)***

Please save the date!

### **CONTACTS**

Mark Glickman, Ph.D. (glickman@fas.harvard.edu)

Scott Evans, Ph.D. (evans@sdac.harvard.edu)

### **NESSIS LOCATION**

Harvard University Science Center

Cambridge, Massachusetts, USA

### **NESSIS DATE AND TIME**

Saturday, September 23, 2017

~9:00 a.m. – 6:00 p.m.

### **DESCRIPTION**

The 2017 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 NESSIS format will be a mixture of talks, posters, and a panel discussion. NESSIS is held biannually with the inaugural NESSIS held in 2007.

The mission of NESSIS is to foster statistics and its application in sports, promote unity and effectiveness among all concerned with statistical problems in sports, and to increase the contribution of statistics in sports. NESSIS aims to address these objectives by promoting research on statistics in sports, encouraging interaction and collaboration among statisticians and other quantitative analysts in the sports arena, and providing an educational opportunity for students and others to learn about statistical methods and applications in sports.

### **NESSIS WEBSITE**

<http://www.nessis.org>

### **PROJECT LEADERSHIP AND ORGANIZATION**

Mark Glickman and Scott Evans are Co-organizers of NESSIS. Dr. Glickman and Dr. Evans co-organized each of the five NESSIS events beginning in 2007.

### **COMMENTS**

A call for abstracts will be announced via the NESSIS website and e-mail listserv, AmStat News, ASA's e-newsletter *Statbits*, the SIS Section email list, the Boston Chapter email list, local Harvard lists, and other possible outlets.

### **DISSEMINATION**

The event will be digitally video-recorded, and media files of the talks will be linked from the SIS web site ([www.nessis.org](http://www.nessis.org)) for unrestricted viewing. NESSIS has been highlighted in a feature article in AmStat News in prior years and a summary article will again be written for AmStat News regarding the 2017 NESSIS. As was the case in prior years, non-academic media outlets will be invited to the 2017 NESSIS to cover the symposium and report in public media.

## ***NEWS & ANNOUNCEMENTS***

### **A New Department of Biomedical Data Science at the Geisel School of Medicine at Dartmouth, New Hampshire**

The Geisel School of Medicine at Dartmouth announced the new Department of Biomedical Data Science, as approved by Dartmouth's Board of Trustees in late 2014. Dr. Christopher Amos is the inaugural Chair of the nation's first Department of Biomedical Data Science which brings together the breadth and depth of faculty expertise in computational and statistical methodologies. The department includes a Division of Biostatistics, a Division of Biomedical Informatics and the Center for Technology and Behavioral Health. Many of the founding members of the Department are members of the American Statistical Association, including Chris Amos, Eugene Demidenko, Jiang Gui, Zhigang Li, Todd MacKenzie, James O'Malley (fellow), Emily Scherer, and Tor Tosteson (fellow).

The mission of the new department is to advance research and education for the quantitative analysis of biomedical and health data and to promote Biomedical Informatics and Biostatistics as essential disciplines for the mentoring and academic development of faculty, as well as the training and education of the next generation of data scientists.

"In recent years, we've seen a massive influx of 'Big Data' generated from many sources including electronic medical records, imaging data, social media, and networked research resources," said Amos. "This presents tremendous opportunities and challenges, requiring us to develop new ways for getting, storing and sorting massive amounts of data. Increasingly, this data is being used for discovery. The question is: Can we use the data to produce reliable predictive models?"

"There is a need for data scientists who are trained to use and deploy these methods," said Amos. "Advanced training in biomedical data science will propel the new era of discovery in this rapidly developing area."

### **Dr. Christopher Amos named the interim director of Norris Cotton Cancer Center**

In June of 2016, Dr. Amos was named as the interim director of the NCI-designated Norris Cotton Cancer Center (NCCC) in the Geisel School of Medicine at Dartmouth. In addition to being the current Chair of the Department of Biomedical Data Science, he has also been serving as the Associate Director for Population Sciences at NCCC.

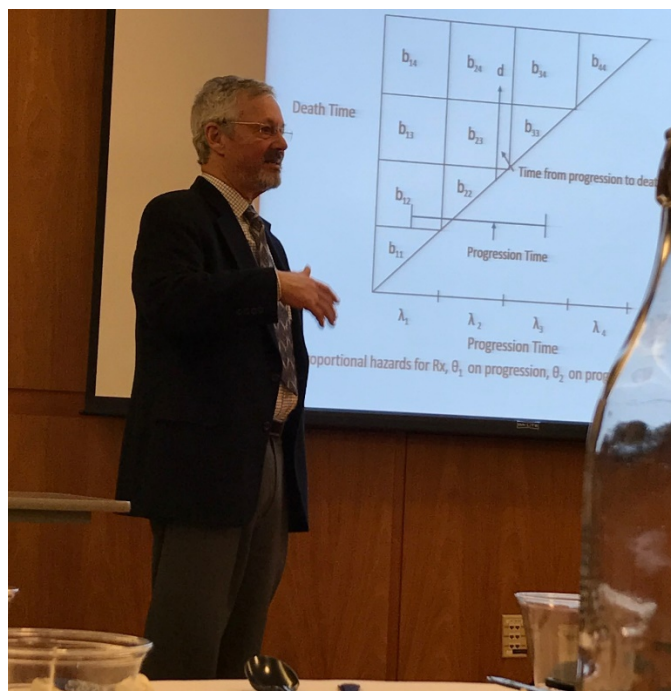
## Neil Shephard at Harvard University Receives the 2017 Guy Medal in Silver

The Royal Statistical Society has awarded Neil Shephard the 2017 Guy Medal in Silver for his seminal paper “Non-Gaussian Ornstein-Uhlenbeck-based models and some of their uses in financial economics” written jointly with Ole Eiler Barndorff-Nielsen. The paper, which was read to the Society in 2001, exemplifies his highly influential contributions across Statistics, Econometrics and Finance, including particle filtering, stochastic volatility models and the statistical analysis of high-frequency data.”

Neil Shephard is Professor of Economics and Statistics, in the Economics and Statistics Departments at Harvard University. He has worked at Harvard since 2013. He is currently also the Chair of the Statistics Department at Harvard.

## David Schoenfeld Honored as 2017 BCASA Mosteller Statistician of the Year

It was a beautiful March day and the Mosteller Statistician of the Year Award Banquet held at Simmons College on March 8 was a resounding success. The keynote speaker was Dr. **David Schoenfeld** who was honored as the 2017 Mosteller Statistician of the Year by the Boston Area Chapter of the American Statistical Association (BCASA). The award was presented to Dr. Schoenfeld in recognition of his impact on medical applications and statistical methodology and for having built a strong statistical unit at Massachusetts General Hospital. He has also been influential as an educator, both in guiding the educational program in the Department of Biostatistics at Harvard School of Public Health over the past 30+ years and in mentoring and training many junior biostatisticians.



David's presentation was entitled "The Infrequent Bayesian" and focused on two specific applications where Bayesian reasoning provided valuable insights in the design and analysis of clinical trials. The first application arose from an ALS study where the investigators wanted to conduct single arm phase II trials of new drugs and compare the results to the placebo groups of previous clinical trials. Using historical data from placebo groups in many trials, one can take into account the trial effect and calculate the predictive distribution of the results of a new placebo group. This can then be used to calculate criteria for what would be a significant effect, as well as the sample size needed to detect this effect. Surprisingly, unless the hypothesized treatment difference is large, a historically controlled trial will require more patients than a randomized trial, which goes against the usual notion that they require one fourth as many patients.

The second application considered whether a cancer therapy that improves tumor-free survival also improves overall survival. Many cancer trials have limited amounts of data on overall survival because of the decision to stop the trial when it is positive in terms of time to tumor progression. Cancer researchers often believe that the treatment will not have a large effect on time from progression to death since the drug is halted at progression. The approach described in the presentation involved developing a joint model of time to tumor progression and time from tumor progression to death, with an informative prior on the treatment effect on the latter parameter. Then Bayesian estimates of the effect of treatment on overall survival can then be calculated as a function of this prior.

The guests at the event included David's wife and daughter along with many of his colleagues and former students. Special thanks go to Bob Goldman who hosted the event.

### **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. A list of past award winners can be found at <http://ww2.amstat.org/chapters/boston/awards.html>

## **Nan Laird Honored as ASA Chicago Chapter Statistician of the Year**

(Excerpt from AmStat News, January 2017, p. 34, with minor revisions)

Members of the ASA Chicago Chapter gathered for a gala dinner November 3, 2016, to celebrate the latest Statistician of the Year Award winner: Nan M. Laird of Harvard University.

The Statistician of the Year (SOY) Award has been bestowed upon leading members of the statistical community since 1966. Recipients are nominated by and voted on by previous winners, ensuring the elevated honor of the award. Laird delighted the audience with a talk recalling some of her favorite projects in biostatistics over the past four decades. Highlights included discussion of her seminal, often-cited paper, “Maximum Likelihood from Incomplete Data via the EM Algorithm” (with A. P. Dempster and D. B. Rubin), her research and committee work resulting in a ban on smoking on commercial airplanes, and papers on the impact of coaching on SAT performance. Following the talk, she answered questions such as, “How did you end up working on such impactful projects?” Her modest answer was, “I got lucky.”

Laird, now retired, is the Harvey V. Fineberg Research Professor of Biostatistics at Harvard University. She earned a BS in statistics from the University of Georgia and a PhD in statistics from Harvard. Her honors are too numerous to list, but they include being named an ASA Fellow, BCASA Mosteller Statistician of the Year, and Fellow of the American Advancement of Science and Institute of Mathematical Statistics. Her research interests include the development of statistical methodology in statistical genetics, longitudinal studies, missing or incomplete data, and analysis of multiple informant data. She has more than 300 publications to her credit.

Previous Chicago Chapter SOY winners include George E.P. Box, W. Edwards Deming, Andrew Gelman, William H. Kruskal, Janet Norwood, John W. Tukey, W. Allen Wallis, and Xiao-Li Meng.

## 2017 Lagakos Alumni Award

The Annual Lagakos Distinguished Alumni Award has been established in memory of Dr. Stephen Lagakos, a faculty member and former chair of the Department of Biostatistics who passed away in a tragic automobile accident in 2009. Professor Lagakos was a leader in the Department, the School of Public Health, and more broadly, in the international community of quantitative biomedical researchers. Steve's qualities of commitment, passion, intellectual brilliance, and personal generosity had a direct personal impact on our lives; and his contributions to biostatistics and to AIDS research were fundamental. This award serves to honor Steve's distinguished career, and to recognize Department alumni whose research in statistical theory and application, leadership in biomedical research, and commitment to teaching have had a major impact on the theory and practice of statistical science. The award will be open to all who have an earned degree through the department, regardless of length of time since graduation or type of degree. The award recipient will be invited to the school to deliver a lecture on their career and life beyond the Department.

Nominations are welcome for the next award, to be given in Fall 2017. Please send nominations via email or by mail to:

Lagakos Alumni Award Committee  
Harvard T. H. Chan School of Public Health  
Department of Biostatistics  
Building 2, 4th Floor  
655 Huntington Avenue  
Boston, MA 02115

Nominations should include contact information for yourself and your candidate, and the candidate's curriculum vita, if available. Please include a letter describing the contributions of the candidate, specifically highlighting the criteria for the award. Supporting letters and materials would be extremely helpful to the committee, but are not required. All nominations must be received by June 3, 2017.

## **Nominations for Chapter Officers**

Several BCASA officer terms are up for election this year for terms starting on January 1, 2018. These are Vice-President, Secretary, and Treasurer (two-year terms). 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 Past President James MacDougall ([jamesmacdougall@comcast.net](mailto:jamesmacdougall@comcast.net)) or President Greta Ljung ([greta.ljung@verizon.net](mailto:greta.ljung@verizon.net)). New volunteers are always welcome and greatly needed.

## **Mu Sigma Rho Membership Nominations**

Mu Sigma Rho is the national honorary society for statistics. Its purpose is to promote and encourage scholarly activity in statistics and the recognition of outstanding achievement among the students in eligible academic institutions.

The deadline of March 15, 2017 is approaching for you to nominate your outstanding statistics students for membership in Mu Sigma Rho this year.

Both undergraduate and graduate students can be nominated. Information about BCASA's chapter of Mu Sigma Rho is available at <http://ww2.amstat.org/chapters/boston/MuSigmaRho.html>. Instructions on how to nominate students can be found at <http://www.colby.edu/musigmarho/> or by contacting Liam O'Brien at [lobrien@colby.edu](mailto:lobrien@colby.edu).

Additional information about Mu Sigma Rho can be found at:  
<http://www.stat.sc.edu/msrnatl.html>.

## **Please Join the BCASA Planning Committee**

Chapter activities are planned and organized 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. The meetings are held in the evening and dinner is provided. For more information contact Chapter President Greta Ljung, [greta.ljung@verizon.net](mailto:greta.ljung@verizon.net).



## ***JOB OPPORTUNITIES***

### **Biostatistician Tufts Clinical and Translational Science Institute (CTSI)**

The Biostatistics, Epidemiology, and Research Design (BERD) Center in the Tufts CTSI is a critical resource supporting research teams by providing statistical collaboration, consulting, and mentoring services to the Tufts CTSI research community. The Statistician Associate I is responsible for conducting statistical analyses and performing data management for clinical research projects, in conjunction with BERD Center senior statisticians.

#### **Principal Duties and Responsibilities:**

Work with researchers and senior statisticians to provide statistical support for research projects, including study design, database construction, data management, and analysis. Ensure that databases comply with HIPAA regulations. Assist with preparation of grants and research protocols. Assist with preparation of manuscripts and presentations. Attend regular research meetings. Maintain and increase statistical skills through educational opportunities including seminars, lectures, courses, and reading of current literature.

#### **Job Knowledge and Skills:**

Knowledge of and experience with application of statistical methods for analysis of biomedical data and ability to learn and apply unfamiliar methodologies. Programming capabilities in SAS and R and ability to learn new statistical packages. Ability to work independently as well as in a collaborative, team-oriented environment. Excellent organizational skills and attention to detail. Excellent oral and written communication skills in English, particularly the ability to communicate technical information to non-technical colleagues. Ability to work on multiple projects in the same time frame, including both long-term and short-term projects. Ability to self-monitor progress on long-term projects and complete assigned tasks independently. Ability to change priorities quickly in response to deadlines.

**Education:** Master's degree in statistics or biostatistics, or related field required.

#### **Experience:**

Two to three years, preferably in a medical research environment is desired. Experience in managing statistical databases and analyzing biomedical data is required. Experience with SAS and R programming is required. Experience with Excel, REDCap and StudyTRAX is desirable.

Apply at

<https://jobs.tuftsmedicalcenter.org/job/boston/statistical-associate-i/1172/3350999>

and please contact contact Norma Terrin, PhD, Director of the Biostatistics, Epidemiology, and Research Design (BERD) Center, at [nterrin@tuftsmedicalcenter.org](mailto:nterrin@tuftsmedicalcenter.org)

Additional job opportunities may be found at the following websites:

- <http://www.amstat.org/ASA/Your-Career/JobWeb.aspx?hkey=bd026aba-1d60-4292-8364-8896ee6e0b9a> from the ASA
- <http://www.stat.ufl.edu/jobs/> from the University of Florida Department of Statistics

If a member wishes to have the BCASA publicize a job opportunity, please contact Yan Dong ([yad509@mail.harvard.edu](mailto:yad509@mail.harvard.edu)) for the BCASA newsletter, or Tom Lane ([Tom.Lane@mathworks.com](mailto:Tom.Lane@mathworks.com)) for BCASA email announcements.

## BCASA Treasurer's Report for 2016

	Items	Amount	Balance
<b>Beginning Balance</b>			<b>\$6,944.68</b>
<b>Income</b>	Membership dues and ASA rebates	\$3,712.00	
	Short courses and Events	\$2,614.71	
	Deposit from CD	\$8,000.00	
	Stimulus funding from ASA	\$,1000.00	
<b>Total income</b>		<b>\$15,326.71</b>	
<b>Expenses</b>	Short courses and Events	\$16,379.82	
	Planning Committee Meeting dinners	\$989.40	
	Misc. (gifts)	\$101.42	
<b>Total Expenses</b>		<b>\$17,470.64</b>	
<b>Net Gain/Loss</b>		<b>-\$2,143.93</b>	
<b>Ending balance</b>			<b>\$4,800.75</b>

**Bank details as of February 23, 2017:**

Bank account: \$5,928.22  
 CDs: \$15,188.95  
 Total: \$21,117.17

## **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 T. H. Chan School of Public Health  
Department of Biostatistics  
<http://www.hsph.harvard.edu/biostatistics/>  
<http://www.hsph.harvard.edu/biostatistics/seminars-events/>

Massachusetts Institute of Technology  
Institute of Data, Systems, and Science  
<http://idss.mit.edu/index.php/event/stochastics-and-statistics-seminar-series/>

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.*

<b>BCASA OFFICERS</b>	
President, 2017-18	Greta Ljung, Consultant
Program Chair, 2017-18	Fotios Kokkotos, Trinity Partners
Past President, 2017-18	James MacDougall, Consultant
Vice-President, 2016-17	Miriam Chernoff, Harvard T.H. Chan School of Public Health
Secretary, 2016-17	Eugenie Coakley, John Snow, Inc.
Treasurer, 2016-17	Lisa Mukherjee, Consultant
Council of Chapters Representative, 2016-2018	Mingfei Li, Bentley University
Webmaster, 2013-18	Ching-Ti Liu, Boston University
Newsletter Editor, 2016-18	Yan Dong, OPKO Diagnostics
<b>BCASA COMMITTEE CHAIRPERSON</b>	
<i>Education Committee</i>	Shannon Stock, Holy Cross
<i>Mu Sigma Rho</i>	Liam O'Brien, Colby College