BCASA NEWSLETTER

Boston Chapter of the American Statistical Association

Proudly serving

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

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Homepage: http://community.amstat.org/bostonchapter/home

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SCHEDULED EVENTS & MEETINGS		
January 16, 2018	Symposium at Harvard Institute of Applied Computational Sciences	Cambridge, MA
January 20, 2018	**BCASA Annual Winter Potluck Dinner and Party**	**Carlisle, MA**
February 21 2018	**Mosteller Statistician of the Year Awards Dinner and Lecture**	**Boston, MA**
March 5, 2018	Women in Data Science Symposium	Cambridge, MA
March 23, 2018	**Analytics Without Borders Conference**	**Waltham, MA**
April 13-14, 2018	2018 New England Statistics Symposium	Amherst, MA
April 27 2018	**Symposium in Honor of Herman Chernoff's 95th Birthday**	**Cambridge, MA**
May 4, 2018	**Second Annual Pharmaceutical Symposium**	**Cambridge, MA**
May, 2018, TBD	**BCASA Annual Meeting and Elections**	**TBD**

*Events in bolded letters are sponsored by BCASA

Event schedule at the Chapter website:
http://community.amstat.org/bostonchapter/home.

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.

PRESIDENT'S REPORT

Happy New Year! And welcome back!

It was my pleasure to serve as BCASA president in 2017. This was a very active year for the Chapter, with a series of well-attended events that included evening lectures, short courses, and social events. Our short courses on Statistics for Spatio-Temporal Data and Applied Longitudinal Analysis were organized by the ASA's Council of Chapters and brought to us under their Traveling Course Program. Also, a stimulus grant made available by the ASA to its chapters allowed us to offer other events below cost. We appreciate the support and thank all of you who participated.

During the past year the Chapter also undertook several significant projects that strengthened our operations. In early Spring, we updated our website by adopting ASA's "microsite" platform. The new site is convenient to update and allows easy access to a variety of ASA materials. Later in the spring, our Membership Committee headed by Miriam Chernoff designed a member survey to obtain feedback and suggestions about programs and to gain a better understanding of member needs. We thank everyone who responded. The feedback received will be useful for program planning, event publicity, and member outreach.

As usual, we will begin 2018 with a Winter Party and a Potluck Dinner. This event will be held on January 20 and will be hosted by Tom and Judy Lane in Carlisle. Details are provided below. This event will be followed by the Mosteller Statistician of the Year presentation and dinner on February 21 at the Harvard Medical School, a Statistics Symposium celebrating the 95th birthday of Herman Chernoff on April 27 at Harvard University, and a Pharmaceutical Symposium on May 4 at Takeda Pharmaceuticals in Cambridge. In May we will also have our annual meeting, which includes the elections of five new chapter officers for 2019. The open positions are listed on page 20 of this newsletter. We welcome nominations and self-nominations for all these positions!

The Boston Chapter is proud to serve five New England states: Massachusetts, Maine, New Hampshire, Vermont, and Rhode Island. The chapter is now 90 years old and, with close to 600 members, we are the second largest chapter within the ASA. We appreciate your membership and we are grateful to the many volunteers who help us serve the statistics community in our region. As the field continues to grow and new opportunities emerge, let's keep the momentum going.

Finally, I wish to thank all the BCASA Officers and Planning Committee members who have worked hard to make our current programs possible. I truly appreciate your time and support. If you have suggestions for future initiatives or if you are interested in volunteering for the Boston Chapter, please contact me at greta.ljung@verizon.net.

Sincerely,
Greta M. Ljung
BCASA President, 2017-18

UPCOMING EVENTS & MEETINGS

BCASA Annual Winter Potluck Dinner and Party

You are all invited to attend our Annual Winter Potluck Dinner and Party that will be held in Carlisle, MA on Saturday January 20. Come join in the fun!

Date: Saturday, January 20, 2018

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

Location: 128 Bingham Rd, Carlisle, MA. Google Map

Directions: This event is at the home of Judy and Tom Lane. The directions are as follows:

From the south (Route 2), go to Concord Center and take Lowell Road, which is to the left of the Colonial Inn. Follow the road five miles and take a left onto Bingham Road. From the north (Route 3 or Route 225), go to Carlisle Center and take Concord Road. Follow the road a little over a half mile and take a right onto Bingham. Go about a quarter mile to #128 on the right, and take the long driveway to the house.

This is a wonderful opportunity to meet new colleagues and catch up with old friends.

Registration: Please sign up for your potluck items by Tuesday January 16 at http://www.luckypotluck.com/potluck/BCASAJanuary2018WinterParty

Be sure to include your e-mail address so we can contact you in case of snow. Also, please check this website for possible cancellations.

What to bring: Please bring a favorite dish (appetizer, main dish, side dish, or dessert) to share along with serving dishes and serving utensils. Drinks, plates, and so forth will be provided.

Mosteller Statistician of the Year Banquet
Presentation: "Statistics and Health Policy"

Honoree: Sharon-Lise Normand
Professor of Health Care Policy (Biostatistics)

Date: Wednesday, February 21, 2018
Time: Social 6:00 pm, Dinner 6:30 pm, Presentation 7:15 pm
Location: Countway Library, 506 Minot Room, Harvard Medical School, 10 Shattuck St.
Directions: https://www.countway.harvard.edu/about/directions
Registration: https://bcasa2018feb.eventbrite.com no later than February 16, 2018
Cost: Dinner $30 for Chapter members; $35 for non-members; students $10; Presentation free

Abstract:

Health Policy research involves understanding who gets access to health care, how much health care costs, and what are the consequences of the care (or lack of care) delivered. In the majority of cases, researchers rely upon observational data for these answers. In this talk, I will discuss 2 seemingly new problems associated with long histories of statistical debate. The first involves the U.S. Hospital Readmissions Reduction Program that took effect in October 2012 with a goal of reducing Medicare payments to hospitals having excess readmission rates. The statistical problem is to infer whether a hospital has excess readmission risk and uses this as a basis for payment policies. The second problem concerns the determination of the long-term health and economic burden to public healthcare payers associated with excess metabolic risk caused by second generation antipsychotic (SGA) drugs utilized by their enrollees. The statistical problem requires inferring effects caused by SGAs delivered in the absence of randomization and uses the inference to identify utilization management tools or other policy levers to improve care.

Speaker Biography:

Sharon-Lise Normand, Ph.D., is Professor of Health Care Policy (Biostatistics) in the Department of Health Care Policy at Harvard Medical School and Professor in the Department of Biostatistics at Harvard School of Public Health. Her research focuses on the development of statistical methods for health services and outcomes research, including the evaluation of medical devices, causal inference, provider profiling, evidence synthesis, item response theory, and latent variables analyses. Her application areas include cardiovascular disease, severe mental illness, medical device safety and effectiveness, and medical technology diffusion. Dr. Normand earned her Ph.D. in Biostatistics, M.Sc. and B.Sc. in Statistics, and completed a post-doctoral fellowship in Health Care Policy. In 2011, Dr. Normand was awarded the ASA Health Policy Statistics Section's Long Term Excellence Award; in 2012, the American Heart Association's Distinguished Scientist Award; in 2013, elected to the Society for Research Synthesis Methodology; in 2015, awarded the L. Adrienne Cupples' Award for Excellence in Teaching, Research, and Service in Biostatistics from Boston University; and in 2017 was awarded the American Heart Association Council on Quality of Care and Outcomes Research Outstanding Lifetime Achievement Award.

Symposium to Celebrate the 95th Birthday of Herman Chernoff to be Held on Friday April 27

Our dear friend and colleague Herman Chernoff turns 95 years old on July 1 of this year. Herman has been at regular attendee at Chapter events and served as Co-Chair of our Program Committee over a period of time. His influence as a researcher and teacher extends to areas such as design and sequential analysis, optimization and control, nonparametric methods, large sample theory, and statistical graphics. To celebrate his 95th birthday and acknowledge his many professional contributions, a symposium will be held in his honor at Harvard University on Friday April 27. The symposium will be co-sponsored by the Harvard Statistics Department, the Boston Chapter of the ASA, and the newly formed New England Statistics Society (NESS), which originates from the New England Statistical Symposium championed by Professor Chernoff in 1987. The program will include presentations by former students, colleagues, and friends of Herman.

Please mark your calendars for this important and exciting event!

Second Annual Boston Pharmaceutical Symposium to be Held on May 4

In May of 2017, the Boston Chapter organized a one-day workshop on the "Design and Monitoring of Adaptive Clinical Trials". The workshop was given by Cyrus Mehta and his team at Cytel Inc. and held at Takeda Pharmaceuticals in Cambridge. The workshop gave an overview of recent developments and best practices in clinical trials and included hands-on training for East, the industry standard clinical trial design software tool. The event was also a great opportunity to network with industry colleagues.

Building on the success of the 2017 event, the Boston Chapter will hold its second annual pharmaceutical symposium in Cambridge on Friday May 4, 2018. This will be a full-day event hosted by Takeda Pharmaceuticals. Details of the program are still being developed and will be posted along with registration information as they become available.

OTHER LOCAL AND REGIONAL EVENTS

Symposium at Harvard's Institute for Applied Computational Science (IACS) to be Held on January 16

Title: "Digital Doctor: Health Care in an Age of AI and Big Data"
Date: Tuesday, January 16, 2018, 9:00 a.m.
Location: Harvard University, Science Ctr. Hall B, 1 Oxford Street, Cambridge

Medicine and health care, like other aspects of life in the 21st century, are being reshaped by computational science, big data, and information technology. Given gigabytes of personal genomic data, therapies can be tailored to the individual patient and the individual disease. Standardized electronic health records create an information resource that improves decision making in the doctor's office and also sheds light on health status across entire populations. Machine learning and artificial intelligence may soon augment the physician's diagnostic skills. As these innovations promise to improve health and prolong lives, however, they also raise sticky economic and ethical questions. Many new medical interventions come at a fabulous price; can we assure equitable access to them? How do we preserve privacy and personal dignity when the "healing arts" become a high-tech enterprise?

Join experts from academia and industry for an all-day symposium at Harvard's Institute for Applied Computational Science for an in-depth look at how advances in technology are impacting human health services.

This event is free and open to the public. Registration information can be found at
https://iacs.seas.harvard.edu/event/computation-service-human-health-symposium-future-computation-science-and-engineering

Women in Data Science (WiDS) Symposium to be Held on March 5 in Cambridge, MA

Date: Monday, March 5, 2018 (All day)
Location: Microsoft New England R&D (NERD) Center, 1 Memorial Drive #1, Cambridge

For the second year, Harvard, MIT, and Microsoft Research New England will partner with Stanford University to bring the Women in Data Science (WiDS) conference to Cambridge, Massachusetts.

This one-day technical conference will bring together local academic leaders, industrial professionals and students to hear about the latest data science-related research in a number of domains, to learn how leading-edge companies are leveraging data science for success, and to connect with potential mentors, collaborators, and others in the field.

The program will include technical talks, a student poster session, recruiting opportunities for attendees interested in data science job opportunities and several networking breaks throughout the day. All genders are invited to attend the conference, which will feature exclusively female speakers. The event is free and open to the public. Registration is required and will open in January 2018.
For further details, as they become available, please see https://idss.mit.edu/calendar/women-in-data-science-wids-cambridge-ma/

The 3rd Analytics Without Borders Conference to be Held at Bentley University on March 23

Location: Bentley University, Waltham on Mar 23rd (Friday), 2018

You are invited to submit your presentation to the 3rd Analytics Without Borders conference. This conference is a forum for researchers and practitioners from different areas of analytics to present and discuss analytics work, be it from corporate institutions, academia, government organizations etc. All groups will be able to interact and thus build bridges between the different areas of specialization.

Topics are broad and will include applied statistics, optimization, data science, etc. Anyone who does anything with data is invited to present their work. Sessions will include a blend of contributions by corporate, academic and government researchers and practitioners.

Submission due day is **Mar 1st, 2018.** Please visit our online submission page: https://www.bentley.edu/analytics-without-borders/call-presentations-and-posters

Please visit our conference website for more details. http://www.bentley.edu/analytics-without-borders

New England Statistics Symposium (NESS) to be held April 13-14

The 32nd New England Statistics Symposium will be held on April 13–14, 2018 at the University of Massachusetts in Amherst

The symposium will be hosted by the Department of Mathematics & Statistics and the Department of Biostatistics & Epidemiology, University of Massachusetts

- **Dates:** Friday, April 13 – Saturday, April 14

- **Location:** University of Massachusetts, Amherst

- **Contact:**

  o Nicholas G. Reich, nick@schoolph.umass.edu

  o Anna Liu, anna@math.umass.edu

The New England Statistics Symposium is an annual conference that moves throughout the region. In odd-years the conference is held at the University of Connecticut. Short courses, break-out groups, poster sessions and keynote addresses are spread over two days. In recent years there has been a student paper competition and various other sponsored awards. For information about past symposiums, please check https://nestat.org/history/symposium/. More details regarding the 2018 symposium will be posted soon.

UPCOMING NATIONAL CONFERENCES

2018 Symposium on Data Science and Statistics
Beyond Big Data: Leading the Way

The 2018 Symposium on Data Science and Statistics (SDSS) will be held on May 16-18 in Reston, VA. The symposium will honor Ed Wegman, who has done seminal work in many areas within the interface of statistics and computing science—as well as data visualization—and has been a driving force in creating the SDSS and its predecessors.

SDSS is a continuation of the Symposium on the Interface of Computing Science and Statistics ("The Interface"). In 1967, a partnership between the Southern California Chapter of the American Statistical Association (ASA) and the Association for Computing Machinery (ACM) culminated in the first of 45 Interface symposia.

The previous symposia brought together computer scientists, statisticians, and mathematicians in addition to both established leaders and rising stars in transdisciplinary research. Illustrious keynote speakers have included Grace Wahba, John Tukey, John Nash, Sir David Cox, Bradley Efron, and Bill Cleveland, while the rich history and quality of the symposia are in large part due to the contributions of past program chairs such as Lynne Billard, David Scott, and Ed Wegman.

The new annual SDSS combines data science and statistical machine learning with the Interface Foundation of North America's (IFNA's) historical strengths in computational statistics, computing science, and data visualization. It stands on the shoulders of the above–mentioned giants and many others, and will continue the tradition of excellence by providing an opportunity for researchers and practitioners to share knowledge and establish new collaborations. SDSS is a partnership of the IFNA and ASA. IFNA is responsible for the program, and the ASA is responsible for operations.

Ed Wegman was a driving force behind early Interface symposia, spearheaded efforts to establish IFNA in 1987—which assumed responsibility for planning the symposia and publishing the proceedings—and drove the new partnership and expansion.

For further information about the 2018 conference, please see
http://ww2.amstat.org/meetings/sdss/2018/.

2018 Joint Statistical Meetings to be Held in Vancouver, Canada, July 28 – August 2

It is now time to start preparing for JSM 2018. This year's meetings will be held in Vancouver, British Columbia, Canada, from July 28 – August 2, 2018. The theme for this year is Lead With Statistics.

The JSM program consists of invited, topic-contributed, and contributed sessions; introductory overview lectures; late-breaking sessions; poster presentations; roundtable discussions; and professional development courses and workshops.

Invited session and professional development course and workshop proposals for 2018 are being accepted now. Refer to the 2018 proposal instructions to guide you. Abstract for the following presentation types are also being accepted:

- Contributed and topic-contributed papers
- Contributed and topic-contributed posters
- Topic-contributed panel sessions
- Speed presentations

The deadline for these is February 1, 2018. Not sure where you'll fit? More information about the different presentation types can be found on the JSM 2018 website at http://ww2.amstat.org/meetings/jsm/2018/beontheprogram.cfm

HIGHLIGHTS FROM SOME RECENT CHAPTER EVENTS

December 5 Awards Event at Harvard Honors Joe Blitzstein

Dr. Joe Blitzstein of Harvard University was this year's recipient of BCASA's Outstanding Undergraduate Teaching of Statistics Award. The award was given to Joe at a dinner held in his honor on December 5 at Harvard University. At the event, Dr. Blitzstein's gave a presentation entitled "Storytelling in Statistics", where he demonstrated how probability and statistics can be made interesting and relevant to students through the use of stories and real-life examples.

Joe is Professor of the Practice in Statistics at Harvard University, where has taught since completing his Ph.D. in Mathematics, with an M.S. in Statistics, at Stanford University in 2006. At Harvard, Joe's passion for statistics and his unique teaching style have popularized statistics among the undergraduates. Professor Xiao-Li Meng, who introduced Joe at the event, noted that since Blitzstein joined the Statistics Department, the introductory probability course, Statistics 110, that he teaches has seen a nearly six-fold increase in enrollment. In addition, the number of undergraduate concentrators in the Statistics Department, where Blitzstein serves as co-director of undergraduate studies, has increased every year since 2008. Much of the new excitement for the field at Harvard is due to Blitzstein's personal commitment to teaching and his exceptional ability to engage the students.

Xiao-Li noted that what makes Blitzstein's teaching so unique are the real-life examples he uses to introduce complex statistical concepts. Rather than just putting formulas on the board, Joe is very good at telling stories which can reveal something very interesting about the material.

Joe has made many other contributions to the statistics program at Harvard. For example, a few years ago, Joe also launched Harvard's first course in data science working with Hanspeter Pfister from the Computer Science department at Harvard. A discussion of this program can be found in the December 2017 issue of the *Amstat News*.

Congratulations to Joe!

Fall Social and Mini-Conference Held on November 4 at the University of New Hampshire

Saturday November 4 was a clear and sunny day with beautiful fall colors still lingering. It was a perfect day to drive up north and attend BCASA's Fall Social and Mini-Conference at the University of New Hampshire in the quaint town of Durham.

The event was co-sponsored by the Boston Chapter and Department of Mathematics & Statistics at UNH and organized locally by UNH Professor Ernst Linder. The event provided an opportunity to meet old and new friends, to get to know fellow statisticians in this region of our chapter, to learn about their latest research, and last, but not least, to visit this Northern coastal region and celebrate the season.

Professor Linder from UNH had put together an excellent program which highlighted some of the work done by statisticians in this area. The presentations were:

- **Tevfik Aktekin,** University of New Hampshire
  Bayesian analysis of a general class of dynamic multivariate non-Gaussian family of models
- **Ernst Linder**, University of New Hampshire
  Statistical downscaling of climate model output in the context of stochastic weather generators
- **Philip Ramsey**, University of New Hampshire
  Potential use of weighted Bootstrapping to simulate validation error in small scale experiments where the goal is prediction
- **Mia Stephens**, JMP
  Text Mining with JMP Pro 13: A Case Study
- **Beth Ziniti**, Applied Geosolutions.
  Spatial and temporal variability of water quality estimated via remote sensing with case study investigation of cyanobacteria and its relationship to Lou Gehrig's disease in Northern New England

The program ended with a raffle of books and other statistical goodies.

The attendees included faculty and students from Worchester Polytechnic Institute, University of New Hampshire, Dartmouth College, Boston University, and Bentley University, along with other members of the local statistics community and the Boston Chapter.

The Chapter wants to thank Professor Linder and his UNH colleagues for the opportunity to visit the UNH campus and attend this excellent event. We wish them a happy and productive 2018 and we look forward to seeing them again soon.

NEISM22 Held on November 4 at Stonehill College

For the 22nd consecutive year, statistics educators came together for the annual New England Isolated Statisticians Meeting (NEISM22), which was held at Stonehill College on November 4. In all, 38 statisticians from 2- and 4-year schools across New England participated. This year's meeting was also attended by ASA's first K-12 Ambassador, Christine Franklin. Christine is a nationally recognized leader in K-12 statistics education and her ASA role is to provide leadership in the creation and presentation of professional development material for teacher educators and teachers.

Christine led an interactive morning session on the current state of pre-collegiate curricula and practices, and shared her vision for the future, both in terms of what will happen before college and then how collegiate programs and courses will evolve.

A second morning session focused on pedagogical and technological tools that impact the way statistics is taught in the classroom. The discussion included the use of group projects, group presentations, computer-based and manual simulation games, case studies, virtual and online classrooms, flipped classroom, lecture capture technology, and the use of on-line resources.

Over lunch, Bob Goldman led a discussion about incorporating ethics into our statistics courses. The session provided the attendees with some excellent source material and solicited suggestions about effective approaches to the sometimes-sensitive or overlooked subject.

In the afternoon, Mike Sale of Stonehill spoke about ways to include computer science concepts and techniques in the statistics curriculum. As fundamental statistical techniques are increasingly taught at the K-12 level, computing should occupy a more prominent role. Many schools have computer science faculty and facilities that statistics educators should consult and make use of.

The final session for the day was led by Amelia McCormack and Ben Baumer of Smith College and covered the use of visualization in statistics education. Dynamic visualizations that go beyond static histograms and scatterplots can engage students in interactive data exploration and discovery, and encourage them to think about data and problem solving in creative ways.

For additional information about this meeting or plans for next year, please contact any of this year's organizers:

Rob Carver, rcarver@stonehill.edu
Bob Goldman, robert.goldman@simmons.edu
John McKenzie, mckenzie@babson.edu
Michael Salé, msale@stonehill.edu

Group discussion during NEISM22

OTHER NEWS AND ANNOUNCEMENTS

Nicholas Horton Named Fellow of the AAAS

Nicholas Horton, professor of statistics, has been named a fellow of the prestigious American Association for the Advancement of Science (AAAS). Horton was elected by his peers in recognition of his "distinguished research contributions to statistical and data sciences, creativity in statistics education and professional service developing curriculum guidelines for statistical education and computing," according to the AAAS.

Horton and only 395 other scientists won fellowships, which acknowledge "scientifically or socially distinguished efforts to advance science or its applications." Of those new members, all but four represent major universities and world-renowned nonprofits, such as Harvard University, Georgia Institute of Technology, Oakridge National Laboratory and the Howard Hughes Medical Institute. Horton and colleagues from Kenyon, Hope and Franklin and Marshall colleges are the only fellows this year who are professors at liberal arts institutions.

Horton and his fellow honorees will be acknowledged during a ceremony at the 2018 AAAS meeting in February.

"Statistics and data science make up an increasingly important part of the scientific enterprise," Horton said. "My own work as a biostatistician involves the development and dissemination of new statistical methods that can help research teams extract meaning from data. Being recognized is important as it demonstrates the key role that statisticians play in this process.

Founded in 1848, the AAAS is the world's largest general—and arguably most prestigious—scientific society. It fulfills its mission to "advance science and serve society" through initiatives in policy, international programs, education, public engagement and more. It includes nearly 250 affiliated societies and academies of science, and publishes several highly regarded journals, including *Science*, a leading peer-reviewed academic journal. The tradition of awarding AAAS Fellowships began in 1874.

"I'm delighted that Nick Horton has been named an AAAS fellow," said Catherine Epstein, dean of the faculty at Amherst. "This is a rare honor, but it's hardly surprising. Nick is nationally known for both his statistical contributions and his work as a statistics educator. The incredible energy that he brings to his students, his field, and to Amherst College is truly inspiring. We are extraordinarily lucky to have Nick at the College."

The AAAS fellowship is not the only high-profile commendation Horton has accepted in recent months. In August, he received a Founders Award, the highest honor of the American Statistical Association (ASA). Two months earlier he won the Harvard School of Public Health's Lagakos Distinguished Alumni Award, which recognized his leadership and service to his profession. Last

December, he was appointed to the National Academies of Sciences Committee on Applied and Theoretical Statistics; he is the only representative of a liberal arts college on the committee.

Accolades notwithstanding, working with young minds excites Horton the most.

"As a teacher-scholar at Amherst, I have the privilege to work with our students to discover their intellectual and creative passions while helping them develop the ability to 'think with data,'" he said. "The mission of a liberal arts college like Amherst is to help to develop the capacity of our students to be prepared to enter the world and solve complex problems. What could be more of a liberal art than learning how to make sense of the data that increasingly dominates our society?"

As an applied biostatistician, Horton's work is by definition—and in practice—highly interdisciplinary. His research focuses on developing approaches to model complex relationships, analyze longitudinal (long-term) studies and account for missing data. He recently completed a fellowship through the ASA/National Science Foundation/Bureau of Labor Statistics program, where he led a project to methods to "fill-in" missing values in principled ways for the Occupational Employment Survey. He also conducted an important study with collaborators from other institutions that found that depression remains strongly linked to a higher risk of death, and that risk has increased significantly for women in particular in recent years.

Throughout his career, Horton has taught a variety of courses in statistics and data science, including regression and design, foundations of statistics and advanced data analysis. His biggest passions, he said, are improving quantitative and computational literacy for students with a variety of backgrounds as well as engagement and mastery of higher-level concepts and capacities to undertake research.

Horton earned his bachelor's degree from Harvard College and his doctor of science in biostatistics from the Harvard School of Public Health. Has taught at Smith College and the Boston University School of Public Health, among other institutions. He joined the faculty of Amherst College in 2013.

VIP Consultants and Judges Needed for the 2018 ASA Five College DataFest at UMass Amherst, March 23-25

DataFest is a nationally-coordinated undergraduate competition in which teams of up to 5 students work over a weekend to extract insight from a rich and complex data set. The mission of DataFest is to expose undergraduate students to challenging questions with immediate real-world significance that can be addressed through data analysis. By working in teams, students with varying skill sets will combine their efforts and expand their collective data analysis horizons. Interaction among students, as well as with outside consultants will promote the sense that data analysis is a dynamic, engaging, and vibrant part of our society, as well as a realistic, practical, and fun career path. Last year's DataFest held at Smith College attracted about 160 students.

DataFest was founded at UCLA in 2011, when 30 students gathered for 48 intense hours to analyze five years of arrest records provided by Lt. Thomas Zak of the Los Angeles Police Department. The 2013 data consisted of several million potential romantic pairings provided by e-Harmony. Students were asked to find qualities that predict or characterize successful matches. Last year's data was from Expedia and allowed students to show off their data wrangling, visualization, and modeling skills. The data for this will be revealed when the event begins.

At the conclusion of the competition, each team will have 6 minutes to make a presentation to our panel of judges. In addition to a "Best in Show" prize, we will give a prize for best visualization and also for best use of external data. This year's DataFest -- now under sponsorship from the ASA -- will coincide with analogous events taking place at UCLA and Duke University (among others) bringing the flair of a national competition to the event, and pitting Five College students against their counterparts at elite research universities. Students from the Five Colleges (Amherst, Hampshire, Mount Holyoke, and Smith Colleges, as well as the University of Massachusetts-Amherst) will have an opportunity to compete.

Critical to the success of DataFest are VIP Consultants -- statisticians, data scientists, quantitative analysts, and other data professionals who visit to chat and give advice to the students. These visitors wander the room and offer advice and encouragement to the teams. The students find these experiences highly enriching, and the consultants find the encounters to be quite fun. In the past, many consultants have made a commitment to stay for one or two hours, but then stayed much longer because they were having such a good time. Consultants have also found this to be a very useful recruiting tool. Members of the BCASA or their colleagues would make terrific consultants and are strongly encouraged to consider attending. Please contact Ben Baumer (bbaumer@smith.edu) or Amelia McNamara (amcnamara@smith.edu) if you would like to be a consultant.

Further information about DataFest can be found at
http://www.science.smith.edu/datafest/

StatFest 2018 Call for Institutional Liaisons

Amherst College will be hosting StatFest 2018 on Saturday, September 22, 2018. StatFest is a one-day event aimed at encouraging undergraduate students from under-represented groups to consider graduate studies and careers in the statistical sciences. Ensuring that the statistics profession reflects the diversity of our society is one of the strategic planning goals of the American Statistical Association.

StatFest includes keynote addresses from noted statisticians that motivate how statistics and data science are being used to extract meaning from data. The program also includes interactive panels on statistics careers in industry, government, and academia, along a discussion for students on the graduate student experience (facilitated by graduate students who provide unvarnished and helpful advice). Undergraduates can present posters on quantitative or computational research projects or related work. Multiple opportunities are built into the program to allow participants to meet each other, mingle, interact, and network.

The free conference is an ongoing initiative of the American Statistical Association through its Committee on Minorities in Statistics.

At this point in time the organizing committee is looking to identify institutional liaisons at colleges and university in the New England and Mid-Atlantic regions who would help to register and bring students from their institution.

Can you please fill out the short survey at https://goo.gl/forms/LamUKFuhtHHfbuPR2 (or http://tinyurl.com/statfestcontact) with your contact information?

For more information please contact StatFest 2018 organizing committee chair Nicholas Horton (nhorton@amherst.edu)

WHAT'S GOING ON IN THIS GRAPH?:

A new feature by the New York Times and the ASA

By Sharon Hessney

Q: What is one of the more efficient ways to display data?
A: A graph

Q: Who makes some of the best graphs in journalism?
A: New York Times

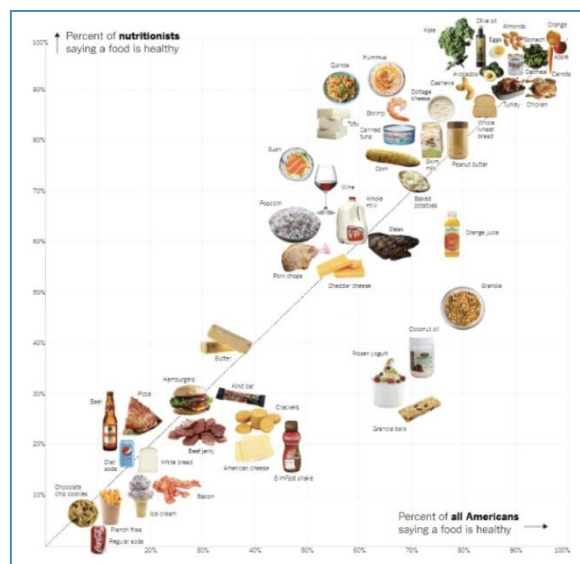Q: What feature in the *New York Times* is so difficult for readers to understand?
A: Their extraordinary graphs

Q: Who is best prepared to explain these extraordinary graphs?
A: American Statistical Association members

Q: How does this happen?
A: Through *What's Going On In This Graph? (WGOITGraph?),* which is a free monthly, online New York Times feature developed in partnership between the *New York Times* and the ASA.

Click on graph for larger version

Since Amanda Cox joined the *New York Times* in 2005 as Graphics Editor and now as The Upshot's editor, the *New York Times* has frequently produced excellent data displays (graphs, flow charts, maps, and plenty of other representations) that explain a story. Whether it's their annual, data-rich weather graphs, the Supreme Court voting block table, or its recent "Is Sushi Healthy?" scatter plot (above), the visual representations have provided insightful additions to the understanding the story. At the same time, it has become important to help the readers understand graphical displays. "Guided practice" with statistics teachers is the way to teach how to "read" graphs, but where can readers get this? *What's Going On In This Graph? (WGOITGraph?)* is a useful tool.

WGOITGraph? can be a class starter, taking 10 -15 minutes. Project the graph on a screen or hand out printed copies. Have students work in pairs or discuss as a class. Respond online or write out answers. Read the Reveal to see the graph's article, sample responses, additional questions, and explanations of key statistical terms.

Fifteen years ago, the *New York Times* started the Learning Network, a free, online feature that provides materials to help teachers use the newspaper in their classrooms. Two former humanities teachers– Katherine Schulten and Michael Gonchar, have lead the charge by offering teachers writing prompts, news quizzes, contests, and much more. However, much of the content has been English language arts and history rather than quantitative reporting.

Steve Pierson, ASA Director of Science Policy, and Rebecca Nichols, ASA Director of Education, were approached and offered to assist the *New York Times* Learning Network in addressing the need. The contributors include ASA member Sharon Hessney, a Boston Advance Placement Statistics teacher, who selects the graphs, writes the releases, and coordinates the online moderators. ASA volunteer moderators have included Corey Andreasen (WI and Qatar), Jared Derksen (CA),

WHO   Grades 7 - 12 math, English, and social studies students

WHAT   A <u>free</u>, <u>online</u> feature of the New York Times, in partnership with the American Statistical Association

WHEN   Second Tuesday of each month during the school year <u>and</u> in the archives thereafter

WHY   Using timely New York Times graphs that are compelling to students, learn how to critically think and write about all kinds of graphs

HOW   A class starter, which can take 10 - 15 minutes.

Students answer the questions:

What do you notice? What do you wonder? What's the story this graph is telling?

On release Tuesdays, moderators respond in real time to students entries.

On Fridays, moderators reveal the graph and its article, summarize the responses with shout-outs, ask additional questions, and give three Stat Nuggets -- definitions of statistical terms and where they are seen in the graph.

Erica Chauvet (PA), and Paul Buckley (DC). Senior editors are Roxy Peck (ASA Fellow and professor emerita of Statistics at California Polytechnic State University) and Christine Franklin (ASA K-12 Statistical Educator Ambassador and professor emerita of University of Georgia).

Monthly at 9 am on Tuesday, *WGOITGraph?* presents a *New York Times* graph. From 9 am – 2 pm, a team of ASA teachers moderates the live discussion of student responses focused on the questions:

- What do you wonder?
- What's going on in this graph?

Many teachers recognize the first two questions. They are the Math Forum/NCTM's Noticing and Wondering strategy. To learn more about how to use this strategy, go to Annie Fetter's [video](#) and our [two-page explanation](#).

On the Friday following the release, the *New York Times* Learning Network publishes a Reveal - a follow-up which includes the original article, summary of student responses, additional questions that students may want to answer, and Stat Nuggets. These Stat Nuggets inform the teachers, who are usually *not* statistics teachers and may not even be math teachers, the definition of statistical terms and how they are represented in that month's graph.

All *WGOITGraph?* pieces are archived to use at any time on the [*New York Times* Learning Network site](#). Already in the archives are scatter plots, time series, and choropleths (colored maps) on climate change, nutrition, jobs, and e-commerce. Other topics that will probably be featured this school year are on gun violence, the DACA Dreamers, and fiction writing.

The target audience is middle and high school math, science, and humanities students, but all are encouraged to participate. The feature has already been showcased on a [Data Stories podcast](#). A podcast on PolicyViz is planned for next month. (You can see an excellent PolicyViz [podcast by the New York Times' Amanda Cox](#).) The ASA has been spreading the word about this series, but we encourage all of you to do the same.

BOSTON CHAPTER ANNOUNCEMENTS

Upcoming Chapter Elections

In May 2018, we will be electing five new chapter officers. These officers are: President, Program Chair, Newsletter Editor, Webmaster, and Council of Chapters Representative. The first four positions are for two-year terms starting in January 1, 2019. The Council of Chapters Representative is for a three-year term starting at the same time. We welcome nominations. For more information on officer responsibilities please see http://community.amstat.org/bostonchapter/aboutus/officers.
Below is a brief summary of the responsibilities:

- President - Oversees chapter activities; works to ensure an active program of lectures, short courses and other events; handles committee appointments; serves as chief spokesperson for the chapter

- Program Chair - Chairs the Program Committee; suggests meeting topics and develops the event schedule with input from the President and Planning Committee; coordinates volunteers to organize each event; prepares event information for publicity

- Newsletter editor - Chairs Newsletter Committee; ensures publication in a timely manner; solicits and sends reminders for contributions; does the final editing of the newsletter

- Webmaster - Maintains and updates the BCASA web site

- Council of Chapter Representative – Serves as the communications link between the Chapter, the Council of Chapters and ASA as a whole. Completes and returns the annual chapter report to the Council of Chapters

If you are interested in volunteering for one of these positions, please contact Miriam Chernoff (mchernoff@sdac.harvard.edu), Greta Ljung (greta.ljung@verizon.net), or any of our other officers. Also, please let us know if you wish to nominate someone else for one of these positions. The success of our chapter depends on volunteers and your help is much needed. So please consider running for one of these positions.

Nominations for the 2017-18 Outstanding Undergraduate Statistics Teaching Award

The criteria for the award are intentionally few and non-specific. The aim is to ultimately acknowledge as wide a variety of statistics education accomplishments as possible. For instance, the winner may have published widely on statistical pedagogy; may have created an exemplary undergraduate program in statistics; may have inspired several generations of undergraduates to pursue careers in statistics, and so on.

The awardee will:

- Be a faculty member at a two-year or-four-year college or university in MA, RI, NH, VT, or ME whose primary responsibility is teaching statistics to undergraduates. Those on approved leave during the academic year in which they are nominated qualify if they fulfilled the requirement the previous year.
- Hold membership in the ASA and the BCASA
- Have more than three years of experience in teaching statistics

Further, winners of the BCASA's Mosteller Award will <u>not</u> be eligible for this teaching award. Nominees unsuccessful in one year will be reconsidered automatically the following year.

For more information about the award contact Professor Shannon Stock at sstock@holycross.edu. Nominations forms may be found on the BCASA website at http://community.amstat.org/bostonchapter/awards/teachingaward.

The deadline for nominations for the 2017-18 award is February 15, 2018.

Mu Sigma Rho Membership Nominations Sought

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

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. The deadline for completing the nominations is March 1, so please act now!

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

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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. The meetings are held in the evening and dinner is provided. For more information contact Chapter President Greta Ljung, greta.ljung@verizon.net.

Benefits of BCASA Membership

Membership in the Boston Chapter of the ASA has many benefits including the following:

- Receive notification of our quarterly newsletter and upcoming chapter events
- Meet new colleagues and network with others in the field
- Participate in chapter sponsored events at discounted member rates
- Continue your statistical education and advance your career
- Support and enrich the local statistics community
- Support ASA's grassroots efforts and help develop the next generation of statisticians

Unless already a member, please consider joining now. You can join the Boston Chapter when you join the American Statistical Association (ASA) or renew your ASA membership. ASA members who wish to join the Boston Chapter at other times should complete the printed application form available at http://community.amstat.org/bostonchapter/joinbcasa and send it directly to the ASA.

You can also be a member of the Boston Chapter without being an ASA member. To join the Boston Chapter without joining the ASA, write a check for $10 ($4 for students) made payable to BCASA, and send it directly to our Treasurer at:

> Boston Chapter of ASA
> c/o Lisa Mukherjee
> PO BOX 200766
> Boston, MA 02120

Provide your name, address, and email address. Members receive an electronic subscription to the chapter newsletter and an opportunity to join our e-mail list for other announcements. A membership application form is available at http://community.amstat.org/bostonchapter/joinbcasa.

JOB OPPORTUNITIES

Note: Job opportunities sent to Yan Dong, BCASA Newsletter Editor at yad509@mail.harvard.edu will be included in a future BCASA newsletter. Please email your job posts in a Word attachment with "BCASA newsletter job post" in the subject line.

Postdoctoral Fellowship or Research Scientist Position in Biostatistics
Geisel School of Medicine at Dartmouth

A postdoctoral fellow or research scientist is sought to conduct innovative research to implement estimation of complex statistical models in challenging situations. The two-year position is funded by a five-year grant from the Agency for Health Care Research and Quality that supports methodological and applied research. The successful candidate will be appointed in The Dartmouth Institute for Health Policy and Clinical Practice and will work under the mentorship of Dr. James O'Malley and collaborate with experts in a variety of fields including Medicine, Health Policy, Medical Sociology, and Health Economics.

Applicants should have a doctoral degree in biostatistics, statistics or a related field and be interested in performing innovative statistical research to allow cutting-edge solutions to be obtained to important applied problems. Areas of particular relevance include hierarchical/multi-level modeling, complex survey design, and social network analysis. A background in one of these areas would be helpful but not imperative.

Submissions should include a letter of intent, curriculum vitae, and names and contact information for three references. Review of applications will commence immediately and will continue until the position is filled.

Applicant materials should be e-mailed or mailed to:
      Attention: Joel R. King (Post-doctoral fellowship search)
      The Dartmouth Institute for Health Policy and Clinical Practice
      Geisel School of Medicine at Dartmouth
      Level 5, Williamson Translation Science Building
      1 Medical Center Drive, Lebanon NH 03756, USA
      Email: Joel.R.King@Dartmouth.edu

Please contact James O'Malley at James.OMalley@Dartmouth.edu with questions about the position.

Salary Range: Competitive; **Benefits:** Excellent

Founded in 1797, the Geisel School of Medicine at Dartmouth draws on the resources of Dartmouth College and Dartmouth-Hitchcock Medical Center for broad interdisciplinary programs in biomedical research, education, patient care and service. Located in rural New Hampshire, the region uniquely offers idyllic landscapes and recreation, along with outstanding schools and cultural activities. The Dartmouth Institute is world renowned for its research in the variation of health care utilization and outcomes. For more information on the Dartmouth Institute for Health Policy and Clinical Practice: http://tdi.dartmouth.edu/

Programmer at PointRight

PointRight is the industry leader in providing data-driven analytics and decision support services to healthcare organizations. We offer web-based analytic services that help skilled nursing facilities improve their compliance, financial, clinical, and risk management goals. For more than 20 years, PointRight has helped the long-term care industry make confident decisions. PointRight collaborates with a broad range of companies in healthcare, insurance, and payer groups.

We are seeking a SAS Programmer to work with the PointRight Analytics Team. The job will entail heavy data management/manipulation, extraction of large data sets from multiple data sources and analysis of the data output. The incumbents will work closely with the Analytics Team to generate and analyze reports.

Duties and Responsibilities include, but are not limited to, the following:
– Providing users with SAS/R education and generalized programming support
– Ensuring the proper collection, management, and storage of data
– Designing, developing, validating, and programing databases, complex data validation checks, custom reporting systems, and statistical tables to ensure data quality and integrity
– Expanding or modifying existing programs for efficiency and reusability
– Designing, validating, and generating data reports, listings, and graphs
– Utilizing SAS/R, and other software, to provide ad hoc reporting, tables and listings and graphs
– Understanding and following SOP's and contributing to the development and implementation of Good Programming Practices and procedures
– Accurately documenting programs adhering to the company's SOPs
– Reviewing/developing project materials, including data operation guidelines, reports, etc.
– Keeping current with programming developments and SAS/R technical reports as well as relevant healthcare topics and issues
– Researching new technologies
– Communicating in an accurate and timely status updates to project team and management

Basic Qualifications
– Excellent SAS statistical programming skills including macros programs development, and awareness of current features in SAS especially in Base SAS, SAS/Stat and SAS/Graph
– Excellent R statistical programming skills a plus
– Knowledge of Windows Batch scripting a plus
– Basic analytic skills and strong deductive reasoning skills
– Experience with large datasets a plus
– High level Microsoft Office and Excel skills
– Experience working independently to assess needs, identify solutions, create specifications for that solution, and program finalized specializations preferred
– Desire to remain informed of new developments in programming, that are relevant to the industry and the development of tools in SAS/R
– Strong organizational skills and attention to detail
– Ability to work on multiple projects at the same time
– Ability to work both as an individual contributor and as a team member
– Excellent written and verbal communication skills

Education and Experience
Bachelor's degree or above in computer science/mathematics/biostatistics with at least 3 years of experience in SAS or R; a combination of experience and education will be considered

Please attach the following when applying: 1) Resume 2) Copy of transcript 3) Cover letter 4) SAS and/or R code sample (solely created by the applicant)

Additional Information
PointRight's office is headquartered at 150 Cambridge Park Drive, Suite 301 Cambridge, MA 02140. We offer a competitive salary and a superior employee benefits package including medical insurance, dental insurance and 401(k) plan with a company contribution.

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. It your institution would like to appear on this list, please contact Greta Ljung at greta.ljung@verizon.net.
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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

Brown University School of Public Health
Department of Biostatistics
http://www.stat.brown.edu/

Dartmouth College
Department of Biomedical Data Science
https://bmds.dartmouth.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

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Department of Biostatistics
http://www.umass.edu/sphhs/biostatistics

University of New Hampshire
Department of Mathematics & Statistics
https://ceps.unh.edu/mathematics-statistics

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/

Worchester Polytechnic Institute
Department of Mathematical Sciences
http://www.wpi.edu/academics/math/

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.

BCASA OFFICERS	
President, 2017-18	Greta Ljung, Consultant
Program Chair, 2017-18	Fotios Kokkotos, Trinity Partners
Past President, 2017-18	James MacDougall, Consultant
Vice-President, 2016-19	Miriam Chernoff, Harvard T.H. Chan School of Public Health
Secretary, 2016-19	Eugenie Coakley, John Snow, Inc.
Treasurer, 2016-19	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
BCASA COMMITTEE CHAIRPERSONS	
Education Committee	Shannon Stock, Holy Cross
Mu Sigma Rho	Liam O'Brien, Colby College