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
E-Mail: BostonChapterASA@gmail.com

SCHEDULED EVENTS & MEETINGS		
November 15, 2019	Statistics and the Life Sciences: Creating a Healthier World	Boston, MA
November 16, 2019	**Traveling Short Course of the ASA: Guidelines for Using State-of-the-Art Methods to Estimate Propensity Score and Inverse Probability of Treatment Weights When Drawing Causal Inferences**	**Boston, MA**
December 4, 2019	**Just Machine Learning**	**Waltham, MA**
January 2020	**Annual Potluck Dinner and Party**	**TBD**
February 2020	**Mosteller Statistician of the Year Awards Lecture**	**TBD**
February 28, 2020	**Analytics Without Borders Conference**	**Boston, MA**
March 6, 2020	Women in Data Science (WiDS) Conference	Cambridge, MA
April 2020	**New England Statistics Symposium (NESS)**	**TBD**
April 27-May 8, 2020	**May Institute on Computation and Statistics for Mass Spectrometry and Proteomics**	**Boston, MA**
May 2020	**Pharma Symposium**	**TBD**

*Events in bolded letters are sponsored by BCASA

2020 BCASA AWARD Nomination Submission Deadline		
April 30, 2020	Statistical Outreach and Literacy Award	See page 13

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 on our website and through emails to our members. We are currently planning events for the coming year. If you have suggestions, please contact Program Chair Olga Vitek at o.vitek@northeastern.edu.

UPCOMING CHAPTER EVENTS

ASA Short Course on "Guidelines for Using State-of-the-Art Methods to Estimate Propensity Score and Inverse Probability of Treatment Weights When Drawing Causal Inferences" on November 16

Date: Saturday, November 16, 2019 (All day event)
Location: Cargill 097 (CG 097), Northeastern University, 45 Forsyth St, Boston, MA 02115
Map: https://goo.gl/maps/DxUdySJaJctyyNG58
Instructor: Beth Ann Griffin, RAND Corporation
Cost: Academic/nonprofit, BCASA Member, $30; Academic/nonprofit, Non-member $60; Industry, BCASA member $135; Industry, Non-member $165; Late registration (starting Nov 1st) will incur an additional charge. (Note: Information on how to join the Boston Chapter is provided elsewhere in this newsletter).
Registration: https://bcasa2019propensity.eventbrite.com

On Saturday, November 16, 2019, the Boston Chapter will be hosting a one-day short course brought to us by the ASA's Council of Chapters under their traveling short course program.
This full-day course will take place in Cargill 097 on the campus of Northeastern University, 45 Forsyth St, Boston, MA 02115. The detailed information will be posted on our website. Registration includes course materials, light refreshments and lunch. Please contact Olga Vitek o.vitek@northeastern.edu for more information.

Course Abstract:
Estimation of causal effects is a primary activity of many studies. Examples include testing whether a substance abuse treatment program is effective, whether an intervention improves the quality of mental health care, or whether incentives improve retention of military service members. Controlled, random-assignment experiments are the gold standard for estimating such effects. However, experiments are often infeasible, forcing analysts to rely on observational data in which treatment assignments are out of the control of the researchers. This short course will provide an introduction to causal modeling using the potential outcomes framework and the use of propensity scores and weighting (i.e., propensity score or inverse probability of treatment weights) to estimate causal effects from observational data. It will also present step-by-step guidelines on how to estimate and perform diagnostic checks of the estimated weights for testing the relative effectiveness of two or more interventions. Attendees will gain hands-on experience estimating propensity score weights using boosted models in R, SAS and Stata; evaluating the quality of those weights; and using them to estimate intervention effects. Additional topics (if time allows) can also include methods for conducting sensitivity analyses for unobserved confounding and estimation of the effects of time-varying treatments. Attendees should be familiar with linear and logistic regression; no knowledge of propensity scores is expected.

About the instructor:
Beth Ann Griffin is a senior statistician at the RAND Corporation Inference and is a member of the Pardee RAND Graduate School faculty. Her statistical research focuses on causal effects estimation when using observational data. Her substantive research has primarily fallen into three areas: (1) substance abuse treatment for adolescents, (2) military health, and (3) gun policy research. She is currently the principal investigator of two projects sponsored by the National Institute of Drug Abuse (NIDA), one which is focused on improving a promising health services research tool (the TWANG package) for estimating causal effects of treatment using propensity score weights (www.rand.org/statistics/twang) and the other which aims to develop well-operationalized, empirically-supported sequences of decision rules—known as "Adaptive Interventions" (AIs)—to provide guidance about substance-use services decisions for adolescent clients. Griffin also serves on the editorial board of the *Annals of Applied Statistics, Statistics in Medicine and Observational Studies*. She received her Ph.D. in biostatistics from Harvard University.

An Evening Lecture "Just Machine Learning" on December 4

Date: Wednesday, December 4, 2019. Light dinner will be served at 6 p.m. with talk to follow from 7 p.m.-8 p.m.
Location: Smith 122, Bentley University, 175 Forest Street, Waltham, 02451
Speaker: Tina Eliassi-Rad, Northeastern University
Directions: http://uxpaboston.org/wp-content/uploads/2012/03/Bentley_DrivingDirections.pdf
Registration: https://bcasa2019december.eventbrite.com
Note: The event is FREE and open to all but advanced registration is required.

Abstract:
Tom Mitchell in his 1997 Machine Learning textbook defined the well-posed learning problem as follows: "A computer program is said to learn from experience E with respect to some task T and some performance measure P, if its performance on T, as measured by P, improves with experience E." In this talk, I will discuss current tasks, experiences, and performance measures as they pertain to fairness in machine learning. The most popular task thus far has been risk assessment. For example, Jack's risk of defaulting on a loan is 8, Jill's is 2; Ed's risk of recidivism is 9, Peter's is 1. We know this task definition comes with impossibility results (e.g., see Kleinberg et al. 2016, Chouldechova 2016). I will highlight new findings in terms of these impossibility results. In addition, most human decision-makers seem to use risk estimates for efficiency purposes and not to make fairer decisions. The task of risk assessment seems to enable efficiency instead of fairness. I will present an alternative task definition whose goal is to provide more context to the human decision-maker. The problems surrounding experience have received the most attention. Joy Buolamwini (MIT Media Lab) refers to these as the "under-sampled majority" problem. The majority of the population is non-white, non-male; however, white males are overrepresented in the training data. Not being properly represented in the training data comes at a cost to the under-sampled majority when machine learning

algorithms are used to aid human decision-makers. There are many well-documented incidents here; for example, facial recognition systems have poor performance on dark-skinned people. In terms of performance measures, there are a variety of definitions here from group- to individual-fairness, from anti-classification, to classification parity, to calibration. I will discuss our null model for fairness and demonstrate how to use deviations from this null model to measure favoritism and prejudice in the data.

About the Speaker:
Tina Eliassi-Rad is an Associate Professor of Computer Science at Northeastern University in Boston, MA. She is also a core faculty member at Northeastern University's Network Science Institute. Prior to joining Northeastern, Tina was an Associate Professor of Computer Science at Rutgers University; and before that she was a Member of Technical Staff and Principal Investigator at Lawrence Livermore National Laboratory. Tina earned her Ph.D. in Computer Sciences (with a minor in Mathematical Statistics) at the University of Wisconsin-Madison. Her research is rooted in data mining and machine learning; and spans theory, algorithms, and applications of big data from networked representations of physical and social phenomena. She has over 80 peer-reviewed publications (including a few best paper and best paper runner-up awardees); and has given over 200 invited talks and 14 tutorials. Tina's work has been applied to personalized search on the World-Wide Web, statistical indices of large-scale scientific simulation data, fraud detection, mobile ad targeting, cyber situational awareness, and ethics in machine learning. Her algorithms have been incorporated into systems used by the government and industry (e.g., IBM System G Graph Analytics) as well as open-source software (e.g., Stanford Network Analysis Project). In 2017, she served as the program co-chair for the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (a.k.a. KDD, which is the premier conference on data mining) and as the program co-chair for the International Conference on Network Science (a.k.a. NetSci, which is the premier conference on network science). In 2010, she received an Outstanding Mentor Award from the Office of Science at the US Department of Energy. For more details, visit http://eliassi.org.

ANALYTICS
WITHOUT BORDERS

The 5th Analytics Without Borders Conference: Call for Submissions

Date: Friday, February 28, 2020
Location: Tufts University, Boston, MA

You are invited to submit your presentation to the 5th Analytics Without Borders conference. This conference provides a forum for participants involved in data analytics in a variety of different fields

(corporate institutions, academia, government organizations etc.) to present and discuss their work. In addition to formal presentations, the conference will allow participants plenty of opportunity to interact with each other and thereby increase their knowledge of analytics in other disciplines.

Topics are broad and can include applied statistics, optimization, data science, etc. Anyone involved in some aspect of data analytics is invited to present their work. Sessions will include a blend of corporate, academic and government researchers and practitioners.

Submission due day is **Feb 14th, 2020.** 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. https://www.bentley.edu/academics/analytics-without-borders

May Institute on Computation and Statistics for Mass Spectrometry and Proteomics

Date: April 27 – May 8, 2020
Location: Northeastern University, Boston, MA
Organizers: Meena Choi and Olga Vitek
Website: https://computationalproteomics.khoury.northeastern.edu/

The May Institute focuses on computational and statistical aspects of quantitative mass spectrometry-based proteomics. The course combines keynote presentations, introductory lectures, practical training, and informal personal discussions.

Instructors of the course are leading experts, 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:

- April 27 – April 29, 2020: Targeted proteomics with Skyline
- April 27 – April 29, 2020: Proteomics and metabolomics with OpenMS
- April 29 – May 1, 2020: Beginner's statistics in R
- April 29 – May 1, 2020: Intermediate R and data visualization
- May 2-3, 2020: Future Developers Meeting
- May 4-6, 2020: Statistics for quantitative mass spectrometry
- May 6, 2020: Scientific writing
- May 6-8, 2020 : Capstone – case studies in data-independent acquisition (DIA)

More information is at https://computationalproteomics.khoury.northeastern.edu/

OTHER LOCAL AND REGIONAL EVENTS

Statistics and the Life Sciences: Creating a Healthier World on November 15

Date: November 15, 2019, 8:30 a.m.-2:20 p.m.
Location: Boston University School of Public Health, Hiebert Lounge, 72 East Concord Street, Boston 02118
Registration (free): https://www.bu.edu/sph/news-events/signature-programs/deans-symposia/statistics-and-the-life-sciences-creating-a-healthier-world/#rsvp

Planned in coordination with the Boston University School of Public Health Department of Biostatistics and the Boston University Department of Mathematics and Statistics, and cohosted by the American Statistical Association, the Institute for Mathematical Statistics, and the National Institute of Statistical Sciences.

We are globally connected like never before, in nearly all aspects of our lives. While this fact has numerous implications, from the perspective of public health it leaves us uniquely poised to potentially overcome major challenges that have to date been out of reach. These include aging traits such as cognitive decline and Alzheimer's disease, pulmonary disease such as COPD and asthma, and cardiovascular diseases. Significant progress on any and all of these problems will be data intensive, with statistics a key element at the core. The goal of this workshop is to stage the statistical challenges and progress towards solutions in a handful of emerging and mission-critical areas of the health sciences with global impact. Specifically, focus will be on the following three areas: digital health, machine learning in causal inference, and networks for public health. Ultimately, the idea is to bring together a gathering of representatives from statistics and related domain areas, in an agile and interactive format, and use a web-based dissemination platform to bring broad visibility to these topics.

Agenda
8:00 a.m. – 8:30 a.m., *Doors open, Breakfast Available*
8:30 a.m. – 8:50 a.m., *Opening Remarks,* Sandro Galea (Boston University School of Public Health) and Josée Dupuis (Boston University School of Public Health)
8:50 a.m. – 9:50 a.m., *Plenary Speakers,* Susan Murphy (Harvard University) and Joseph Lehar (The Janssen Pharmaceutical Companies of Johnson & Johnson and Boston University)
9:50 a.m. – 10:00 a.m., *Break*
10:00 a.m. – 11:10 a.m., *Part One: Digital Health: Integrating Wearables, Social Media and More*, Keynote: Vadim Zipunnikov (Johns Hopkins Bloomberg School of Public Health); Panelists: Pei Wang (Icahn School of Medicine at Mount Sinai), Greg Hather (Takeda Pharmaceuticals), Margrit Betke (Boston University); Moderator: Elaine Nsoesie (Boston University School of Public Health)
11:10 a.m. – 12:20 p.m., *Part Two: Machine Learning in Causal Inference*, Beth Ann Griffin (RAND Corporation), Susan Gruber (Putnam Data Sciences), Stefan Wager (Stanford Graduate School of

Business), Laura Balzer (University of Massachusetts – Amherst); Moderator: Chanmin Kim (Boston University School of Public Health)
12:20 p.m. – 12:50 p.m., *Lunch*
12:50 p.m. – 2:00 p.m., *Part Three: Networks for Public Health*, Key Lecture: David Dunson (Duke University); Panelists: Tian Zheng (Columbia University), Neha Gondal (Boston University), Ali Shojaie (University of Washington); Moderator: Jacob Bor (Boston University School of Public Health)
2:00 p.m. – 2:20 p.m., *Closing Remarks*, Bhramar Mukherjee (The University of Michigan School of Public Health), Eric Kolaczyk (Boston University)

Women in Data Science (WiDS) Conference on March 6, 2020

Date: March 6, 2020, 8:00 a.m.-5:00 p.m.
Location: Microsoft New England, One Memorial Drive, Cambridge, MA 02142
Website: https://www.widscambridge.org/

Women in Data Science (WiDS) is a one-day conference featuring thought leaders in data science from academia, industry, non-profits, and government. The goal of WiDS is to inspire and educate data scientist worldwide, regardless of gender, and to support women in the field of data science. The conference, which started in 2015 at Stanford, now includes a global conference with approximately 150+ regional events, a datathon encouraging the participants to hone in their data analytic skills using a social impact challenge, and a podcast featuring leaders in the field talking about their work, their journeys, and lessons learned.

For the fourth year, Harvard, MIT, and Microsoft Research New England will collaborate with Stanford University to bring the Women in Data Science (WiDS) conference to Cambridge, Massachusetts on March 6, 2020. As in past years, the conference will feature an all-female line up of speakers from academia and industry to talk 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 speakers at the 2019 WIDS held in Cambridge included Esther Duflo of MIT, who this fall was awarded the 2019 Nobel Memorial Prize in Economics along with two co-researchers "for their experimental approach to alleviating global poverty". At age 46, Professor Duflo is the youngest person and only the second woman to win this prize.

Additional information about the 2020 conference will be posted on the conference website as it becomes available. https://www.widscambridge.org/

JOURNAL NEWS AND ANNOUNCEMENTS

Journal of Statistics Education Welcomes Papers for Special Issue on "Computing in the Statistics and Data Science Curriculum"

In 2020 it will have been 10 years since Nolan and Temple Lang's paper "Computing in the Statistics Curriculum" was published (The American Statistician, 2010, 64(2):97-107). In that influential paper Nolan and Temple Lang wrote:

- The nature of statistics is changing significantly with many opportunities to broaden the discipline and its impact on science and policy.
- To realize this potential, our curricula and educational culture must change. While there are opportunities for significant change in many dimensions, we focus more narrowly on computing and call for computing concepts to be integrated into the statistics curricula at all levels.
- Computational literacy and programming are as fundamental to statistical practice and research as mathematics.
- We advocate that our field needs to define statistical computing more broadly to include advancements in modern computing, beyond traditional numerical algorithms.
- Information technologies are increasingly important and should be added to the curriculum, as should the ability to reason about computational resources, work with large datasets, and perform computationally intensive tasks.
- We present an approach to teaching these topics in combination with scientific problems and modern statistical methods that focuses on ideas and skills for statistical inquiry and working with data.
- We outline the broad set of computational topics we might want students to encounter and offer ideas on how to teach them.
- We also discuss efforts to share pedagogical resources to help faculty teach this modern material (including supplemental materials).

The Nolan and Temple Lang paper has been highly cited and has prodded the statistics community to embrace computation as a foundation as important as mathematics. Ten years after publication, what has changed? What still needs to change? What's needed to implement curricular shifts?

To further these discussions the Journal of Statistics Education is planning a set of themed papers to coincide with the tenth anniversary of the publication of "Computing in the Statistics Curriculum". They are inviting submissions that address the questions above and related questions.

TIMETABLE:

- August 1, 2019 (call for submissions)
- October 1, 2019 (request for submission of draft abstracts and working title to the following Google form https://forms.gle/gygMiZV4H4iMjvaw7)

- December 1, 2019 (call for reviewers)
- December 15, 2019 (deadline for submissions via the Journal of Statistics Education submission site https://mc.manuscriptcentral.com/ujse, please select the special issue "Computing in the Statistics and Data Science Curriculum")
- March 15, 2020 (working deadline for initial editorial decisions)
- July 2020 (working deadline for final revisions)
- November 2020 (proposed publication date)

QUESTIONS? Please contact the guest editors for the cluster of papers: Johanna Hardin (Pomona College) at Jo.Hardin@pomona.edu and Nicholas Horton (Amherst College) at nhorton@amherst.edu or Jeffrey Witmer (JSE Editor in Chief) at jeff.witmer@oberlin.edu

A flier can be found at https://nhorton.people.amherst.edu/JSEFlier2.pdf

RECENT CHAPTER EVENTS

Smith Professor Ben Baumer Receives the BCASA's Outstanding Undergraduate Teaching Award

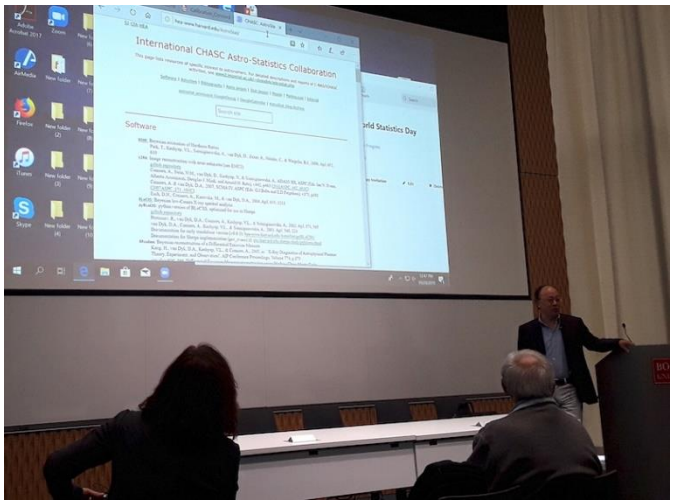
Professor Ben Baumer of Smith College received this year's Award for Outstanding Undergraduate Teaching of Statistics. Professor Baumer accepted the award and delivered a lecture titled "The New Roaring Twenties: Imagining statistics and data science curricula in the coming decade" at an event held in the Department of Statistics at Harvard University on Monday, October 7.

Boston University Student Chapter of the ASA World Statistics Day Presentation – Astrostatistics: The Intersection of Statistics and Outer Space

On October 29, 2019, the Boston University Student Chapter of the ASA (BUSCASA) hosted a symposium entitled "Astrostatistics: the intersection of statistics and outer space." The event was co-sponsored by the Boston Chapter of the ASA and BU Spark! & the Hariri Institute for Computing. The aim of the event was to introduce members of the Boston statistics community to the interdisciplinary and innovative field of astrostatistics.

The symposium began with an introduction to the field of astrostatistics by Dr. Xiao-Li Meng of the Harvard University Statistics Department. Dr. Aneta Siemiginowska of the Center for Astrophysics | Harvard & Smithsonian then presented on the Chandra X-Ray Observatory, a specially designed earth orbiting telescope detecting X-ray emissions. The telescope has observed the remains of exploded stars, imaged the area surrounding the supermassive black hole at the middle of the Milky Way, and found additional black holes. Next, Dr. Vinay L. Kashyap from the same institution presented on the nature of high-energy astronomic data. Astronomers use observed photons to estimate the nature of the objects in the universe. Dr. Meng closed the symposium with a presentation on the calibration concordance problem, the dilemma that different instruments give different estimates for the same object. He explained how statistical methods and models can be used to better estimate quantities of interest. The symposium finished with a question and answer session, and encouraged students to consider the field of astrostatistics given the current abundance of data.

The symposium was attended by over 25 members of the Boston statistics community, including graduate students from the Boston University statistics and biostatistics departments, as well as faculty members from different disciplines.



MEMBER NEWS

Professor Susan A. Murphy of Harvard became President of the Institute of Mathematical Statistics (IMS) on 31st July 2019, taking over from Professor Xiao-Li Meng. Other Harvard Faculty members who have served as IMS President are W.G. Cochran (1946), Herman Chernoff (1968), Frederick Mosteller (1975) and Xiao-Li Meng (2019). Congratulations to Susan!

Professor Lorin Crawford from the Department of Biostatistics at Brown University has been named by The Root among the 100 most influential and prominent members of the African American community! Professor Crawford is being recognized as an up-and-coming researcher who is developing statistical models to help scientists better understand genetic disorders. Dr Crawford is also a recent winner of the 2019 Alfred P. Sloan Jr. Foundation's research fellowship for his work on genetic disorders. Congratulations to Lorin!

BOSTON CHAPTER NEWS AND ANNOUNCEMENTS

Nominations for the Statistical Outreach and Literacy Award

Nominations are now being accepted for the first BCASA Statistical Outreach and Literacy Award. The aim is to acknowledge contributions to statistical literacy and outreach in the public domain. For instance, the candidate may have furthered the understanding of statistics through utilizing statistical or graphical methods in electronic or print media, in conference presentations or other public forums, or by offering training courses on statistical topics in the US or abroad. The candidate may have reached out to further the use of statistics in other disciplines. He or she may have inspired an understanding of a public issue through the use of statistics. Candidates need not be affiliated with academia. This award will ordinarily be given every two years.

The deadline for nominations for the 2020 award is April 30, 2020. The awardee will be asked to give a presentation in the fall of 2020.

The awardee will:

- Have a connection with the BCASA catchment area of MA, RI, NH, VT, or ME. This could include:
    - Having lived or worked in the area;
    - Having been a member of the BCASA;
    - Having studied or reported on an issue that is relevant to persons living in the area.

- Have made a substantial contribution to statistical literacy and outreach through the print or electronic media or through public forums. This could include but is not limited to:
    - Framing a public problem using effective use of statistical reasoning
    - Making statistical reasoning accessible to a public audience
    - Illustrating social trends with statistical graphics

Further:

- Winners of the BCASA's Mosteller Statistician of the Year Award and the Undergraduate Outstanding Teaching Award will not be eligible for this Literacy/Outreach Award.
- Nominees unsuccessful in one year may be reconsidered in succeeding years.

Nominations should include:

- Nomination form
- Letter of nomination (no more than four pages)

- Two or more (up to four) letters of support (no more than two pages each)
- Candidate's CV

For more information about the award please contact Shannon Stock at sstock@holycross.edu or Mariam Chernoff at mchernoff@sdac.harvard.edu.

Nominations forms may be found on the BCASA website at http://community.amstat.org/bostonchapter/awards/literacy.

Nominations for Chapter Officers for Terms Starting January 1, 2021

This spring, we will be electing four new chapter officers. These officers are: President, Program Chair, Newsletter Editor, and Webmaster. All four positions are for two-year terms starting January 1, 2021. 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

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. Please submit your nominations by February 28, 2020, if possible.

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 the recognition of outstanding achievement among the 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://community.amstat.org/bostonchapter/awards/musigmarho. 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.

Additional information about Mu Sigma Rho can be found at: https://www.stat.purdue.edu/msr/.

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 activities for the chapter. The meetings are held in the evening and dinner is provided. For more information contact Chapter Vice-President Miriam Chernoff (mchernoff@sdac.harvard.edu).

How Do I Join the Boston Chapter?

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.

However, you can 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, discounts at some events, 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 Elizabeth Kane, BCASA Newsletter Editor at kane1215@bu.edu will be included in a future BCASA newsletter.

Biostatistics Faculty, Open Rank (Special & Scientific Staff - CTSI)

Institution: Tufts Medical Center
Location: Boston, MA
Type: Full-Time

Tufts Clinical and Translational Science Institute (CTSI) and the Institute for Clinical Research and Health Policy Studies (ICRHPS) at Tufts Medical Center seek a faculty Biostatistician to provide methodological leadership for innovative and collaborative clinical research and teaching. Our institutes provide a supportive academic environment for original methodological research and ample opportunities for collaboration.

Tufts statisticians have a track record of success, working closely with clinician researchers to develop predictive models used worldwide to predict health outcomes for patients with myocardial infarction and kidney disease. They have also been integral to the production of high-impact methodological advances, such as innovations in meta-analytic techniques, more efficient clinical trial design, and evaluation of the heterogeneity of treatment effects.

Our Biostatisticians:

- Are based in our Biostatistics, Epidemiology, and Research Design (BERD) Center.
- Are eligible for Tufts University faculty appointments.
- Collaborate with clinical, health services, and basic science researchers throughout Tufts University, Tufts Medical Center, and their affiliates.
- Publish often.
- Teach and mentor MS/PhD students in our acclaimed Clinical and Translational Science Graduate Program.
- Researchers in all areas of biostatistics are encouraged to apply.

Responsibilities:

- Provides methodological leadership to multidisciplinary teams engaged in research in the biomedical and clinical sciences, behavioral and social sciences, community-engaged research, public health studies, and health policy research.
- Teaches biostatistics classes within Tufts CTSI's Clinical and Translational Science Graduate Program at the Tufts University's Sackler School of Biomedical Sciences.

- Mentors and assists fellows and junior faculty with their research projects, from design to analysis. Devotes effort to specific research grants as a collaborating statistician-investigator and supervises master's level statisticians who work on those projects.
- Initiates and carries out independent research on methodological issues. Responsible for seeking independent funding by writing grant applications.
- Assists investigators throughout the Tufts community with study design, statistical analyses, and methodological questions related to their research projects, pre- and post-award.
- Works collaboratively with research departments across the Tufts campus and affiliated organizations and engages in a high level of interdisciplinary activity.

Requirements:

- The candidate should have a PhD in biostatistics with a strong record of collaboration with clinicians. A track record of academic productivity, funding, and innovation is expected.
- An understanding of the span of biostatistics and study design is required, as is an ability to recognize opportunities to use or develop novel methods.
- Classroom teaching experience is required.
- The ideal candidate will have excellent communication skills in translating complex concepts to non-methodologically expert audiences.
- Demonstrated potential for securing external funding, as an independent investigator or collaborating methodologist, is desirable.
- To apply: please submit your CV and cover letter through Tufts Medical Center's online system: https://pm.healthcaresource.com/CS//wel#/job/3642

Tenure Track Assistant Professorship in Statistics at Middlebury College

The Middlebury College Department of Mathematics invites applications for a tenure-track Assistant Professorship in Statistics to begin in fall 2020. A PhD in statistics or a closely related field should normally be in hand by time of appointment. Successful candidates will advise, mentor, teach courses at all levels including the first-year seminar program, and contribute to crafting the expansion of our statistics and data science offerings. The potential to collaborate across disciplines and/or incorporate undergraduates in research is desirable. The full position description can be found at http://www.middlebury.edu/academics/math/faculty-job-opportunities/faculty-job-opportunities.

Applications should be submitted via Interfolio at https://apply.interfolio.com/65550. Full instructions can be found on the website above. Questions about the application process or the position can be directed to Steve Abbott, Mathematics Department Chair, at abbott@middlebury.edu.

Tenure Track Faculty Position at Bentley University

Job Description Summary
The Department of Mathematical Sciences at Bentley University – private business-oriented university located in suburban Boston – invites applications for at least one tenure track position beginning Fall 2020. We seek candidates to add to our strengths in applied statistics, applied mathematics, data science and machine learning. Candidates with the ability and willingness to teach in more than one of these areas at both the undergraduate and graduate levels are especially attractive. Applications for both junior and senior positions are welcomed. The rank and salary will be commensurate with experience.

The Mathematical Sciences Department offers undergraduate degrees in mathematical sciences, actuarial sciences, and data analytics and an MS in Business Analytics, and it is involved in the PhD program in Business, both in teaching and in doctoral student supervision. We value collaboration with faculty in other departments and have a particularly strong record of cross-disciplinary scholarship. Candidates are encouraged to learn more about our department by visiting http://www.bentley.edu/mathematics/.

Minimum Qualifications:
Applicants must hold a Ph.D. in Statistics, Mathematics, or a closely related discipline. Criteria for selection include: (a) Evidence of excellent teaching ability, and (b) High quality research skills and experience.

Candidates who possess organizational skills to foster and build academic programs consistent with the department's mission, strong communication skills for building research partnerships, and ability and willingness to supervise graduate student research and participate in activities related to our graduate programs are encouraged to apply.

Preferred Qualifications:
Applied experience in academic or nonacademic spheres is highly desirable.

Special Instructions to Applicants:
Candidates should submit a cover letter (candidates should indicate how their research interests and expertise could integrate with the department's mission), current curriculum vita, research statement, teaching statement, and arrange for three letters of recommendation, at least one of which should address teaching. Names and contact information for three references are required upon application. Bentley will contact these confidential references for those candidates moving forward in the process. The review of applications will begin immediately and continue until the position is filled.

Please submit your application here:
https://bentley.wd1.myworkdayjobs.com/faculty/job/Bentley-Campus/Tenure-Track-Open-Rank--Mathematical-Sciences_R0000318

Bentley University requires references checks and may conduct other pre-employment screening.

Harvard University Data Science Initiative Call for Postdoctoral Fellows

The Harvard University Data Science Initiative is seeking applications for its Harvard Data Science Initiative Postdoctoral Fellows Program for the 2020-2021 academic year. The duration of the Fellowship is two years. Fellows will receive a generous salary as well as an annual allocation for research and travel expenses.

We are looking for researchers whose interests are in data science, broadly construed, and including researchers with both a methodological and applications focus. Fellows will be provided with the opportunity to pursue their research agenda in an intellectually vibrant environment with ample mentorship. We are looking for independent researchers who will seek out collaborations with other fellows and with Harvard faculty.

The Harvard Data Science Initiative Postdoctoral Fellows Program is supported by the Harvard Data Science Initiative. The Harvard Data Science Initiative involves faculty from across the University.

Deadline: Applications must be submitted online by 5:00 p.m. on December 2nd, 2019.

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 Shannon Stock (sstock@holycross.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://www.bu.edu/sph/about/departments/biostatistics/
https://www.bu.edu/sph/about/departments/biostatistics/seminars/

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/
https://umaine.edu/mathematics/colloquium/

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/seminars/statistics-and-probability-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
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. Copies of past newsletters can be found on our website at https://community.amstat.org/bostonchapter/newsletter. Send comments or suggestions to any of the officers listed below.

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