

# BCASA NEWSLETTER

*Boston Chapter of the American Statistical Association*

Proudly serving

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

---

Volume 39, No. 1, September 2020

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

E-Mail: [BostonChapterASA@gmail.com](mailto:BostonChapterASA@gmail.com)

---

## SCHEDULED EVENTS & MEETINGS

<b>September 23<sup>rd</sup></b>	<b>BCASA Panel Discussion</b>	<b>Virtual</b>
<b>October 16<sup>th</sup> and 23<sup>rd</sup></b>	<b>Shiny Essentials</b>	<b>Virtual</b>
<b>November 7<sup>th</sup></b>	<b>Virtual Student Research Symposium in Statistics and Data Science</b>	<b>Virtual</b>
November 7, 8, 14, 15	R for Beginners Workshop	Virtual
<b>March 26, 2021</b>	<b>Analytic Without Borders</b>	<b>Virtual</b>
<b>Spring 2021</b>	<b>Pharmaceutical Symposium</b>	<b>TBD</b>

\*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 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](mailto:o.vitek@northeastern.edu).

---

## *President's Message*

Dear BCASA members,

I hope you are doing well in these challenging times. The pandemic, economic difficulties, and racial injustice have been heartbreaking. At times like this, community is more important than ever, but the way in which community is fostered needs to be rethought for this time of social distancing. Additionally, statistics is more important than ever, for its vital role in making sense of complicated, controversial data about issues such as COVID-19 spread and testing, unemployment trends, and police brutality. However, the way in which statistics is practiced also needs some rethinking, putting greater emphasis than ever before on ethical considerations and clear communication to students and the general public.

Statisticians in the Boston area have been making great contributions to research and communication about the pandemic. To name a few of many notable contributions:

- Nicholas Reich (UMass Amherst) has been developing ensemble models for forecasts of COVID-19 deaths and hospitalizations in the US, and communicating the results through an interactive visualization available via <https://covid19forecasthub.org>
- Xihong Lin (Harvard Biostatistics) has been studying the outbreak in Wuhan, China and evaluating the impact of non-pharmaceutical interventions. Again, communication is critical, and Xihong has been presenting her team's results in various venues, such as a webinar at the Broad Institute, the video of which is available at <https://www.hsph.harvard.edu/biostatistics/2020/03/watch-xihong-lins-webinar-on-covid-19-research/> and a Twitter thread at <https://twitter.com/XihongLin/status/1236075174069440512>
- The Harvard Data Science Review, led by Editor-In-Chief Xiao-Li Meng, has published a special issue on COVID-19: <https://hdsr.mitpress.mit.edu/specialissue1>

The new BCASA Statistical Outreach and Literacy Award was instituted before the pandemic, but takes on further importance in an era where it is easier and ever for statistical abuses and misconceptions to have lethal consequences. The inaugural award winner will be announced later this year.

Obviously, many exciting events had to be canceled, postponed, or re-formatted. Chapter events will continue to be in virtual format at least until the end of 2020, for safety reasons. Olga Vitek (Program Chair and President-Elect) and several chapter officers have been working hard on planning online events. Olga's report in this newsletter reflects on numerous recent and upcoming events for the Chapter. We welcome your suggestions on what kinds of events would be the most useful and interesting to you while meetings still have to be remote.

One silver lining to events having to be remote is that travel and commute times are cut to zero, both for members who would like to attend (as the Chapter serves quite a large area) and for speakers. Similarly, more and more seminars are available online, with speakers from all over the world. For example, see <https://statisfaction.wordpress.com/remote-seminars/> for a sample of such seminars, and <https://www.hsph.harvard.edu/biostatistics/2020/08/dfci-zoominars-for-data-science-lineup-3/> for the Dana-Farber Cancer Institute "Zoominar for Data Science" series of Q&A with invited speakers and Rafael Irizarry about many topics in data science.

I would like to thank the Planning Committee and many volunteers, sponsors, and Chapter members for their efforts. I especially thank Olga (Program Chair is a demanding role even in more normal times), and Greta Ljung (Past President) and Lisa Mukherjee (Treasurer) for many years of service to the Chapter. I am pleased to report that Greta and Lisa are recipients of the ASA Award for Outstanding Chapter Service for 2020.

I hope to see you at an online event soon, and in person before too long. Thank you for your support for the Chapter and the field of statistics, and I hope you have a healthy, productive year (and beyond).

Best wishes,  
Joe Blitzstein  
Chapter President

## *Program Chair Report*

By Olga Vitek

Dear BCASA members:

I am happy to have this opportunity to reflect on all the activities of the Chapter that have taken place since last Fall. Despite the challenging circumstances surrounding COVID19, the chapter was, and remains, very active.

The new academic year started in September 2019 with the New England Symposium on Statistics in Sports (NESSIS) in Cambridge. This meeting connected statisticians and quantitative analysts working with sports teams, sports media, and universities, and allowed them to discuss problems of statistical modeling and analysis of sports data.

In October, the Chapter sponsored the lecture by the Outstanding Undergraduate Teaching Awardee Ben Baumer, Assistant Professor in the Statistical & Data Sciences Program at Smith College. Ben spoke on “The new roaring twenties: Imagining statistics and data science curricula in the coming decade”. The talk explored how the statistics and data science curriculums can change to emphasize existing competencies (e.g., data wrangling and visualization), new paradigms (e.g., big data and cloud computing), and modern manifestations of old concepts (e.g., ethics and computational literacy).

Also in October, a one-day New England Rare Disease Statistics (NERDS) workshop brought together speakers from industry, academia, and government. It facilitated discussions of technical statistical issues, regulation interpretation, and stories of both success and failure.

In November, the New England Isolated Statisticians Meeting at Wellesley College offered an opportunity for isolated statisticians to network, and learn from each other.

Another highlight of the month was the Traveling Short Course of the ASA. Dr. Beth Ann Griffin from RAND Corporation presented “Guidelines for using state-of-the-art methods to estimate propensity score and inverse probability of treatment weights when drawing causal inferences”. The course was a great success, with nearly 100 participants from both academia and industry. We appreciate the interest of the attendees and we are grateful to student volunteers for their assistance.

In December, Prof. Tina Eliassi-Rad from Northeastern University spoke on “Just machine learning”. Her talk discussed how just machine learning can be possible in our unjust world.

The highlight of January was the annual potluck dinner and party in Carlisle, MA. We are very grateful to Tom Lane and his wife, Judy, for hosting the wonderful event. I very much enjoyed the conversations with many Chapter members.

In February the Chapter celebrated the winner of the Mosteller Statistician of the Year Award, Professor Eric Kolaczyk from Department of Statistics at Boston University. After a well-attended dinner, Eric spoke on Moving 'Practice' to the Center of Statistics, by drawing upon his research on

statistical network analysis, and provided his perspective as the director of Boston University's MS in Statistical Practice (MSSP).

Also in February, the very successful Analytics Without Borders Conference, hosted by Tufts University and organized by Bentley University, Bryant University, Tufts University, and UMass Lowell, highlighted a wide range of applications of statistics and data science through presentations from corporate institutions, academia, and government organizations.

In Spring, the COVID19 pandemic brought havoc to our lives, and the Chapter activities were of course affected. In April, the Chapter cancelled its annual meeting and evening event, as well as the talk by ASA's Past-President Karen Kafadar on Statistics meets CSI: The critical role of statistics in evaluating forensic evidence. The popular Pharmaceutical Symposium scheduled for May had to be postponed and will now be held in spring 2021.

But at the same time, with little delay, the Chapter found ways to transition online. The online version of the May Institute on Computation and Statistics for Mass Spectrometry attracted a much greater audience than the original in-person meeting, with some lectures exceeding 500 participants.

The past experience taught us that, although online activities are challenging, they also offer opportunities to include a broader audience, that is more diverse in its scientific interests, geography and background. In the coming year we plan a number of exciting online events.

The upcoming events include a September panel of experts discussing the effects of the COVID19 pandemic on the job market and career paths in data science, business analytics and data analytics. On Oct 16 & 23 Mine Çetinkaya-Rundel will offer the ASA traveling short course "Shiny essentials". Program details and registration information are provided elsewhere in this newsletter.

November will bring us the Student Research Symposium in Statistics and Data Science. We will also host a 4-day workshop covering R for beginners, with applications to mass spectrometry data and analysis on November 7,8,14,15. Although examples in the workshop are specific to mass spectrometry, the course will be useful to anyone without prior experience in R and interested in learning the language.

I would like to use this opportunity to thank student volunteers, sponsors and host institutions, members of the planning committee, and numerous other members of the Boston Chapter for contributing time and effort to make our Chapter a vibrant and inclusive community. I am confident that we will be able to adapt to the new challenges and continue to maintain an exciting program that will be useful and of interest to many. Please keep an eye on the newsletter, and please do not hesitate to send us suggestions.

Wish you all health and resilience for the year to come!

Olga Vitek  
Program Chair and President-Elect

## UPCOMING FALL EVENTS

### *BCASA Discussion Panel on September 23<sup>rd</sup>*

**Date and Time:** September 23<sup>rd</sup>, 5-7pm

**Location:** Virtual

**Registration:** <https://community.amstat.org/bostonchapter/home>

*COVID19 pandemic: how does it influence the job market and career paths in data science, business analytics and data analytics?*

**Description:** The COVID19 pandemic substantially changed the ways we live and work. Some of the changes are temporary, while others may be long term. How do these changes affect the job market and careers in the fields of data science, business analyst, data analysis, applied statistics, etc.? What technical and/or soft skills become particularly important now? What are the differences between industries? A panel of data scientists will discuss these and related questions, and answer questions from the audience.

The intended audience for this panel includes

1. Current undergraduate and graduate students majoring data science, data analytics or Statistics
2. Professionals interested in a career change within/towards data science-related fields
3. Educators in statistics and data science

We believe, however, that the event would be of interest to all members of our chapter.

### *Short Course on the R package Shiny on October 16<sup>th</sup> and 23<sup>rd</sup>*

As part of ASA's Council of Chapters Traveling Course program, the Chapter is pleased to bring you this short course entitled "Shiny Essentials."

**Instructor:** Mine Çetinkaya-Rundel, Senior Lecturer, School of Mathematics, University of Edinburgh

**Date and Time:** October 16<sup>th</sup> and October 23<sup>rd</sup>, 1-4pm

**Location:** Virtual

**Registration:** <https://bcasa2020oct.eventbrite.com>

**Pre-Requisite:** Some familiarity with R. Having written some functions in the past is a plus.



#### **Course Description**

Shiny is an R package that makes it easy to build interactive web apps straight from R. You can host stand-alone apps on a webpage or embed them in R Markdown documents or build dashboards. This

short course will introduce you to building web applications and dashboards with Shiny, reactive programming, and customizing and deploying your apps for others to use.

### **Modules**

- Your first shiny app: A walk through of building your first app, from start to finish
- Designing UI: Building blocks for designing your user interface
- Understanding reactivity: Expressing the server logic using reactive programming
- Deploying and sharing: Putting it altogether to share it with the world
- Modules: Refactoring your apps as they grow into modules
- Troubleshooting: Useful tips for those pesky errors

### **Workshop setup**

We will use RStudio Cloud for the workshop so you don't need to install anything ahead of time. I recommend using either Google Chrome or Firefox as your browser. We will regularly break for small group activities so please be ready to work through hands on exercises with others in the workshop. It would be useful if you're able to keep your video and mic on at least during the breakout groups. I will ask that you keep yourself muted during the main session and put any questions in the chat window. If you're able to do so, I encourage you to keep your video on during the main session as well, but this is entirely optional.

### **About the Instructor**

Mine Çetinkaya-Rundel is Senior Lecturer in the School of Mathematics at University of Edinburgh and Data Scientist and Professional Educator at RStudio. She is on leave from her Associate Professor of the Practice position at the Department of Statistical Science at Duke University. Mine's work focuses on innovation in statistics and data science pedagogy, with an emphasis on computing, reproducible research, student-centered learning, and open-source education as well as pedagogical approaches for enhancing retention of women and under-represented minorities in STEM. Mine works on integrating computation into the undergraduate statistics curriculum, using reproducible research methodologies and analysis of real and complex datasets. She also organizes ASA DataFest, an annual two-day competition in which teams of undergraduate students work to reveal insights into a rich and complex data set. Mine works on the OpenIntro project, whose mission is to make educational products that are free, transparent, and lower barriers to education. As part of this project she co-authored three open-source introductory statistics textbooks. She is also the creator and maintainer of [datasciencebox.org](https://datasciencebox.org) and she teaches the popular Statistics with R MOOC on Coursera. More information can be found at <https://www2.stat.duke.edu/~mc301/>

## *Virtual Student Research Symposium in Statistics and Data Science on November 7<sup>th</sup>*

**Date and Time:** November 7, 2020

**Location:** Virtual

**Registration and Abstract Submission:** <https://www.eventbrite.com/e/virtual-student-research-symposium-in-statistics-and-data-science-tickets-117442296069>

The Boston Chapter of the ASA, in collaboration with the ASA Student Chapters at Boston University, Bentley, and Tufts University, is organizing a virtual Student Research Symposium in Statistics and Data Science on November 7th. The goal of the event is to create a venue for students in New England to present their research and network with peers from other institutions. Whether you are a current student interested in presenting your research, or a prospective student curious about graduate programs, please consider joining us for a day of presentations on the exciting work being conducted by students in our region! Further details about the program will be posted at <https://community.amstat.org/bostonchapter/upcoming-events/bostonsrs2020> as they become available. For general inquiries, please contact [bostonSRS2020@gmail.com](mailto:bostonSRS2020@gmail.com).

### **Keynote Presentation**

**Speaker:** Francesca Dominici, Clarence James Gamble Professor of Biostatistics, Population and Data Science, Co-Director of Data Science Initiative, Harvard University.

**Title:** “A Particulate Solution: Data Science in the Fight to Stop Air Pollution and Climate Change”

**Abstract:** What if I told you I had evidence of a serious threat to American national security – a terrorist attack in which a jumbo jet will be hijacked and crashed every 12 days. Thousands will continue to die unless we act now. This is the question before us today – but the threat doesn’t come from terrorists. The threat comes from climate change and air pollution.

We have developed an artificial neural network model that uses on-the-ground air-monitoring data and satellite-based measurements to estimate daily pollution levels across the continental U.S., breaking the country up into 1-square-kilometer zones. We have paired that information with health data contained in Medicare claims records from the last 12 years, and for 97% of the population ages 65 or older. We have developed statistical methods and computationally efficient algorithms for the analysis of over 460 million health records.

Our research shows that exposure to air pollution is killing thousands of senior citizens each year. This data science platform is telling us that federal limits on the nation’s most widespread air pollutants are not stringent enough.

This type of data is the sign of a new era for the role of data science in public health, and also for the associated methodological challenges. For example, with enormous amounts of data, the threat of unmeasured confounding bias is amplified, and causality is even harder to assess with observational studies. These and other challenges will be discussed.

Note: The registration is now open and students are encouraged to submit their abstracts using the EventBrite registration link provided above.





## *Call for submissions: The 6<sup>th</sup> Analytics Without Borders Conference*

Hosted by **Bentley University** on March 26th (tentatively), 2021 in partnership with Bryant University, Tufts University and UMass at Lowell.

You are invited to submit your presentation to the 6th Analytics without Borders conference. Due to the pandemic of COVID19, the conference will be a virtual conference this year.

This conference is a forum for individuals from all areas of analytics to present and discuss their work, be it from corporate institutions, academia, government organizations, etc. All groups will be able to interact with each other and thus build bridges between the different analytics constituencies.

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

Both undergraduate and graduate students are encouraged to submit their research or side research projects.

Submission due date is **March 1<sup>st</sup>, 2021**. Please visit our online [submission page](#).

Please visit our conference website for more details at [the 6<sup>th</sup> Analytics Without Borders Conference](#).

## ***The 25th New England Isolated Statisticians Meeting (NEISM25) – Postponed until November 2021***

Under non-pandemic circumstances, the 25th New England Isolated Statistics Meeting (NEISM25) would be held this November. However, in the current circumstances we, the organizers, have decided to postpone this anniversary meeting until November 2021 (tentatively scheduled for Saturday, November 6, 2021). We hope that by then we can hold a special, in person, event.

It is too early to ask you to hold the date but do keep it in the back of your mind. We will send out a notice as soon as we have more definite information. Please do not hesitate to contact one of us if you have questions.

Stay safe and well.

Regards,  
The NEISM25 Organizing Committee  
John McKenzie (mckenzie@babson.edu)  
Bob Goldman (robert.goldman@simmons.edu)  
Rob Carver (rhcarter5@gmail.com)  
Michael Sale (msale@stonehill.edu)

## **OTHER LOCAL AND REGIONAL EVENTS**

### ***Virtual Fall Seminars offered by the IDSS Institute at MIT***

The Institute for Data, Systems, and Society (IDSS) at MIT has announced the following dates and speakers for its Fall virtual presentations in the Distinguished Seminar Series:

- October 5, 2020; 4:00 pm -5:00 pm; Online  
Rachel Kranton, Duke University: “Social Networks and the Market for News”
- November 2, 2020; 4:00 pm-5:00 pm; Online  
Eric J. Tchetgen Tchetgen – Luddy Family President’s Professor, University of Pennsylvania
- December 7, 2020; 4:00 pm – 5:00 pm; Online  
Bruce Western – Bryce Professor of Sociology and Social Justice, Columbia University

Please see <https://idss.mit.edu/calendars/category/idss-distinguished-seminar-series/> for registration and Zoom login information

## JOURNAL NEWS AND RELATED ANNOUNCEMENTS

### *The Journal of Public Health Policy (JPHP) Welcomes Elena N. Naumova of Tufts University as Its New Editor-in-Chief*

The *Journal of Public Health Policy (JPHP)* is a quarterly peer-reviewed medical journal established in 1980 by Milton Terris. It covers the field of public health and is the official journal of the National Association for Public Health Policy. The aim of the journal is to create an inclusive public health policy dialogue among its readers and to broaden the debate to include all forces and environments that impinge on the health of populations. It provides an exciting platform for framing policy debates and honing policies to solve new problems and unresolved old ones.

Dr. Elena Naumova, Professor at the Friedman School of Nutritional Science and Policy at Tufts University and Chair of the Division of Nutrition Data Science, has served as Statistical Editor for the journal since 2004. In January of this year, she was appointed Editor-in-Chief of the journal. Welcoming her to this new position, the out-going Co-Editors Anthony Robbins and Phyllis Freeman wrote the following:

“Professor Elena N. Naumova will surely lead JPHP forward with imagination and rigor in an increasingly hazardous world. Not only is she immensely accomplished, Elena Naumova never met a public health issue that failed to fascinate her. She is brilliant in her own work and, as this journal’s statistical editor since 2004, tireless in helping our authors to bring greater meaning to their work for JPHP’s global readership. She has been a most enthusiastic, encouraging, and effective mentor for authors around the world.



Originally from Novosibirsk (Siberia), Russia, Elena studied mathematics and statistics there before moving to Japan, then the United States where she began her work in public health on issues related to air and water quality. Building from her mathematical foundation, she has since expanded the range of her public health focus to climate change, extreme weather, disease surveillance, immune response, and malnutrition. She is an avid advocate of using novel information technologies and underutilized data sources for public health research and practice.

In 1997, Elena arrived at Tufts University’s Department of Community Medicine and Public Health in the School of Medicine before moving on to academic administrative responsibilities as Academic Dean for Faculty, Director of the Office of Faculty Affairs, and now as Chair of Nutrition Epidemiology and Data Science in the Friedman School of Nutrition Science and Policy. She has authored more than 180 peer-reviewed articles and book chapters and worked with other public health journals in some editorial capacity. She is or has been Principal Investigator for millions of dollars of

research grants from major science funders, including many grants pertaining to climate change—and drawn considerable media attention to these topics. The quality of attention she devotes to students has brought her large numbers of postdoctoral, doctoral, masters, and bachelor candidates with research projects for her to supervise - around the world.

We are honored that she has chosen to devote a substantial portion of her energy and intelligence to the *Journal of Public Health Policy*. Under Elena’s scientific leadership, we trust that JPHP will continue to paint an informative picture of all the things that can harm or enhance health.”

[Read the full Editorial here.](#) Robbins, A., Freeman, P. *We welcome JPHP’s new Editor-in-Chief: Elena N. Naumova. J Public Health Pol* **41**, 1–3 (2020). <https://doi.org/10.1057/s41271-019-00190-5>

### ***New Articles in Harvard Data Science Review (HDSR)***

The latest issue of HDSR contains a timely collection of 15 articles (6 forthcoming in August and September) that should inspire much discussion and debate. Editor-In-Chief Xiao-Li Meng appropriately sets the stage for the reader with his delightful editorial (complete with a recipe), “What is your List of 10 Challenges in Data Science?” This issue truly embodies HDSR’s mantra, *Everything Data Science and Data Science for Everyone*, as it features a high school student, a comedian, and two presidents (one for a university and one for a professional society), among many others from industry and academia. Other topics include:

- A conversation with MIT President Rafael Reif on COVID-19 and MIT’s College of Computing
- Recent work by LinkedIn’s data science team on causal inference
- Data science and home cooking
- An interview with the lead author of a recent study that raises questions about the accuracy of making predictions using machine learning techniques
- Papers addressing the challenges in data privacy and statistical science
- How businesses can successfully implement data and AI strategies
- Plus, Deep Learning and Differential Privacy, the use of data science in urban planning, why data science education should begin in kindergarten, and much more!

The articles are available at <https://hdsr.mitpress.mit.edu/> A special issue on “COVID-19: Unprecedented Challenges and Chances”, published in May, 2020, is also available here.

## ***BCASA Member Phil Gona Published COVID-19 Opinion-Editorial***

ASA member Phil Nyakauru Gona wrote an opinion-editorial entitled "Global Message from Scientists on COVID-19", which was published in the Sunday Mail of Zimbabwe. The article was prepared on behalf of members and alumni of Global Young Academy and delivered specific recommendations for sharing accurate information about the epidemic and opening two-way communication between scientists and the public. You can read the published piece at [www.sundaymail.co.zw/global-message-from-scientists-on-covid-19](http://www.sundaymail.co.zw/global-message-from-scientists-on-covid-19)

## ***New Mini-Series: "Data Science Frontiers in Pharma"***

The first episode in the mini-series describes Advances in Biotech/Biopharma from the perspective of the Boston Chapter of the ASA.

**Weidong Zhang** (Jounce Therapeutics) discusses data science challenges in immunotherapy. **Wenting Cheng** (Biogen) covers work in multiple sclerosis and acute optic neurosis. Major themes include statistical innovation, innovative/complex designs, and wearables, along with adaptive design and protecting the scientific integrity of clinical trials.

Watch the episode on:

- **Youtube:** <http://www.youtube.com/watch?v=AZcw9I7Nckc>
- **Podbean:** [podofasclepius.podbean.com/?p=14493274](http://podofasclepius.podbean.com/?p=14493274)

Pod of Asclepius is sponsored by the ASA's Statistical Learning and Data Science Section, Medical Device and Diagnostics Section, and North Carolina Chapter.

## AWARDS AND RECOGNITIONS

**Francesca Dominici**, the Clarence James Gamble Professor of Biostatistics, Population and Data Science at the Harvard T.H. Chan School of Public Health, and Co-Director of the Data Science Initiative at Harvard University, is the 2020 recipient of the Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society at the 2020 JSM. Her citation reads “For her high-quality, innovative, and policy-relevant science; “for her commitment to transparency and reproducibility in science; and for her work in developing statistical methods for evaluating health effects of exposure to air pollution”

**Tracey Ke**, Assistant Professor of Statistics at Harvard University, received the Noether Young Scholar Award at the 2020 JSM. Her citation reads: “For outstanding early-career contributions to nonparametric statistics”.

**Sherri Rose**, Associate Professor of Health Care Policy (biostatistics) at the Harvard Medical School, has been named an elected Fellow of the American Statistical Association (ASA). In her work, Rose focuses on statistical machine learning for health care policy. She currently studies fairness for risk adjustment formulas and the generalizability of computational health economics algorithms. In 2015, she founded the Health Policy Data Science Lab with associate professor of health care policy (biostatistics) Laura Hatfield, PhD, to create a collaborative, inclusive work environment to investigate policy issues using statistical methods. Her citation reads: “For outstanding contributions to statistical methodology for health policy, particularly in computational health economics; for exemplary leadership service; and for dedicated mentoring of young scholars and promotion of diversity of the profession”.

**Ching-Ti Liu**, Professor of Biostatistics at Department of Biostatistics at Boston University, has been named Fellow of the of the American Statistical Association. Liu’s research interest mainly focuses on the development of statistical and computational approaches for genetics/genomics and bioinformatics studies. In addition, Dr. Liu also collaborates as a statistician or statistical geneticist on several projects studying complex diseases such as diabetes, obesity, musculoskeletal disorder, and cancer. His citation reads: “For outstanding contributions and strong leadership in both the development of innovative statistical methods and in collaborative research to elucidate the genetic basis of complex human traits and for dedicated service to the profession.”

**Greta Ljung and Lisa Mukherjee** are the recipients of the ASA Award for Outstanding Chapter Service as announced at JSM 2020. The awards are given in recognition of their long-term service on the BCASA Planning Committee and for their important contributions to the Chapter as President and Treasurer, respectively. Congratulations to both!

**Nicholas Horton**, Beitzel Professor of Technology and Society (Statistics and Data Science) at Amherst College has taken over as co-chair of the National Academies Committee on Applied and Theoretical Statistics (CATS). CATS advises government, academia, industry, and nonprofit

organizations on the ways that statistics and data science can be used to improve decision making and policy using data.

**Robert Goldman** retired from Simmons University on June 30, 2020 after 48 years. He joined Simmons College on July 1, 1972. Bob was involved in changing the name for his department from Mathematics to Mathematics and Statistics. He expects to continue as an active member of the BCASA Planning Committee. He has been the president of the chapter and received the ASA Council of Chapters Service Award in 1999. Bob co-created the Mosteller Statistician of the Year Award and was responsible for the Outstanding Undergraduate Teaching Award. Bob plans to spend more time with his family, especially his two grandchildren, Theo and Eleanor.

## IN MEMORIAM

### *Remembering George Cobb*

submitted by Nicholas Horton



We are saddened by the passing this May of long-time chapter member and Mosteller Statistician of the Year George Cobb (Mount Holyoke College) after a long illness. George was an international leader in efforts to bring statistics education into the 21st century. His papers, writing, books, and talks were always provocative and thoughtful. His paper “Mere Renovation is Too Little Too Late: We Need to Rethink Our Undergraduate Curriculum from the Ground Up” helped to catalyze efforts to ensure that statistics is relevant and that our students see the excitement and potential of the discipline.

In addition to the Mosteller Award, George was a Fellow of the ASA and recipient of the ASA Founder’s Award. George served on the National Academies Committee on Applied and Theoretical Statistics and the Board of the ASA. He was the inaugural recipient of the US Conference on Teaching Statistics Lifetime Achievement Award in 2005 (the award has since been renamed in his honor).

George is survived by his spouse Cheryl and his daughter Lee Tae.

More information can be found in the Amstat News article by Allan Rossman and Thomas Moore (<https://magazine.amstat.org/blog/2020/07/01/remembering-george-cobb-1947-2020/>).

Picture (above) of George Cobb in 1995.

## *Remembering Susan Fera Assman*



This summer, we were saddened to learn about by the passing of **Susan Fera Assman**, who for many years was an active member the BCASA's Planning Committee. Susan lost her courageous battle with cancer at the age of 63 on Saturday, May 30. She was born in Princeton, NJ, the daughter of the late Frederick and Mary Assmann. Susan was the class of 1974 valedictorian at Hopewell Valley Central High School in Pennington, NJ. She graduated summa cum laude from Dartmouth College in 1978 and earned a Ph.D. in mathematics from the Massachusetts Institute of Technology in 1983 and a M.S. in biostatistics from the University of Massachusetts School of Public Health, Amherst in 1994. She has an Erdős number of 2. Susan was a Principal Statistician at HealthCore (formerly New England Research Institute) in Watertown, MA, where she worked for a week shy of 26 years, following a career as a mathematics professor at UMass Lowell and at Regis College in Weston, MA. Susan was the co-author of over 60 scientific publications and her statistical analyses of data from clinical trials will aid many patients. Susan was an avid reader, a student of the English art of change ringing, an enthusiastic amateur harpsichordist, and an ardent supporter of the early music community in Boston.

Susan is survived by her husband and soulmate, Jeffrey Del Papa of Waltham, MA, and by several members of her family.



## BOSTON CHAPTER NEWS AND ANNOUNCEMENTS

### *Nominations Sought for the 2021 Mosteller Statistician of the Year Award*

We are currently seeking nominations for our 2021 Statistician of the Year award. The BCASA Mosteller Statistician of the Year award is presented each year at a dinner/lecture in February or early March to a distinguished statistician who has made exceptional contributions to the field of statistics and has shown outstanding service to the statistical community, including the Boston Chapter. The honoree may be from academia, industry, or government.

Please forward all nominations by October 31, 2020 to Joe Blitzstein at [blitz@fas.harvard.edu](mailto:blitz@fas.harvard.edu). Please include a brief description of the candidate's qualifications for the award. Following the deadline, the Chapter officers will meet to select the winner.

The winner of this award in 2020 was Professor Eric Kolaczyk from Boston University. A complete list of past winners can be found at <http://community.amstat.org/bostonchapter/awards/mostellerstatistician>.

### *Nominations Sought for the 2021 Excellence in Undergraduate Teaching of Statistics Award*

The aim of this award is to honor someone who has made significant contributions to teaching statistics to undergraduate students. 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 responsibilities include 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 not be eligible for this teaching award. Nominees unsuccessful in one year will be reconsidered automatically the following cycle.

For more information about the award contact Shannon Stock at [sstock@holycross.edu](mailto:sstock@holycross.edu).

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

The nomination deadline for the 2020-2021 award is February 15, 2021.

## *Four New Chapter Officers Elected for Terms Starting January 1, 2021*

In April, 2020, the chapter elected the following officers for two-year terms starting on January 1, 2021:

**President:** Olga Vitek, Northeastern University

**Program Chair:** Kristin Baltrusaitis, HSPH

**Webmaster:** Piaomu Liu, Bentley University

**Newsletter Editor:** Elizabeth Kane, Avania

Congratulations to All! We appreciate their willingness to serve and look forward to working with them. The next chapter elections will take place in May 2021 when three new officers will be elected. Details will be announced in an upcoming newsletter.

## *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](mailto:lobrien@colby.edu).

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

## *Please Join the BCASA Planning Committee*

Chapter activities are planned and organized by a core group known as the Planning Committee. Please consider joining us. The committee is open to all interested chapter members, regardless of whether they are also members of the ASA. We meet several times per year to plan upcoming activities for the chapter. The meetings are held in the evening and typically include dinner. For more information contact Miriam Chernoff ([mchernoff@sdac.harvard.edu](mailto:mchernoff@sdac.harvard.edu)).

## *Please Join the Boston Chapter*

Membership in the Boston Chapter of the ASA offers many privileges. 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](mailto:kane1215@bu.edu) will be included in a future BCASA newsletter.

### *Associate Director, Biostatistics (Rare Genetic Disease) at Agios*

Agios ([agios.com](http://agios.com)) is a biopharmaceutical company committed to applying our scientific leadership in cellular metabolism to transform the lives of patients with cancer and rare genetic diseases. We are growing rapidly with an active research and discovery pipeline across both therapeutic areas. Agios has two approved oncology precision medicines and multiple first-in-class investigational therapies in clinical and/or preclinical development.

Agios is seeking an innovative Associate Director for our Biostatistics team. Our statisticians lead, develop and implement statistical solutions to support all phases of clinical trials and influence decisions across our oncology and the rare genetic disorder platforms. The successful candidate will function as an independent program statistician across multiple clinical development programs, and will supervise study level statisticians/programmers at CROs.

Agios Statisticians are accountable for all biostatistics study deliverables and manage key trial responsibilities including: statistical design of all phases of trials, authoring of SAPs, and conducting just-in-time analyses and data exploration. The successful candidate must possess the desire and ability to work with study teams up through and including leadership responsibilities as part of our growing, evolving group.

#### **RESPONSIBILITIES:**

- Serve as the statistical leader and project manager for all biostatistics deliverables across assigned clinical development programs
- Ensure that clinical development programs (or parts assigned) meet scientific, regulatory, and quality requirements
- Manage outsourced biostatisticians/programmers, and mentor team members as needed
- Perform trial statistician responsibilities including attendance of study team meetings, authoring SAPs, reviewing CRFs, design of phase 1-3 and PK studies, review of protocols/amendments, conducting exploratory data analyses, and performing just-in-time analyses
- Apply innovative statistical approaches to study design, analysis and data exploration methodologies, including Bayesian adaptive methods to dose finding
- Plan and track study level activities within programs, including resources; ensure CRO timelines and objectives are met
- Help establish and maintain Agios data standards, within and across programs (e.g. standardization of CRFs, outputs, SAPs)
- Plan and manage submission activities, like SCS, SCE, briefing books.
- Serve as a general clinical development and statistical resource at Agios; participate in non-clinical project activities

**REQUIRED QUALIFICATIONS:**

- PhD in Biostatistics and 5+ years biopharmaceutical industry experience as a biostatistician OR;
- Masters Degree in Biostatistics and 10+ years biopharmaceutical industry experience as a biostatistician
- Fluent in English (oral and written)
- Prior Experience with regulatory submissions
- Proven knowledge and expertise in statistics and its applications to clinical trials
- Fluent with statistical software including SAS, R, EAST, among others
- Proven ability to work independently
- Excellent communication and presentation skills
- Team player, with ability to work successfully across functions
- Ability to lead and inspire Biometrics teams; previous experience managing contractors
- Innovative, flexible mindset

[Apply via the Agios website](#) or email [jill.donovan@agios.com](mailto:jill.donovan@agios.com)

### *Director, Biostatistics at Agios*

Agios (agios.com) is a biopharmaceutical company committed to applying our scientific leadership in cellular metabolism to transform the lives of patients with cancer and rare genetic diseases. We are growing rapidly with an active research and discovery pipeline across both therapeutic areas. Agios has two approved oncology precision medicine and multiple first-in-class investigational therapies in clinical and/or preclinical development.

**Description:**

We are seeking an experienced biostatistician who will be responsible for leading, developing and implementing statistical solutions to optimally support all phases of clinical trials, regulatory interactions and decision making.

The successful candidate:

- Will provide input and review statistical considerations for pharmacokinetic endpoints in protocols, provide guidance and review statistical analysis plans for pharmacokinetic endpoints, provide input and review specifications for ADAM data sets and outputs for pharmacokinetic endpoints across the entire Agios portfolio (oncology and RGD); Industry experience in early development studies with a PK component is required
- Will function as lead statistician within Oncology responsible for statistical design of trials, development of statistical analysis plans, authoring and/or review specifications for analyses, conducting just-in-time analyses, and authoring responses to questions from health authorities
- Will have the opportunity to take a leadership role in the Biostatistics function at Agios and must possess the desire and ability to work with study teams up through and including leadership responsibilities

### **Duties and Responsibilities:**

- Manage outsources biostatistics and programming deliverables associated with pharmacokinetic endpoints and analyses; provide input and review analyses specifications, review summary documents and technical documents associated with pharmacokinetic analyses
- Support submission components associated with pharmacokinetic data across the Agios portfolio
- Ensure CRO timelines and objectives are met
- Serve as a lead statistician within Oncology
- Participate in the response to health authority inquiries associated with a regulatory submission
- Ensure that clinical development programs meet scientific, regulatory, and quality requirements
- Perform trial statistician responsibilities as needed, including attendance of study team meetings, contribute to study design and protocol development, author and review SAPs, review CRFs, develop and/or review analyses specifications, perform just-in-time analyses
- Apply innovative statistical approaches to study design and analysis
- Help establish and maintain Agios data standards, within and across programs
- Serve as a general clinical development and statistical resource at Agios; participate in non-clinical project activities.

### **Minimum Requirements**

- PhD in Biostatistics or related discipline with 8+ years biopharmaceutical industry experience; MS in Biostatistics or related discipline with extensive industry and leadership experience will be considered
- Industry experience in early development studies with a PK component is required
- Prior experience in an early development program statistician role or lead statistician actively contributing to Summaries of Clinical Pharmacology or other Technical Documents associated with pharmacokinetic-response analyses (4 years minimum)
- Working knowledge of CDISC strongly preferred
- Experience with regulatory filings strongly preferred.
- Proven knowledge and expertise in statistics and its applications to clinical trials
- Fluent with statistical software such as SAS
- Ability to work independently
- Fluent in English (oral and written)
- Excellent communication and presentation skills
- Team player, with ability to work successfully across functions
- Ability to lead and inspire Biometrics teams
- Innovative, flexible mindset

### **Agios Competencies**

- *Drives and Delivers:* Executes and Operates to a High Standard and Resourceful
- *Connect and Relate:* Collaborates and Stays in Touch
- *Build and Transform:* Improves Continuously and Builds Networks
- *Lead from Every Chairs:* Empowers Self and Others and Challenges Self and Others

[Apply via the Agios website](#) or email [jill.donovan@agios.com](mailto:jill.donovan@agios.com)



**Senior Biostatistician, Cambridge, MA**

Requisition Number: CLD20-901

*At Blueprint Medicines, we are a leading company in the personalized medicine revolution by focusing on delivering new medicines that are targeted to the genetic driver of disease. We do this by leveraging our one-of-a-kind drug discovery platform to discover, develop and work to bring highly-selective kinase inhibitors to patients globally. This prolific scientific platform has enabled Blueprint Medicines to build a pipeline of novel therapies that span three distinct areas of medicine; genomically defined cancers, rare diseases and cancer immunotherapy.*

**Job Summary:**

This position is responsible for statistical aspects of study designs, planning and execution of statistical analyses for multiple clinical development programs, health authority submissions, presentations and publications, by working closely with colleagues in clinical development, translational medicine and research, and with key outsourced functions including data management, SAS programming, clinical pharmacology, medical writing, and regulatory affairs to advance Blueprint Medicine’s drug candidates under development. This position will perform tasks under the guidance of the supervisor, and gradually gain independency.

**Responsibilities:**

- Contribute to clinical protocol development, including authoring of the section on statistical methods and reviewing/editing of all sections.
- Author statistical analysis plans for clinical trials, and author/edit mock tables, listings and figures (TLFs). Oversight external statistical programmers to generate TLFs and ensure quality of deliverables.
- Review CRF designs to ensure data collection meet the study objectives and the requirements of statistical analyses.
- Specify randomization schedules and test their implementations. Support ongoing safety review of the program/study teams and data monitoring committees.
- Perform ad hoc statistical analyses and basic SAS programming as needed.
- Contribute to the clinical study reports, including authoring of statistical sections and interpretation of the study results. Support regulatory submissions.
- Support the preparation of publications, including manuscripts, posters and oral presentations.
- Participate in department and cross-functional meetings to optimize clinical study designs, endpoints, and analysis strategies.
- Keep abreast of new developments in statistics, drug development and regulatory guidance through literature review, conference attendance, etc.

**Qualifications:**

- PhD in statistics or a related field with 0 to 3 years of clinical trial experience in the pharmaceutical industry, or MS in statistics or equivalent with at least 3 years of clinical trial experience in the pharmaceutical industry.
- Experience in oncology clinical research is preferred but not required.

**Capabilities:**

- Knowledge of statistical methods that apply to Phase I-IV clinical trials.
- Knowledge of FDA and ICH regulations and guidelines.
- Proficient in statistical programming (SAS is required, and R is a plus).
- Strong interpersonal skills and excellent written/oral communication skills including grammatical/technical writing skills.
- Self-motivation and self-confidence are critical.

*All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or status as a protected veteran.*

To apply: <https://blueprintmedicine.applytojob.com/apply/PQ0oSKDuTi/Senior-Biostatistician?source=ASA>



## BCASA REGION STATISTICS SEMINARS

Below is a list of the regional statistics (& mathematics) and biostatistics departments that often offer statistics seminars, along with URLs for each department and its seminars. If your institution would like to appear on this list, please contact 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://sph.bu.edu/Biostatistics/department-of-biostatistics/menu-id-617603.html>

<https://sph.bu.edu/Biostatistics/seminars/menu-id-617654.html>

### **Brown University**

Division of Applied Mathematics

<http://www.dam.brown.edu/>

[http://www.dam.brown.edu/dam\\_seminars.shtml](http://www.dam.brown.edu/dam_seminars.shtml)

### **Brown University School of Public Health**

Department of Biostatistics

<http://www.stat.brown.edu/>

### **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**

Department of Biostatistics

<http://www.umass.edu/sphhs/biostatistics>

**University of New Hampshire**

Department of Mathematics & Statistics

<http://www.math.unh.edu/>

<http://www.math.unh.edu/seminars>

**University of Rhode Island**

Department of Computer Science and Statistics

<http://www.cs.uri.edu/>

**University of Vermont College of Engineering and Mathematical Sciences**

Department of Mathematics & Statistics

<http://www.uvm.edu/~cems/mathstat/>

**Worcester Polytechnic Institute**

Department of Mathematical Sciences

<http://www.wpi.edu/academics/math/>

<http://www.wpi.edu/academics/math/news.html>

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 individuals listed below.

<b>BCASA OFFICERS</b>	
President, 2019-20	Joseph Blitzstein, Harvard University
Program Chair, 2019-20	Olga Vitek, Northeastern University
Past President, 2019-20	Greta Ljung, Consultant
Vice-President, 2020-21	Shannon Stock, College of the Holy Cross
Secretary, 2020-21	Wenting Cheng, Biogen Inc.
Treasurer, 2016-21	Lisa Mukherjee, Consultant
Council of Chapters Representative, 2019-2021	Mingfei Li, Bentley University
Webmaster, 2019-20	Jeremiah Perez, Avania
Newsletter Editor, 2019-20	Elizabeth Kane, Avania
<b>BCASA COMMITTEE CHAIRPERSONS</b>	
Education Committee	Shannon Stock, College of the Holy Cross
Mu Sigma Rho	Liam O'Brien, Colby College
Membership Committee	Committee Chair to be appointed