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Two—Exploring ASA Sections
and Interest Groups



STATISTICS AND DATA SCIENCE:
INFORMING POLICY AND
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2024 Joint Statistical
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Portland, Oregon

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KEY DATES FOR PARTICIPANTS

February 1 - April 15, 2024

Late-Breaking Session Proposal Submission

May 31, 2024

Draft Manuscript Deadline



KEY DATES FOR ATTENDEES

May 1, 2024 (11:00 a.m. ET)

Registration and Housing Open

June 3, 2024

Early Registration Deadline

June 4 - July 1, 2024

Regular Registration

July 2 - August 8, 2024

Late Registration

July 5, 2024

Housing Deadline

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ASA

The American Statistical Association is the world's largest community of statisticians. The ASA supports excellence in the development, application, and dissemination of statistical science through meetings, publications, membership services, education, accreditation, and advocacy. Our members serve in industry, government, and academia in more than 90 countries, advancing research and promoting sound statistical practice to inform public policy and improve human welfare.

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STAT*tr@k* is a column in *Amstat News* and a website geared toward people who are in a statistics program, recently graduated from a statistics program, or recently entered the job world. To read more articles like this one, visit the website at http://stattrak.amstat.org. If you have suggestions for future articles, or would like to submit an article, please email Megan Murphy, *Amstat News* managing editor, at megan@amstat.org.

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Getting Started in Government, Agency, and Legislative Advocacy

This column is written for those interested in learning about the world of Data for Good, where statistical analysis is dedicated to good causes that benefit our lives, our communities, and our world. If you would like to know more or have ideas for articles, contact David Corliss at davidjcorliss@peace-work.org.





Upcoming Events!

Theory will meet practice and networks will be created at the **2024 SYMPOSIUM ON STATISTICS AND DATA SCIENCE**. A gathering of data scientists, computer scientists, and statisticians—from students to seasoned professionals—will exchange ideas, learn about new data tools and methodologies, and see data science in action. Intrigued? Registration opens February 5. Learn more about the symposium, slated for June 4–7 in Richmond, Virginia. http://tinyurl.com/2y4kpxck

If listening to your colleagues present their work on establishment statistics is a goal for 2024, consider attending **ICES VII**. Taking place in Glasgow, Scotland, it's a unique opportunity to interact with statisticians from around the world interested in survey methodology. Registration opens February 15. Get the details at https://tinyurl.com/2x2pddrw.

Late-Breaking Proposals Sought

The Joint Statistical Meetings 2024 Program Committee has allocated two coveted slots for invited sessions specifically dedicated to late-breaking topics. Proposals should be submitted from February 6 – April 15 via the online submission system at ww3.aievolution.com/JSMAnnual2024. For details about late-breaking sessions, visit https://bit.ly/3tKRyg3.

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Registration Open for Joint Research Conference



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Statistics: A Core Competency for Collaborative Science

ASA Adds Open-Access Journal to Provide Unrestricted Access to Scholarly Research

Hello, ASA Colleagues,

Statisticians and data scientists—we are ONE community. Our collective aspiration is to inform decisions and drive discovery. We know the challenges to attaining this vision are significant, so collaboration is key. As a statistician working to inform public policy, I know it will take collaboration across disciplines to address society's biggest challenges (e.g., pandemic recovery, climate change, precision medicine, education reform, criminal justice). In an era of data ubiquity and rapid analysis, statisticians and data scientists are positioned to play a central role across application areas.

Yet perversely, the nature of what we do is a major barrier to increasing visibility for our contributions. Our work is often complex, and it can be hard for a nonstatistician to understand. So, our myriad contributions across all areas of science are easy to overlook. We need to communicate our impact in ways a nonstatistician can appreciate (e.g., by storytelling about how statistics affects the lives of real people every day). However we approach this challenge, the responsibility to take action lies with us.

The American Statistical Association has consistently sought ways to showcase the impact of our discipline—and our individual contributions to society. The ASA's vision is "a world that relies on data and statistical thinking to drive discovery and decisions"—to which 2022 President Kathy Ensor added "with statisticians leading the way." I greatly admire this vision and how it is being operationalized.

Under Ensor's leadership, the ASA launched the Influencing Discovery Exploration and Action (IDEA) Forum to bring together scientists, leaders, and policymakers to advance solutions to global challenges and identify opportunities in which statistics plays a critical role. The 2022 IDEA Forum focused on managing and mitigating the impact of climate change. An article in a special issue of *CHANCE* [36.1] titled "The Influencing Discovery Exploration & Action Forum: An Initiative of the American Statistical Association" highlighted outcomes of the forum and future opportunities.

Following the success of the 2022 event, the IDEA Forum in 2023 focused on open science. At the heart of the open science movement is the conviction that open science is better science. More rigorous. More inclusive. More efficient. More trustworthy. More reproducible. More impactful.

A salient recognition of the value of open science is the rapid proliferation of open-access journals, which are a powerful catalyst for transparent, ethical, and collaborative science. The ASA recently added the open access journal *Data Science in Science (DSiS)* to its portfolio of publications. This innovative journal will provide unrestricted access to scholarly research.

To highlight the contributions of open access journals, I want to share with you excerpts of an interview with *DSiS* founding editor David Matteson and Ensor, who had an initiative focused on data science and artificial intelligence. The full interview will appear in *CHANCE 37.1*. Here's how the newest member of the ASA slate of journals will showcase *statistical science as a core competency* for interdisciplinary collaborations.

What specific niche or aspect of data science in scientific research does *Data Science in Science* aim to cover?

David: Our aim is to advance research in any broadly defined scientific domain through contributions



Madhumita (Bonnie) Ghosh-Dastidar



The ASA Board's expectation is that *DSiS* will rise to the stature of our other prestigious journals ... but with an eye toward collaborative science. — Kathy Ensor

inherently enhanced by thoughtful and careful application of modern data science methodology. We also aim to be a home for collaborative research newly enabled through data science that spans multiple scientific domains. Simultaneously, DSiS aims to advance research in data science, itself, through methodological innovations and novel model adaptations that provide a new means for reaching greater scientific understanding and discovery. We also appreciate seemingly small technical changes reached through deep contextual consideration, as these regularly can have major and lasting practical and scientific impacts.

What inspired the ASA to add Data Science in Science to its portfolio of iournals?

Kathy: The ASA supports 16 journals, with our flagship journal being the Journal of the American Statistical Association. However, there was a gap in our offerings that did not adequately serve our community addressing interdisciplinary science. The applications section of JASA provides an outlet, as well as our specialty journals in topic areas, but we lacked this holistic journal dedicated to strongly interdisciplinary science, where data science is central to the scientific advancement. David has done an exceptional job of founding DSiS exactly in the style that will support a large component of our statistics and data science community.

Who is the audience for Data Science in Science?

David: DSiS was founded as open access, so everyone! More seriously, data science, itself, is transdisciplinary and its use spans all quantitative research. We consider that union our broadest potential audience. More specifically, any domain scientist with anything from data science interest to deep technical expertise and any perpetually curious data scientist who enjoys learning new science through a technical lens should feel part of our core community.

Could you provide examples of how the journal aims to encourage cross-disciplinary contributions?

David: We believe the data note article type and the collaborative collections and special issue launches have high potential to attract crossdisciplinary contributions. Consistently providing an excellent process and product and spreading that positive experience through authors' peer networks

may better help us maintain the quality of contributions and community we strive for.

What unique contributions or perspectives do you anticipate *Data Science in Science* offering to the ASA community?

Kathy: The ASA Board's expectation is that *DSiS* will rise to the stature of our other prestigious journals, such as *JASA*, but with an eye toward collaborative science. By showcasing the essential and valuable contributions of our field to innovative scientific breakthroughs, we strengthen our ability to tell the story of our collective scientific impact.

What opportunities will *DSiS* provide for emerging scholars or researchers?

David: I have always been drawn to exciting new applications and motivated to collaboratively develop new methods and learn new things from both perspectives. And many new researchers have a similar passion for collaboration enabled through data science. For all of them, we are a space that celebrates and elevates their joint contributions to science and data science. There are also the early-career editorial positions ..., as well as possible coorganization on a special issue and collection.

What are your long-term goals or aspirations for the journal?

David: Our vision is a radical collaboration to develop a shared foundation of data science that integrates transdisciplinary perspectives; catalyzes novel high-impact cross-domain collaborations; and advances the development of core principles for reproducible, interpretable, transparent, explainable, and ethical data science. Ultimately, we strive to establish an inclusive research community that better leverages our combined efforts and enables discovery and applications that can benefit our society.

How do you envision *DSiS* affecting the ASA community and broader scholarly community?

Kathy: Our collective goal should be to elevate *DSiS* to an internationally recognized journal publishing the highest caliber papers addressing data science's contributions to science and society. David has clearly started the journal with this goal,

and the progress in three years is nothing short of impressive. A big shout out to David and his extensive and top-notch editorial team!

I look forward to this new journal and other exciting opportunities being organized by the ASA for our membership.

As I prepared to assume the role of ASA president, I reached out to my mentors and network of ASA colleagues for their perspectives. "Build on the success of your predecessors" was a common theme in the advice I received. Following that advice, I plan to focus on Influencing Discovery Exploration and Action to create solutions for important policy issues, highlighting statistical innovation and leadership with an eye toward maximizing impact through outreach. I will look to the Committee on Data Science and Artificial Intelligence and all committees of the Professional Issues and Visibility Council to help identify pressing topics most relevant to our membership and society.

Even as we fix our eyes on future achievements, it is essential to recognize achievements that have—for far too long—been under-appreciated. February is Black History Month. It is an opportunity to celebrate and amplify the voices and achievements of Black men and women who have helped propel scientific understanding and innovation, breaking barriers and shaping the future of scientific inquiry. I hope after reading some of their biographies in this issue, you will take the opportunity to honor the legacy of trailblazer Annie T. Randall, who overcame blistering discrimination and overt racism to make extraordinary contributions as a mathematical statistician at the National Institutes of Mental Health. You can go the extra mile by nominating an early-career colleague for the Annie T. Randall Innovator Award at www.amstat.org/your-career/ awards/annie-t-randall-innovator-award.

M. Ghosh Destidar

Predict 5 Creators Give Behind-the-Scenes View

Amanda Malloy and Donna LaLonde

Te predict Mathematics and Statistics Awareness Month will be a celebration!

In anticipation of this annual April focus on promoting mathematics and statistics, three dedicated ASA members have organized a unique contest designed to engage high-school, undergraduate, and graduate students.

Students will submit their numerical predictions regarding five questions on different topics and events taking place in April (the prediction must be a single number per question). There will be prizes for the top finishers! Visit ww2.amstat.org/ mathstatmonth (or scan the QR to the right) for details.

The minds behind the Predict 5 Contest belong to Sarah Pagni, Shruti Jain, and Matthew Finkelman. Here, they tell us a little about themselves and offer advice for the contest.

Tell us a little about yourself.

Sarah: I'm currently an assistant professor and biostatistician at Tufts University School of Dental Medicine, and I've been working here for nearly nine years. I have a PhD in biomedical sciences with a concentration in microbiology from the Icahn School of Medicine at Mount Sinai and an MPH with a concentration in quantitative methods from the Harvard TH Chan School of Public Health. In my role at Tufts, I teach biostatistics to the postgraduate dental students (residents, master's, and DSc candidates) and collaborate with students, faculty, and staff on their research projects.

Shruti: I am a trained dentist and statistician, currently working in the division of biostatistics and experimental design at Tufts University School of Dental Medicine. I completed my training in dentistry in India. I moved to the United States 11 years ago and completed a master's in public health. It was while studying for my master's degree that I realized my love for statistics and decided to pursue a career that combines dentistry and statistics. In my free time, I like working on art projects with my 2-year-old daughter, traveling, and working on my fitness.

Matt: I am an associate professor in the department of public health and community service and the director of biostatistics and experimental design at the Tufts University School of Dental Medicine. I absolutely love my job. I work with amazing people, collaborate on fulfilling research in dentistry and oral

health, and lecture in interesting courses. Our students are awesome. I also conduct research on how to shorten computer-based screening questionnaires without compromising accuracy. On a personal note, I am so proud to be the husband of Amy Krasner and the father of Max and Adeline Finkelman.

Who are your statistical mentors?

Sarah: It might sound a little cheesy, but I would say the collaborative group we have here within our biostatistics team are really the people I admire. A lot of our work is independent, but it's fantastic to have such great statisticians to work and learn with.

Shruti: I have been fortunate to have statistical mentors who have significantly shaped my understanding of the field. David Kriebel, my professor of epidemiology and basic statistical methods, was instrumental in laying the foundation for my understanding of statistical concepts. His phenomenal style of teaching statistics enhanced my learning and created an inquisitiveness to learn more. Additionally, I am constantly inspired by the knowledge and dedication displayed by my colleagues Matthew Finkelman and Sarah Pagni in our statistics-related



responsibilities at work. I have also found user groups like the Boston Area SAS Users Group to be invaluable for staying updated on the latest trends and having discussions about nuanced statistical methods.

Matt: There are so many—I sincerely apologize to anyone I leave out! Victor de la Pena, who helped me start my journey in statistics; David Rogosa, Edward Haertel, Tze Leung Lai, and Susan Holmes, who instilled in me a

passion for rigor in research and for creativity, compassion, and dedication in teaching/ mentorship; David Weiss, who encouraged and guided me in my subfields of interest; Giles Hooker, Dylan Small, Eric Bair, Steven Roberts, Regina Nuzzo, John Storey, Debashis Paul, Eric Stone, Ryan Tibshirani, Armin Schwartzman, Sergey Terentyev, and so many more inspiring and wonderful individuals I met in grad school; Michael Nering, who taught me about the professional side of work while having fun at the same time; Alan Zaslavsky, David Harrington, Paul Catalano, and Musie Ghebremichael, who caringly helped me make the transition to biostatistics; Athanasios Zavras, whose leadership style combines kindness, logic, and fairness; and Sarah Pagni and Shruti Jain, who are the best teammates I could ever ask for.

From a historical perspective, I love the work of Abraham Wald, as I've long had an interest in sequential analysis and admire the clarity and logic of his writings. Moreover, when I take a step back and reflect on how truly lucky I am to have had fabulous mentors not only in statistics, but also in the dental field, it's really amazing to think about.

Last but not least, my dad, Daniel Finkelman, was my first statistical mentor, as he encouraged me to pursue my interest in probability and gave me practice through many games of Strat-O-Matic Baseball. My mom, Carolyn Karp, has been incredibly supportive throughout my education and career.

Have you participated in hackathons or data challenges before?

Sarah: While I haven't directly participated in a hackathon before, I have worked on the back end of research projects that stemmed from dental education hackathons. I also helped organize and participated in DentalFest here, which was a day-long contest for dental students to have fun with dentaladjacent activities.

Shruti: I enjoyed being a student participant in data challenges while attending school in India. In 2019, it was a fun and fulfilling experience to be on the other side of the data challenge when the division of biostatistics and experimental design at Tufts University School of Dental Medicine organized DentalFest, a day of challenges for dental students. It was amazing to see the overwhelmingly positive response to the event.

Matt: About 10 years ago, I organized a small public March Madness pool in which statistical modeling was involved; the winner was the participant whose model had the highest log-likelihood. I also participated in the pool. I learned a lot from the prediction exercise and from losing to my friend Andrew Ho.

What motivated you to create the Predict 5 contest? What do you like about statistical contests, and why do you believe they are important?

Sarah: To become more involved in the greater statistical community and provide a fun way for students to approach statistics. Contests are a fun way to think outside of what a more traditional statistical problem might be, especially for those currently learning statistics.

Shruti: As a statistician myself, I believe statistical contests like Predict 5 play an important role in developing creativity and problem-solving skills among participants. They encourage participants to hone their analytical skills. The competitive aspect of contests encourages participants to come up with novel and diverse approaches to finding solutions to the same problem. I find it interesting to get an insight into these different approaches. My love for challenges and statistics motivated me to support bringing the Predict 5 contest to the ASA.

Matt: I've had an interest in competitions for good causes and/or educational value since I was a teenager. Starting in high school and inspired by the work of Jonathan White, I've had terrific experiences organizing and co-organizing basketball, volleyball, poker, and trivia events to benefit charity.

My colleagues and I also held a DentalFest event and fundraiser at our dental school in which the students competed in fun and educational dental-related challenges.

The new Predict 5 contest is a perfect way to combine my passions for statistics and education. It's going to be a great time, and you can't beat teaching or learning while also

having fun. I love the idea of students developing or sharpening their statistical skills and interest in the field while participating, and maybe one of the students will create a contest or event of their own.

I truly appreciate the efforts of Donna LaLonde, Amanda Malloy, and the ASA in collaborating with us on this initiative!

Do you have any advice for students who are about to try their hand at predicting, perhaps for the first time?

Sarah: Be creative and have fun!

Shruti: Predicting an outcome is an art and science. Don't be afraid to experiment and keep refining your approach. And most of all, have fun!

Matt: If you use sophisticated techniques to make predictions in a given domain, think about the degree to which those predictions align with simpler approaches and your intuition/ knowledge of the domain.

Are you Team R or Team Python? Or another team?

Sarah: Team Stata all the way. But I do use R, as well, so if I had two choose between the two, I'd be team R.

Shruti: Currently, I am wholeheartedly Team SAS. I am impressed by the user friendliness of R as a programming language, as well.

Matt: I'm Team Whatever Gets the Job Done but will always have a soft spot for R. ■

JOURNAL OF STATISTICS AND DATA SCIENCE EDUCATION HIGHLIGHTS

January Issue Takes on Difficult **History of Statistics**

The January issue of the open-access Journal of Statistics and Data Science Education (JSDSE) leads with a paper by Lee Kennedy-Shaffer that recounts the difficult past of statistics, notably the role of eugenics in the development of the field. He argues we must confront our history to move forward and offers three examples of famous statisticians and their work on eugenics to ground the discussion. He also provides guidance for addressing the troubling history in the classroom.

Other papers published in the issue explore a number of timely topics, including the following:

- Training interdisciplinary data science collaborators (Jessica L. Alzen, Ilana M. Trumble, Kimberly J. Cho, and Eric A. Vance)
- Team-teaching to prepare analytics-enabled professionals (Katie A. McCarthy and Gregory A. Kuhlemeyer)
- A new approach to teaching statistical inference (Mortaza Jamshidian and Parsa Jamshidian)
- How students apply statistics terms to people (Lawrence M. Lesser and Martin Santos)
- Factors related to student success in first-year statistics courses (Alexandr Akimov, Mirela Malin, Yermone Sargsyan, Gayrat Suyunov, and Salim Turdaliev)

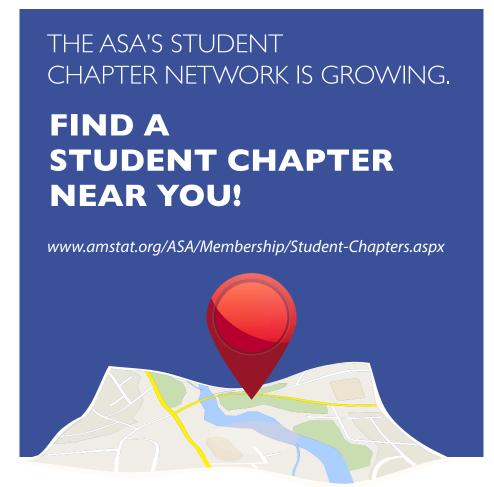
- Anxiety around learning R (Ainsley Miller and Kate Pyper)
- Confidence disparities and pre-course coding (Janet E. Rosenbaum and Lisa C. Dierker)
- An application to create, adjust, and check suitability of data sets (Christopher J. Casement and Laura A. McSweeney)

An exploration of how missing data is handled in dissertations and textbooks (Hairui Yu, Suzanne E. Perumean-Chaney, and Kathryn A. Kaiser)

The issue also includes an editorial that highlights interviews with notable statistics and data science educators and a Taylor & Francis collection of open-access interviews.

MORE ONLINE

These articles and more can be found at www.tandfonline.com/ journals/ujse21.



JEDI CORNER

Critical Race Theory and Statistical Analysis: What You Need to Know

Emily Griffith

The Justice, Equity, Diversity, and Inclusion (JEDI) Outreach Group Corner is a regular component of Amstat News in which statisticians write about and educate our community about JEDI-related matters. If you have an idea or article for the column, email the JEDI Corner manager at jedicorner@datascijedi.org.

ood statistical practice involves understanding the frameworks in which we obtain data, perform inference, and apply findings. One such framework, critical race theory, is widely known, widely criticized, and widely misunderstood.

Critical race theory is a legal and academic framework that considers the role of systemic racism in American society. This framework examines the effects of racial bias in institutions and structures, not just the bias of individuals. It also emphasizes that racialization—the process by which society organizes racial groups—is a unique driver of racial disparities, over and above differences in other socioeconomic factors associated with race, according to Chandra Ford and Collins Airhihenbuwa in their American Journal of Public Health article, "Critical Race Theory, Race Equity, and Public Health: Toward Antiracism Praxis."

To explain and motivate the importance of critical race theory to statisticians, the JEDI Outreach Group sponsored the 2023 Joint Statistical Meetings session "Critical Race Theory for Statisticians: Incorporating CRT into Statistical Analysis." Organized by David Corliss of Grafham Analytics and chaired by Kim Sellers of North Carolina State University, the session featured panelists Melody Goodman of New York University, Stephanie Cook of New York University, and Scarlett Bellamy of Boston University. Rebecca Andridge of The Ohio State University served as a discussant.

Goodman presented an analysis of Stand Your Ground laws and defendant convictions in Florida from the PubMed article "Race, Law, and Health: Examination of 'Stand Your Ground' and Defendant Convictions in Florida," which she and several coauthors wrote.

Her presentation demonstrated how critical race methodology, which draws on tenets of critical race theory and focuses on structures embedded with racism, provides a vocabulary and structure for examining public health outcomes. Stand Your Ground laws expand the right to self-defense by allowing individuals to defend themselves using deadly force when they believe, reasonably, they are in danger. Several studies mentioned in FRONTLINE's "Is There Racial Bias in 'Stand Your Ground' Laws?" have shown these laws increase the number of homicides and, due to racial bias, result in the increased killing of Black people specifically.

Goodman made an interesting and essential point about the importance of clearly defined vocabulary to discuss these issues. For example, race, itself, is not a risk factor for specific public health outcomes, as it is a social construct and not a biological or genetic factor. When race is used, it is a proxy measure for racism, discrimination, and other sociodemographic variables we do not necessarily collect. Statisticians and other scientists need to understand contexts and structures leading to poor health outcomes.

In Goodman's Stand Your Ground analysis, race, itself, is not a risk factor, but members of a racial group are at high risk of racial profiling and discrimination. Her analysis found cases involving white victims were more likely to result in a conviction compared to those involving non-white victims.

Cook's presentation built on the ideas presented by Goodman. In her talk, "How Do We Incorporate a CRT Perspective in Our Statistics Courses?," Cook focused on teaching students to think carefully about the scientific research questions we are interested in and the specific metrics associated with those questions. She emphasized



Emily Griffith is an associate professor of the practice in the department of statistics at North Carolina State University. She has been a member of the JEDI Outreach Group since its inception in 2021.

measures of race, ethnicity, and other identity-based variables should have meaning for the population they describe. She also introduced the concept of quantitative intersectionality, a framework that describes how group membership (e.g., race, gender, class) is intertwined and influenced by overarching systems of power and oppression.

For example, health disparities experienced by Black women cannot be understood as a grouping of the effects of being "Black" and being a "woman," but are best understood as the specific experiences of being a Black woman compared to other intersecting groups (e.g., Black men, white men, and white women).

Cook gave several practical examples of using this concept, even in an introductory course. One was that, for a two-sample t-test, the groups could be "Black women" and "Black men," instead of modeling the same effect of gender identity across race. This simple shift introduces the concept of intersectionality to students and will push them to think more critically about the data we collect and conclusions we draw.

Cook pointed out that this is an exciting time to be involved in this work, as there is so much being done. She concluded with this idea: "Statisticians can help make the invisible visible. But we first must remove any and all stigma associated with discussing power and privilege."

Bellamy's talk, "Measuring People and Thoughtfully Representing Them in Statistical Models," took the idea of incorporating critical race theory one step further. While Goodman focused on using it in research and Cook discussed using it in the classroom, Bellamy discussed incorporating the underlying themes of critical race theory into our research teams, including faculty and staff hiring and evaluation and student recruitment. She mentioned diversity work is often viewed as a form of benevolence or work we do because we should. However, diverse teams improve the science by increasing rigor and pursuing more broadly relevant problems than are addressed by teams with limited diversity.

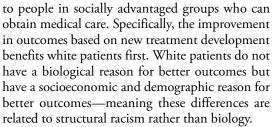
One example Bellamy shared involved a cancer amenability index. Parisa Tehranifar and coauthors wrote that as amenability—or the likelihood cancer will respond well to treatment-increases, white patients have substantially better outcomes than others in their PubMed article titled "Medical Advances and Racial/Ethnic Disparities in Cancer Survival." This disparity does not exist for unamenable or hard-to-treat cancers. The improvement in outcomes due to treatment is only available

Digging Deeper

Self Defense and 'Stand Your Ground', National Conference of State Legislatures, https://bit.ly/3TQjslt

Applying an Intersectionality Lens in Data Science," Data4Change, https://bit. Iv/3HfSBrA

"Science Benefits from Diversity," Nature, https://go.nature.com/3TU2FxW



Wrapping up the discussion, Andridge shared a redlining map of Columbus, Ohio, and described research by Jeffrey Wing and coauthors in the PubMed article "Historic Redlining in Columbus, Ohio, Associated with Stroke Prevalence" showing stroke rates today align with historical redlining practices. She emphasized that the impact of systemic racism is measurable and stressed that, as statisticians, we need to familiarize ourselves with the language of critical race theory and learn what it is and is not—exactly as we would when learning a new statistical technique.

Andridge also called on statisticians to interrogate their metrics and ensure their models are measuring all factors of interest in a rich, clear, and accurate way. She emphasized that incorporating a critical race theory framework into our work is an evidence-based approach and re-emphasized Bellamy's closing point: Leave the profession better than you found it.

Session attendees were engaged and asked questions leading to discussions about secondary data analysis, sampling strategies to reach underserved and/or historically marginalized populations, and appropriate statistical methodology.

If you found this content interesting, you can learn more by reading the articles in the Digging Deeper sidebar. You can also join the JEDI Outreach Group by visiting https://datascijedi.org/ get-involved. ■



Melody Goodman New York University



Stephanie Cook New York University



Scarlett Bellamy Boston University



Rehecca **Andridge** The Ohio State University

Practical Significance Take Two—Exploring ASA Sections and Interest Groups











Sharina Person

This interview with Susan Paddock, executive vice president and chief statistician at NORC at the University of Chicago; Sharina Person, professor and vice chair of the department of population and quantitative health sciences at the University of Massachusetts Chan Medical School; and Wendy Martinez, senior mathematical statistician for data science at the US Census Bureau, was conducted by Practical Significance co-hosts Donna LaLonde and Ron Wasserstein during a recent podcast.

Ron Wasserstein: What motivated you to join a section and then eventually become the leader of a section?

Sharina Person: I joined the Biometrics Section at the same time I joined the ASA, while I was in graduate school. As a trained biostatistician, the Biometrics Section was just a natural fit that aligned with my training and the focus of my career at the time. I've always benefited from the resources and training provided by the section but was on the margin, if you will.

How I got into leadership is a funny story. I got a call out of the blue from a colleague at a local institution who asked if I would be interested in running for a leadership position. I didn't think I would win because I didn't feel like anybody knew me or I had the credibility because of not being as active in the section as I could have been, but who knew I would end up winning?

And it was one of the best decisions I could have made because it not only provided me the ability to connect with other statistical professionals nationally and internationally who I may not have had an opportunity to connect with before, but it also allowed me to give back. I've been enjoying the time that I've been in this role and am a little sad it's ending this year.

Susan Paddock: Similar to Sharina, I started in sections when I was a graduate student. I did my dissertation on nonparametric Bayesian methods at Duke University. And the Bayesian Statistics Section was a natural entry point when I was a graduate student. For me, it was important to be active in that section for a whole host of reasonsnetworking and just being part of a community. I was meeting other people who were coming out of graduate programs around the same time, and so that was a lot of fun.

My section memberships mirror the course of my career. For the first 15 or so years of my career, I was in and out of the Bayesian Section and Health Policy Statistics Section as an officer. Those sections were particularly important for my career development. And that's interesting because they're quite different sections. That's one thing I really like about the ASA sections—there is such a variety. There are so many ways to find relevant and extremely helpful communities.

Wendy Martinez: Like Susan and Sharina, I became a member of the ASA as a student. I was first introduced to ASA sections by my PhD adviser, Ed Wegman. He was heavily involved with the Statistical Computing and Statistical Graphics sections when I was working on my PhD. I was hanging around with him at my first JSM [Joint Statistical Meetings] and went to their section mixer. It was such a wonderful way to meet people because you're in this relaxed atmosphere.

I just remember I thought, "Wow, this is just a great group of people and I want to be part of it." I joined the sections and, at that time, I worked for the



US Navy as a civilian and the Defense and National Security Section was just getting established.

Once it was established, they needed candidates to run for some of the offices and I volunteered. I was elected, which also was a surprise, but that was the start of my ASA leadership journey.

Ron Wasserstein: Susan, I'm going to get back to you for the next question. Donna mentioned your role in the Council of Sections Governing Board, and I expect some ASA members don't know what that is. What does the Council of Sections Governing Board do, and what sort of things is it up to these days?

Susan Paddock: The Council of Sections Governing Board supports members of the ASA as they pursue their scientific and statistical interests. The support is through the creation of sections and interest groups. The governing board has the role of promoting coordination and cooperation across sections and serves as a voice for sections at the ASA board level.

The Council of Sections is a particularly important and interesting entity within the ASA. When I first became a Council of Sections representative for a section, it opened my eyes to how the ASA works. I certainly recommend serving in that role.

The Council of Sections provides a way to make sure the issues that are important to one section are heard throughout the broader ASA. I should probably explain that sections are groups of at least 200 ASA members who are organized around a particular statistical approach or statistical area of practice or some sort of theme. This allows the sections to contribute to the JSM program formally in terms of having invited and topiccontributed sessions, other sessions, activities, etc. Sections often initiate other activities, as well, such as webinars or conferences. Interest groups can be started with a petition of 25 ASA members. However, unlike sections, interest groups do not need to have all their members involved with the ASA, so interest groups can be effective for outreach. In fact, this year, we have two new interest groups that exemplify this. One is called the Partnership for Clinical Research and Statistics. One of their main goals is to be a voice in the clinical research community and consult with other professional organizations in that space. The other interest group is the Privacy and Confidentiality Interest Group, a wide-ranging and important topic, as well, that touches a lot of areas.

In terms of what the Council of Sections Governing Board is focusing on this year, we sponsored a JSM workshop for section officers to discuss the findings from the ASA's Anti-Racism Task Force report and what the report means for sections. Another initiative is monitoring the health of sections. We conduct an annual survey to find out what activities the sections are undertaking for their members, which can spark ideas across the Council of Sections when sections hear about what others are doing—such as newsletters or social media campaigns. We are also discussing conferences with sections, making sure the communication channels between sections and the ASA are open, such as understanding to whom to reach out when a section is thinking about organizing a conference.

Donna LaLonde: We're going to focus on what Biometrics and Text Analytics is up to. Sharina. what are some of the initiatives Biometrics is working on? If you can, look in your crystal ball and tell us what might be coming in the future.

Sharina Person: The Biometrics Section is focused on getting back to basics, specifically reconnecting with our members, as well as the leaders reconnecting with each other. We're holding meetings more frequently so we can strategize on how we

The main reason to join a section is that it can 'shrink' the ASA down to size. . . . You might not feel alone at JSM if you have a section mixer to attend.

can benefit from cross-collaboration. We also want our section members to tangibly feel the benefit of joining the Biometrics Section.

We're deep in the weeds about what our members want and need and creating more opportunities for individuals to actively get involved. We're also developing seminars, workshops, roundtables, and continuing education opportunities for a proposal for the upcoming JSM.

We just elected new leadership in the Biometrics Section who are dynamic and ready to go to tackle our strategic initiatives. And we're excited about these endeavors. So be on the lookout if you're a member of Biometrics for celebrations along the way.

Donna LaLonde: Wendy, what's Text Analytics up to?

Wendy Martinez: This is our first year of existence, and we're getting organized and transitioning from being an interest group. And thanks to the fantastic colleagues and leaders we have in this section, we already have accomplished important things this year.

We had a small symposium in July [2023] on statistics and large language models, which was jointly hosted with the New York City Metro Area ASA Chapter and the department of statistics at Columbia University. We also helped draft a late-breaking session on large language models like ChatGPT that was accepted and presented at JSM in Toronto. So that was exciting.

We also led the effort to write a response to the President's Council of Advisors on Science and Technology's request for public input on threats posed by the use of large language models and their use to spread disinformation. This was submitted to the ASA Board for approval and dissemination.

As for the future, we submitted a proposal for an introductory overview lecture on large language models for JSM 2024. And like most of the sections, we're also working on invited sessions for ISM, so we're looking forward to Portland.

Ron Wasserstein: Thanks! On to my next question: Why should someone join a section? What advice do you have about getting involved?

Susan Paddock: The main reason to join a section is that it can 'shrink' the ASA down to size. I believe people can be intimidated by the size of the ASA and JSM. You might not feel alone at JSM if you have a section mixer to attend. And that might sound kind of silly, but a huge part of going to conferences is connecting with people.

Wendy Martinez: It's not just the JSM, because there's so much interaction between the sections through discussion boards and conversations through the ASA mechanisms for communicating with members. We're having an ongoing conversation throughout the year where you learn about opportunities and you're able to network with people.

But the important thing is that you're networking and interacting with people who have similar interests to you. And as statisticians and data scientists, we come from many different domains.

Sharina Person: I agree wholeheartedly! And it allows you to benefit from all the wonderful resources and workshops that are available. In terms of section involvement, I encourage people just to speak up. I have gotten more emails from people who want to volunteer, and that's wonderful. Let's figure out a way to give you a meaningful experience that will be mutually beneficial to you and the section.

Ron Wasserstein: Nearly 40 years ago, on the advice of my PhD mentor, I wandered into a section mixer at JSM, and that led to 20 years of volunteering with the ASA before coming on the staff. Showing up and speaking up—those things make a difference.

STAFF SPOTLIGHT

Jacquelyn Ganskopp

ello! My name is Jacquelyn Ganskopp, and I am thrilled to have joined the finance team at the American Statistical Association.

I grew up on a farm in the eastern panhandle of West Virginia. It was an awesome place to grow up! I went to a 12-year school and graduated in a class of 34. I went on to West Virginia University, where the class sizes were significantly larger. In May of 1983, I graduated with a degree in accounting and married my high-school sweetheart, Michael, a couple months later. We lived in Pittsburgh, Pennsylvania, for about a year and a half before moving to Alexandria, Virginia, where we have lived since.

I worked for a public accounting firm in Old Town Alexandria for six years. After that, I worked for the American Moving and Storage Association (or some form thereof—there were multiple mergers) for 29 years, until its dissolution in 2021.

My brothers and I still own our father's farms in West Virginia. The farms were protected by conservation easements long before Yellowstone was a television show. In the fall of 2021, Michael and I bought 163 acres of land adjacent to one of our family farms. We are in the process of protecting 155 of those acres with a conservation easement and planning to build a retirement home on the remainder.

I have been serving on the board of a land trust in West Virginia since 2008. The trust's mission is to protect the forests, farms, rural heritage, and waters of the Cacapon and Lost Rivers watershed for the well-being and enjoyment of present and future generations. It is a mission near and dear to my heart.



Jacquelyn Ganskopp's hobby is intarsia, a form of wood inlaying that results in a mosaic-like picture.



Jacquelyn Ganskopp

I have a daughter in Newport News, Virginia, who is married and has two children. I have a son who just got married in September and lives in Denver, Colorado. I have an extended family of brothers and nephews and their families in West Virginia.

When I am not working, I enjoy spending time on our family farms in West Virginia. I

also enjoy a type of woodworking called intarsia, which is a form of wood inlaying that results in a mosaic-like picture. ■



BLACK HISTORY MONTH 2024

In celebration of Black History Month, we recognize members from the Black/African-American collective who have made contributions to the field of statistics as mentors, professors, and entrepreneurs. Read their biographies to learn how they entered the field, what they've accomplished, and how they built their professional careers.



MORE ONLINE Read full profiles of these statisticians at https://magazine. amstat.org.



Kobi Abayomi

Affiliation: Betaside Recordings

Education: Bachelor's, Georgia Institute of Technology;

PhD, Columbia University

Kobi Abayomi once dreamed of becoming a physicist, but he switched majors after he took his first class in statistics at Georgia Institute of Technology. Calling himself an applied methodologist, he has worked on many applied problems and tried to create or derive methodology particular to each. Right now, he is working on the science behind music listening demand and music creation and curation. This past summer, he and a student in the music information program at Georgia Tech discovered a precise way to predict demand for a song from just the way it sounds.





Jemar Bather

Affiliation: Merck

Education: BA, Statistics, Penn State; MS, Applied Statistics, New York University; PhD, Biostatistics, Harvard

As someone who always found joy in identifying data patterns and applying formulas for problem-solving in mathematics, Jemar Bather took advanced math courses and participated in extracurriculars such as Future Business Leaders of America in high school. Moving on to Penn State, he initially pursued an engineering degree but switched to statistics after a captivating introductory course. After graduating, he sought professional development in statistics through the Joint Statistical Meetings Diversity Mentoring Program and International Biometric Society Eastern North American Region Fostering Diversity in Biostatistics Workshop. This involvement broadened his understanding of diverse career paths and provided opportunities to build a professional network and speak on panels about his graduate school experiences. He eventually went on to Harvard to earn a PhD in biostatistics, which he calls his proudest moment. Currently, he is a senior scientist in biostatistics at Merck, where he applies his statistical expertise to develop new medications that enhance health outcomes for those affected by infectious diseases.



Chandra Erdman

Affiliation: Google

Education: PhD, Statistics, Yale University

Chandra Erdman's world was small and unpredictable while growing up in low-income housing in Brooklyn Park, Minnesota. The odds of academic success were against her, but she found a sense of control in numbers. She also found confidence and a way to expand her possibilities exponentially. Math changed her life; she started college at 15 and earned her first degree in mathematics by 20. Eventually, she become the first Black person to earn a PhD in statistics from Yale University. She is now a technical program manager at Google, where she leads a program that improves security for more than 150 products in Google Cloud.

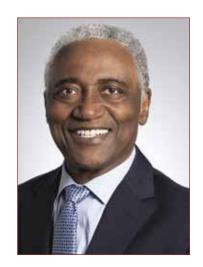


Drake Gibson

Affiliation: US Department of Homeland Security

Education: BA, Economics; Master's, Applied Economics, University of Maryland

Drake Gibson is a lifelong Prince George's County, Maryland, resident who became passionate about data science after learning to program in R and Python in graduate school. While working at the Bureau of Labor Statistics, he took on projects that enhanced his knowledge—his colleagues noticed and encouraged him to apply to be a data scientist. He started a new job at the bureau soon after and learned about record linkage, classifying text with unsupervised and supervised machine learning models, and how to lead a multidisciplinary team. In 2022, he presented his work at the R Government Conference at Georgetown University, which he calls his proudest moment. Currently, he leads a team of skilled data scientists.



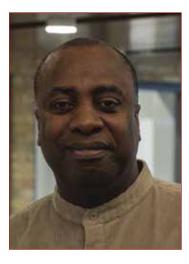
Yoyd J. Edwards

Affiliation: University of Alabama at Birmingham

Education: BA, Mathematics, Morehouse College; Master's, Mathematical Statistics, University of Maryland; PhD, Biostatistics, The University of North Carolina at Chapel Hill

Lloyd J. Edwards' interest in statistics began in his senior year at Morehouse, when he worked with Arthur Jones in the department of mathematics on a data analysis project. Later, he had an old classmate explain what biostatistics is, and that is when he knew he wanted to pursue a PhD in it. He says, "I wanted to use my mathematical and statistical education to have a positive impact on peoples' lives and felt strongly that biostatistics was the right choice for me." Over the next 30 years, Edwards planned and analyzed clinical trials and collaborated with researchers on a broad range of areas in biomedical research, including cardiovascular disease, cystic fibrosis, cancer, aging, pediatrics, and minority health. He has also trained, mentored, and recruited numerous Black biostatistics students, something he considers his proudest professional accomplishment.





Defuran Richardson

Affiliation: Lake Forest College

Education: BA, MS, and PhD, mathematics, Northwestern University

DeJuran Richardson was pursuing a purely mathematical path of study when, midway through graduate school, he was introduced to the biostatistics field by a chance stumble into a conference on sequential methods and testing in clinical trials. The combination of sophisticated mathematics, practical applications, and public health relevance on display was irresistible to him. Richardson loves teaching, but he especially loves mentoring undergraduates and helping others with a background similar to his own. He is currently the Ernest H. Volwiler Professor of Mathematics, senior adviser to the president, and immediate past chair of the department of mathematics and computer science at Lake Forest College.



Christophe Toukam Tchakoute

Education: Master's, Epidemiology, Columbia University; PhD, Statistics, Stanford University

Christophe Toukam Tchakoute grew up in Cameroon during the peak of the HIV/AIDS epidemic, which is how he became interested in STEM. His interest was reinforced when he attended the University of Cape Town in South Africa and became curious about the chemistry and cell biology of HIV and how the virus can hijack the immune system for its own benefit. Consequently, he interned in the HIV/AIDS department at the World Health Organization and was introduced to epidemiology and biostatistics. He eventually earned a full PhD scholarship to Stanford University. He has since graduated and now informs clinical trial design for different oncology programs at Genentech.



Lehana Thabane

Affiliation: St Joseph's Healthcare

Education: BS, Mathematics, National University of Lesotho; Master's, Statistics, University of Sheffield; PhD, Statistics, Western University

Lehana Thabane was always fascinated by numbers and the information one can get from a single number. As such, he developed a strong interest in mathematics and took all the mathematics courses offered to him as an undergraduate. When he ran out, he took statistics courses because they were closely related to mathematics. He has mentored more than 200 graduate students and junior faculty, won several teaching and mentorship awards for his commitment to building capacity in health research, and established the journal Pilot and Feasibility Studies. He is currently vice president of research at St Joseph's Healthcare. ■



ata journalism is the practice of telling stories with data. Writer and journalist Naila Moreira and data scientist Ben Baumer teach a hands-on data journalism course at Smith College that focuses on journalistic practices, using data as a source, and interpreting results in context. We wanted to know more about Moreira, Baumer, their course, and data journalism, so we asked the following questions:

Naila, what or who inspired you to be a journalist/writer?

I got started in journalism while working toward my PhD in geoscience at the University of Michigan. I became intrigued by science and the public interest right about the same time I felt a hankering to return to my longtime love of writing.

I pursued a summer science policy fellowship at the National Academy of Sciences in Washington, DC, where I was given the chance to write news articles about breaking scientific findings for the National Academies website. I loved it.

On the advice of Justin Gillis, then a reporter at The Washington Post and later The New York Times, I returned to my graduate program, joined the reporting staff of the Michigan Daily as their first research beat reporter, and-following Gillis' exhortation—"did not leave." The clips I wrote for that student paper enabled me to apply for journalism jobs.

Ben, what or who inspired you to be a data scientist?

I don't think any one person inspired me to become a data scientist. For starters, "data scientist" wasn't a thing when I was growing up!

I think I'm a data scientist because it provides an approach to solving problems that makes sense to me. I've always been the kind of person who finds data to be a compelling vehicle for becoming

ABOUT THE PROFESSORS

Naila Moreira is the science writing specialist in the **Jacobson Writing** Center and directs the journalism concentration at Smith College. She has



published science journalism, nature writing, fiction, and poetry in venues including The Boston Globe, Daily Hampshire Gazette, Terrain. org, and Cider Press Review. She has poetry forthcoming in Scientific American and a middle-grade novel from Walker Books US in the spring.

Benjamin S. Baumer is a professor in the statistical and data sciences program at Smith College. He has been a practicing data scientist since 2004, when he became



the first full-time statistical analyst for the New York Mets. He won the Waller Education Award from the ASA Section on Statistics and Data Science Education and the Significant Contributor Award from the ASA Section on Statistics in Sports in 2019.

more informed, and I enjoy learning the various technical skills used in data science (e.g., mathematics, statistics, computer science, etc.).

I also enjoy writing, and that has helped tremendously in making this course successful.

Why do you think it's important to teach data journalism?

Ben: Journalism is our best tool for keeping the public informed, which, as we've seen, plays a vital role in a healthy democracy. There are many jobs in data science that basically amount to figuring out better ways to encourage people to click on links, and we have many students at Smith who want to use their data science skills to do something that will have a more personally meaningful impact upon our culture and society. Data journalism offers a path to do just that.

Naila: Encouraging writers to bridge the gap between the 'humanistic' and 'scientific' fields is a huge interest of mine. Science is human, and our humanity can grow through science.

Data journalism allows us to turn the analytical lens of data science on people's daily lives, needs, hopes, and future. From there, the journalist's writing and reporting techniques can help bring that knowledge and understanding directly to the broader public that needs it most.

Briefly describe the curriculum for vour course.

Ben: We read and write!

First, I want to acknowledge that the first version of this course was developed and taught by Amelia McNamara (now of St. Thomas), and we borrowed heavily from what Amelia created.

In a nutshell, Naila and I have different skills and training we bring to the course, but we're trying to move students into the same place—a place



BEN BAUMER

Dear Data, Giorgia Lupi and Stefanie Posavec

Communicating with Data, Deborah Nolan and Sara Stoudt

NAILA MOREIRA

On Writing Well: The Classic Guide to Writing Nonfiction, William Zinsser

Telling True Stories, edited by Mark Kramer and Wendy Call

The New Ethics of Journalism: Principles for the 21st Century, edited by Kelly McBride and Tom Rosenstiel



where they can write a high-quality piece in a journalistic style informed by data.

Students learn a combination of skills and improve their abilities with research, writing, data wrangling, and data visualization. We read current articles in various publication venues and workshop their writing in multiple ways. In total, students write three pieces of data journalism, and some of them get published!

Naila: We have a great teamwork relationship. I rely enormously on Ben's skill in discovering, parsing, and making sense of data sets. My own skills tend to shine most in the direct reporting, writing, and structural design aspects of journalism. Together, he and I discuss newsworthy themes that might reward a data approach for examples or project work for students.

In the classroom, as Ben noted, we start by teaching basic skills that underpin data journalism via shorter written assignments. We then help students design a larger journalistic team project within their own interests.

I try to treat students as if they are already professionals and, indeed, we've had student pieces published in our local paper, The Daily Hampshire Gazette.

Do your students pitch stories to you, or do you give them topics to write about?

Ben: Yes, they pitch ideas to us, and we use our collective experience to help them craft viable articles from their pitches. That process has actually been interesting in its own right, because Naila and I have different hunches about what might make a story successful or unsuccessful. Sometimes, the feedback is like, "That's a great idea, but where are you going to get the data?" Other times, it's more like, "That's a cool data set, but what is the story?"

Ultimately, the stories they write come from a student-generated, instructor-approved curated list. Naila: We do a lot of scaffolding work to guide students toward newsworthy topics, always aiming to clarify exactly what "newsworthy" means—having a timely news peg, an audience, an impact, a doable scope, etc. We also push them to find and explore data sets from sources they may not have known about or thought of before.

However, the thrust of their articles always comes from them. The students surprise me all the time they bring so much to the table in terms of their own interests and ideas. From their existing knowledge, we work to hone their approach to make it manageable, journalistic, readable, and informative.

Can an individual be both a writer and a data scientist, or do the two generally collaborate?

Ben: I think yes. Obviously, different people have different sets of skills and proclivities, and there are students in the course who are clearly coming to us from one side or the other. But ultimately, we want all students in the course to have some capacity for doing both kinds of work.

For many of the students coming from data science, this is the first college course that has forced them to think intentionally about their writing style, and that experience is often deeply rewarding for them.

Naila: A lot of professional news outlets split duties between people who are officially either data experts or writers. Those two types of journalists collaborate to create the final article. However, I think when each side fully understands the tools of the other, the result comes out stronger. Anyway, nothing stops anyone from either writing well or wrangling data well. Both are just tools, and tools can be mastered.

What is the difference between a journalist and a data journalist?

Ben: Not all journalism is informed by data. When you feel like the data is really pushing the piece forward and is central to what is being discussed, then you've got data journalism.

Naila: Ben's right about data being the core of the data journalism piece. Also, though, data journalists may source their ideas and topics differently. They extract newsworthy ideas from data, rather than from stuff people tell them or that they find in written documents.

Ben and I have often talked about 'interviewing' data much like interviewing a human source. In today's big-data world with gobs of quantitative information available or extractable online, data journalists have a lot of novel opportunities.

Should all journalists be data journalists?

Ben: No, there is plenty of room for non-data journalism.

Naila: Agreed! But all journalists could benefit from some data training.

How does data journalism combat misinformation?

Ben: Misinformation is tough because, if your goal is to misinform, you could make up data and pass it off as data journalism. But I think we've already seen changes in political and sports journalism toward more data-driven storytelling. Compared to 10 years ago, a story about the NBA Finals today, for example, is much more likely to focus on which team is scoring with greater

"Not all journalism is informed by data. When you feel like the data is really pushing the piece forward and is central to what is being discussed, then you've got data journalism."

— Ben Baumer

efficiency than which team's star player 'wants it more.' In politics, despite all the challenges pollsters are facing, the narratives can't ignore polling to the degree they could in the past.

Naila: Understanding data and how to write about it can help journalists spot and fight misinformation.

I don't think data journalism is necessarily less subject to bias or abuse—there are a lot of ways to bend, misrepresent, or falsify data. However, when handled well, data can give reporters and readers an important gut check.

Like, how many people were at Trump's inauguration? Well, we can argue about that without much back up or we can report on time-tested methods of crowd estimation, what their limitations and advantages might be, and what they tell us.

What advice would you give to aspiring journalists when it comes to working with data?

Ben: Brooke Williams of Boston University came to our class last year and taught us a great lesson about what events make records. Of course, every time someone gets arrested, there is a record of that, but less obviously, every time someone pays a municipal water bill, there is a record of that. And many of those records are public, so you can get them just by asking (i.e., making a public records request under the Freedom of Information Act).

The best data journalism comes from using a novel source of information to address a question that may not be so obviously related to that data.

Naila: Learn—and ask data experts—before you jump off the deep end and write! I think a temptation with data journalism is to grab a data set



"Combating the Crises: Northampton **Organizations Eye Ways to Address Mental Health Challenges Among LGBTQ+ Youth"** https://bit.ly/3SqQ6LW

"A Higher Ed Game-Changer?: Could MassReconnect Change College **Education in Massachusetts? Experts** Say Yes" https://bit.ly/4b7SnAz

Laura Fay's Substack https://bit. ly/3TYMoYu

and use basic analysis to draw newsworthy conclusions. However, data can hide a lot of assumptions, biases, and blind spots. Is your data set complete? Is it correct? To avoid misrepresentation, it's important to thoroughly think through your data wrangling before you finalize your conclusions.

What is the best way for a data journalist to get a job or have their work published?

Ben: There are lots of online outlets, but I've been impressed with what our students have been able to accomplish at our local paper, the *Daily* Hampshire Gazette. It's a real, longstanding, local

"I think a temptation with data journalism is to grab a data set and use basic analysis to draw newsworthy conclusions. However, data can hide a lot of assumptions, biases, and blind spots."

— Naila Moreira





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newspaper and, like many of its kind, it is feeling the pinch economically. They've been grateful to have high-quality content submitted. For the students, it's a hard byline they can take with them wherever they go, and they know they've helped strengthen local media in the process.

Naila: I took a nontraditional path into journalism, so I know it pays to be persistent and scrappy. Finding any opportunity to write and publish is the crucial first step to a career. That often means starting small. Write articles for your school newspaper. Write freelance pieces or op-eds for a local paper. Write for public-facing or general-interest sections of a trade publication or newsletter in your area of knowledge. Read about how to pitch effectively. Those examples of your writing-your "clips" as they're called in news parlance—are the stepping stones to bigger publication venues and professional jobs.

What books do you recommend aspiring data journalists read?

Ben: I really enjoyed reading Dear Data by Giorgia Lupi and Stefanie Posavec because it illustrates how artifacts from your everyday life—which you might not recognize as data can be used to create compelling data visualizations. These, in turn, could drive stories.

Communicating with Data by Deborah Nolan and Sara Stoudt is wonderful and covers all the bases.

Naila: To complement Ben's data journalism texts, I'll plug some broader texts on good writing and journalism.

William Zinsser's On Writing Well helps any writer improve their nonfiction clarity. Telling True Stories, edited by Mark Kramer and Wendy Call, covers a lot of bases when it comes to designing, reporting for, and writing good journalism. And The New Ethics of Journalism: Principles for the 21st Century, edited by Kelly McBride and Tom Rosenstiel, is crucial reading, as it covers the changing role and responsibilities of journalism in the digital age—the stage from which data journalism as we know it today operates and relates to the world.

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Participate

Invited Session & Workshop Proposal Submission: March 1-31, 2024

Invited Abstract Submission: May 1-31, 2024

Contributed and Poster Abstract Submission: May 15-June 30, 2024

Speaker Registration Deadline: October 15, 2024

Attend

Early Registration and Housing Open: September 10, 2024

Housing Closes: December 12, 2024

Regular Registration Opens: December 5, 2024





David Corliss is the principal data scientist at Grafham Analytics. He serves on the steering committee for the Conference on Statistical Practice and is the founder of Peace-Work.

or most US states, a new legislative session begins near the first of the year, so now is the time priorities are being finalized and legislators are beginning to work on achieving their goals. Since 2024 is an election year, legislatures are focusing on goals the public will notice. Statistics and data will play a vital role in identifying those goals, delivering beneficial results, and measuring impact.

Public advocacy offers many kinds of opportunities, including support for legislation, petitioning government agencies, and seeking financial support for new projects. Many, many organizations are working with governmental organizations and agencies at the local, state, and federal levels—and all use statistical science to help make their objectives a reality. Whatever specific area interests you, there is likely to be a well-established organization working it.

The first step is to contact people addressing your issue of interest and develop a working relationship with them. My first project in D4G was helping Habitat for Humanity, where I volunteered to build houses and use analytics to find more donors and volunteers. This led to policy advocacy for the homeless. Developing a relationship is the essential first step, because Data for Good doesn't move at the speed of science and technology; it moves at the speed of trust.

Advocacy in the public square is inherently interdisciplinary. It's so much more than statistics, requiring advocates to develop skills in teamwork and communication and learn the political process. Communication can be especially challenging because it's not at all like scientific communication. In science, we can address facts, what the data shows, and the degree of

Advocacy in the public square is inherently interdisciplinary. It's so much more than statistics, requiring advocates to develop skills in teamwork and communication ...

uncertainty. By contrast, public advocacy using statistics involves recommending a course of action when all options can have both strengths and weaknesses.

It is crucial to learn to persuade people who disagree with your choice of action to take the steps you want them to take. For example, I would love to recommend support for education based on public good and equal opportunity. However, this approach persuades exactly no one. Those who believe in education for the greater public good don't need to be brought on board again and those who don't aren't motivated by public good and equal opportunity. So, I try to garner support for education using arguments I personally hate, like how it lowers taxes and raises property values. These economic arguments have the power to persuade people who would otherwise oppose money for education. Public advocacy using statistics starts with finding which arguments are persuasive and then bolstering them with science.

Because public advocacy is so interdisciplinary, it's best to work as part of a large team. The best way to do this is by connecting with an existing team working in your area of interest. Statistics is an uncommon and tremendously valuable skill, so many advocacy groups will be glad to have you on board.

Be sure to watch out for groups that don't really understand the impact statistics can have. If an organization just wants you answering phones or calling people to ask for money, think about finding a different group with similar interests. Fund raising, direct services to individuals, and other nonanalytic tasks are important, but we will have the greatest impact by working with an organization that will leverage our work with statistics and data science to make a difference.

Getting Involved

It's a great time to start planning a D4G hackathon for **Earth Day**. Check out the NASA climate change data at https://bit.ly/3O2z0P8 for both inspiration and data to use for an event. Then, connect with local organizations working in your area of interest with a need for data, expert advice, and support.



Stats4Good would also like to highlight an organization working on a serious subject. The K-12 School Shooting **Database** at *https://k12ssdb.org* compiles accurate, reliable data mined from social media, creating an invaluable resource deserving of support.

The ASA is active in advocacy for and using statistics, working to secure funding for research, providing resources for statistical policymakers, and generally raising awareness of statistics and data science and the role they play in making a better world for all.

Steve Pierson is an amazing and inspirational advocate who leads the ASA's science policy and advocacy work. Check out the resources for statistical advocacy at www.amstat.org/policy-and-advocacy. Then, start making your own plans for what you want to accomplish in 2024 and beyond. ■



SDSS 2024 will be held in Richmond, Virginia, June 4-7.

SDSS 2024: Registration, **Lightning Talk Submission Open**

Amanda A. Koepke

he 2024 Symposium on Data Science and Statistics—taking place June 4-7 in Richmond, Virginia—will feature plenary speakers from a variety of backgrounds who will offer thought-provoking sessions exploring topics such as data journalism, ethics and fairness, and the evolving AI research landscape. Participants can also expect courses covering a range of topics, including the following:

- Generative AI Fundamentals and Implementation of LLMs from the Ground Up with Ginger Holt
- Julia for Data Science with Josh Day
- Probabilistic Programming and Bayesian Computing with PyMC with Chris Fonnesbeck
- Effective Graphics for Visual Communication with Data with Susan VanderPlas and Heike Hofmann

Registration and submission for lightning talks are open. Lightning talks include a five-minute presentation followed by an e-poster session,



BEYOND BIG DATA: BRIDGING THE GAP BETWEEN THEORY AND PRACTICE RICHMOND, VA • JUNE 4-7, 2024

which allows presenters to discuss their work at a relaxed pace. Lightning talk submission will close March 10. Visit ww2.amstat.org/meetings/ sdss/2024/submitanabstract.cfm to submit.

As in the past, the symposium will offer networking opportunities such as speed mentoring. SDSS is for professionals at all levels, from those just starting out to seasoned experts.

For more information about the symposium, visit ww2.amstat.org/meetings/sdss/2024 or use the QR code on the left. ■



Learn more at ww2. amstat.org/meetings/ sdss/2024 or use the QR code.

Registration Open for Joint **Research Conference**

he 2024 Joint Research Conference on Statistics in Quality, Industry, and Technology will take place in Waterloo, Ontario, Canada, June 17-20 at the University of Waterloo. This is a joint meeting of the 29th Spring Research Conference on Statistics in Industry and Technology and the 40th Quality and Productivity Research Conference.

The goal of the conference is to stimulate interdisciplinary research and innovative solutions to practical problems through interaction between statisticians, data scientists, quality professionals, engineers, students, and others from diverse fields. The theme of this year's conference is Data Science and Statistics for Industrial Innovation. The technical program will focus on statistical methodology and creative problem-solving to address scientific, industrial, and business challenges, drawing on advances from the statistics, machine learning, and data science fields.

The conference will honor Stefan Steiner, professor and past chair (2014–2022) of the department of statistics and actuarial science at the University of Waterloo. Steiner is an expert in quality improvement, process monitoring, experimental design, and measurement system assessment in the realms of business, industry, and health care. He will give a keynote address titled "The Art and Science of Leveraging."

For an additional fee, participants can register for a full-day, interactive short course (held on June 17) called "Introduction to Large Language Models." Ming Li, director of data science at PetSmart and adjunct instructor at the University of Washington, is the instructor.

The conference will also include (at no additional cost) a technical tour of the Royal City Brewing Co. in Guelph, Ontario.

An important objective of the Joint Research Conference is to encourage student participation, which is done by awarding scholarships such as the Mary G. and Joseph Natrella Scholarship

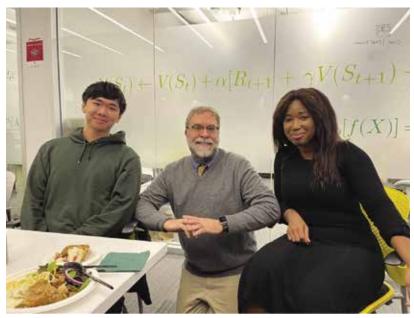


The Joint Research Conference will be held in Waterloo, Ontario, Canada, June 17–20 on the campus of the University of Waterloo.

and student scholarships funded by the National Science Foundation and Canadian Statistical Sciences Institute.

The conference is cosponsored by the American Statistical Association Section on Quality and Productivity, American Statistical Association Section on Physical & Engineering Sciences, and Institute of Mathematical Statistics. Organization of this conference is in partnership with Virginia Tech.

For up-to-date information about the conference program, registration, accommodations, and scholarships, visit the conference website at https:// uwaterloo.ca/jrc-2024. Questions can be emailed to Nathaniel Stevens at nstevens@uwaterloo.ca. ■



Nicholas Horton (middle) talks with Kenny Chen and Anisa Lacey.

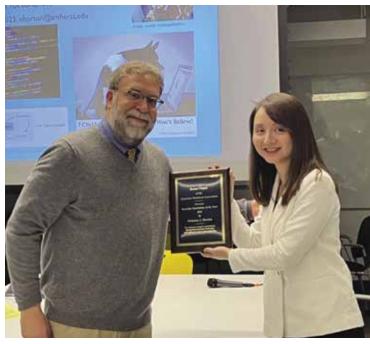


Joseph Blitzstein (right) shares stories about Frederick Mosteller.

Nicholas Horton Honored with Mosteller Statistician of the Year Award

The Boston Chapter of the American Statistical Association recently honored Nicholas Horton, Beitzel Professor in Technology and Society (Statistics and Data Science) at Amherst College, with the Mosteller Statistician of the Year Award. This award is given to a distinguished statistician who has made exceptional contributions to the statistics field and demonstrated outstanding service to the statistical community, including the Boston Chapter.

Originally established in 1990 as the Statistician of the Year Award, it was renamed the Mosteller Statistician of the Year Award in 1997 in honor of its first recipient, Frederick Mosteller,



Wenting Cheng (right) presents the 2023 Mosteller Statistician of the Year Award to Nicholas Horton.



Nicholas Horton gives his presentation, "From the Federalist Papers to ChatGPT."



From left: Olga Vitek, Wenting Cheng, and Nicholas Horton

who served as the founding chair of Harvard's statistics department from 1957-1971, president of the ASA and Institute for Mathematical Statistics, and president of the Boston Chapter from 1959-1960. He was also the only statistician to serve as president of the American Association for the Advancement of Science.

Horton was recognized for his numerous innovative contributions to statistics and data science education and his significant participation in regional statistics activities for more than 25 years. His contributions to statistics and data science education were highlighted and his extensive involvement in professional organizations, including the ASA, were acknowledged.

The event, held in collaboration with Harvard's statistics department, saw close to 50 attendees. Included were introductions of the chapter by current chapter president Wenting Cheng and stories about Mosteller shared by Joseph Blitzstein, a professor at Harvard University and former chapter



Nicholas Horton talks with Sharon Hessney.

president. Tom Lane, also a former chapter president, discussed Horton's contributions, while Amy Wagaman provided a tribute video with messages of appreciation from his students that described his impact at Amherst.

Horton's presentation, titled "From the Federalist Papers to ChatGPT," explored the relevance of text analytics in statistics education and data science and how Mosteller had been a pioneer in this field. ■

Emanuel and Carol Parzen Prize for Statistical Innovation

To promote the dissemination of statistical innovation, the Emanuel and Carol Parzen Prize for Statistical Innovation is awarded in even-numbered years to a North American statistician whose outstanding research contributions include innovations that have affected statistics practice and whose PhD degree is at least 25 years old.

The prize consists of an honorarium of \$1,000 and travel to College Station, Texas, to present a lecture at the prize ceremony.

Nominations for the 2024 prize should include the following:

- A letter describing the nominee's outstanding contributions to high-impact innovative research in statistics
- A current curriculum vita
- Two supporting letters

Nominations should be emailed by March 29 to Samiran Sinha, chair of the 2024 Parzen Prize Committee, at sinha@stat. tamu.edu or mailed to Samiran Sinha, Department of Statistics, Texas A&M University, TAMU 3143, College Station, TX 77843-3143.

The Parzen Prize is awarded by the department of statistics at Texas A&M University and selected by members of the Parzen Prize Committee (consisting of three internal faculty members and two external members). Recent winners include Bin Yu of the University of California, Berkley in 2018 and Herman Chernoff of Harvard University (emeritus) and Peter McCullagh of The University of Chicago in 2022.

For more information about the Parzen Prize, visit https://bit. lv/3GPrraK. ■

ASA AWARDS & RECOGNITION

Know of a deserving person who should be considered for ASA recognition? The ASA's extensive awards program recognizes statisticians who have made outstanding contributions through areas such as:



RESEARCH



CONSULTING



TEACHING



STUDENT **SCHOLARSHIPS**



to the association or profession

Nominate Someone Today! www.amstat.org/awards

Annie T. Randall Innovator Award

The Annie T. Randall Innovator Award was established to recognize early-career statistical innovators across all job sectors with any level of educational attainment. The award was named in honor of pathbreaking Black female statistician Annie T. Randall for her pioneering career in government amid pervasive racial discrimination. Her powerful story and legacy in statistics serve as inspiration for future generations of trailblazers. Established in 2020 by the Biometrics Section, the award provides a \$2,000 prize each year.

Selection Criteria

To be eligible, candidates should be in the early phase of their professional statistical careers. While no more than 10 years into their career is a guideline, career interruptions and transitions are not considered in this count. Committee members appreciate that nontraditional paths are common for trailblazers, so there is no firm cutoff for what is considered early phase. There are also no degree requirements for this award.

A personal statement or nomination letter should discuss how the candidate has pushed boundaries in statistics toward the betterment of the field and society, as well as how they embody Annie T. Randall's tenacity and commitment to excellence. How the candidate meets the broad definition of early career described above should also be addressed in the personal statement or nomination letter.

Deadlines and Contact Information for Select ASA National Awards, Special Lectureships, and COPSS Awards

The ASA's extensive awards program (www.amstat.org/ASA/Your-Career/Awards-and-Scholarships.aspx) recognizes statisticians who have made outstanding contributions to the association and statistical profession through research, teaching, consulting, and service.

AWARD	DEADLINE	QUESTIONS & NOMINATIONS
Statistics in Physical Engineering Sciences Award	February 20, 2024	awards@amstat.org
Gertrude M. Cox Scholarship	February 23, 2024	awards@amstat.org
Edward C. Bryant Scholarship Trust Fund	March 1, 2024	awards@amstat.org
Excellence in Statistical Reporting Award	March 1, 2024	awards@amstat.org
Fellows of the ASA	March 1, 2024	awards@amstat.org
ASA Mentoring Award	March 1, 2024	awards@amstat.org
Outstanding Statistical Application Award	March 1, 2024	awards@amstat.org
Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Award	March 1, 2024	awards@amstat.org
Annie T. Randall Innovator Award	March 15, 2024	Sherri Rose (sherrirose@ stanford.edu)
Biopharmaceutical Section Scholarship Award	March 15, 2024	Biopharmaceutical Community website (community.amstat.org/biop/ awards/scholarship)
Founders Award	March 15, 2024	awards@amstat.org
ASA Pride Scholarship	March 31, 2024	Donna LaLonde (DonnaL@ amstat.org)
Causality in Statistics Education Award	April 5, 2024	awards@amstat.org
Government Statistics Section Wray Jackson Smith Scholarship	May 1, 2024	Nathan Cruze (nathan.cruze@gmail.com)
Links Lecture Award	July 1, 2024	awards@amstat.org
Dorothy Marie Lamb and Annette Lila Ryne Memorial Scholarship	July 15, 2024	awards@amstat.org
Health Policy Statistics Section Achievement Awards	September 15, 2024	Health Policy Statistics Section website (asahealthpolicy.org/for-students)
Lester R. Curtin Award	October 15, 2024	awards@amstat.org
Deming Lecturer Award	October 15, 2024	awards@amstat.org
Lingzi Lu Memorial Award	October 15, 2024	awards@amstat.org

Nominations

Self-nominations or nominations by someone other than the candidate are welcome. Individuals from underrepresented and historically excluded groups in statistics are encouraged to apply. Submissions are due by March 15 and should include the following:

- Candidate résumé or CV
- Candidate personal statement or nomination letter (1-2 pages)

Members of the Annie T. Randall Innovator Award Committee will select the winner. Send nominations and any questions to award committee chair Sherri Rose at sherrirose@ stanford.edu. ■

ASA Mentoring Award

Established in 2015, the ASA Mentoring Award is bestowed upon an ASA member who has demonstrated over a long period extraordinary leadership in developing the careers of statistics students, statisticians, or statistical researchers early in their careers.

Nominations are due by March 1, and the award will be presented at the Joint Statistical Meetings in August. For more information, visit the award webpage at https://bit. ly/48rtAVP. ■

Bryant Scholarship

Applications are being accepted for the Edward C. Bryant Scholarship for an Outstanding Graduate Student in Survey Statistics until March 1. One scholarship recipient is selected annually and receives a certificate and cash prize of \$2,500.

Selection of the scholarship recipient is made by the ASA Bryant Scholarship Award Committee based on the following criteria:

- Potential to contribute to survey statistics
- Applied experience in survey statistics
- Performance in graduate school

Westat established the Edward C. Bryant Scholarship Trust Fund in 1995 to honor its cofounder and chair emeritus and help support a student's graduate education.

Under Bryant's leadership, Westat-an employee-owned statistical firm established in 1961—has grown into one of the world's leading statistical research corporations serving federal, state, and local governments, as well as businesses and foundations.

To apply, fill out the form at https://form.jotform.com/AmStat/ bryant-scholarship. Visit the award webpage at https://bit.ly/4841lwL for more information. ■

ASA Pride Scholarship

Nominations will be accepted for the ASA Pride Scholarship until March 31. To be eligible, candidates must meet the following conditions:

- Be enrolled in a statistics or data science graduate program or have earned a statistics or data science degree within five years of the award date
- Identify as LGBTQ+ or an ally

The ASA Pride Scholarship was established to raise awareness for and support the success of LGBTQ+ statisticians and data scientists and allies. The scholarship celebrates their diverse backgrounds and highlights the invaluable skills and perspectives they bring to the ASA, statistics, and data science.

Send nominations via the form at https://bit.ly/3TYCJ48. For details about the award, visit https://bit.ly/4826uoS. ■



Organized for Defense and Aerospace Communities by









No endorsament of non-NASA and non-DOTRE organizations intended.

DATAWorks 2024 to Focus on Statistical Approaches in Defense, Aerospace

The ASA's Section on Statistics in Defense and National Security is cosponsoring the annual Defense and Aerospace Test and Analysis Workshop April 16-18, which will take place both virtually and in person at the Institute for Defense Analysis in Alexandria, Virginia.

DATAWorks is the result of a multi-organization collaboration between the Operational Test and Evaluation Office of the Director within the Office of the Secretary of Defense, National Aeronautics and Space Administration, Institute for Defense Analyses, and Section

on Statistics in Defense and National Security. The workshop is designed to strengthen the community with a mix of applied problems, unique methodological approaches, and tutorials from leading academics. The goal is to facilitate collaboration, including expanding the community's impact on other government agencies.

The workshop is organized into the following four themes:

- Improving the Quality of Test and Evaluation
- Sharing Analysis Tools, Methods, and Collaboration Strategies

- Advancing Test and Evaluation of **Emerging and Prevalent** Technologies
- Solving Program Evaluation Challenges

Registration includes a fullday short course on April 16, two days of breakout sessions and mini-tutorials April 17-18, lunch, light refreshments, and an evening reception. There is also an opportunity for students to present their work in a poster session.

To learn more about the workshop, visit https://dataworks. testscience.org. ■

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Mathematical Statistician

CENTER FOR DRUG EVALUATION AND RESEARCH OFFICE OF TRANSLATIONAL SCIENCES

The Office of Biostatistics is seeking individuals with strong statistical methodology skills and an interest in biomedical applications to serve as mathematical statisticians. Incumbents work with multidisciplinary teams of review scientists in a dynamic, highly challenging, and innovative atmosphere of development, evaluation, and research of drug and therapeutic biologics. The Office of Biostatistics is responsible for reviews in all therapeutic areas CDER supports and can be as diverse as cardio-renal, oncology, rare disease, and antimicrobial products. Incumbents have an opportunity to employ a broad variety of statistical procedures relevant to pre-clinical and clinical evaluation decisions for new and generic drugs as well as new and biosimilar biologics and the emerging field of quantitative risk assessment.

DUTIES AND RESPONSIBILITIES

- Evaluate and advise on protocols for clinical studies and assess the evidence for safety and efficacy from clinical studies submitted in drug and biologics applications.
- Employ a broad variety of statistical procedures relevant to pre-clinical and clinical evaluation decisions for new and generic drugs as well as new and biosimilar biologics and the emerging field of quantitative risk assessment.
- Work with multidisciplinary teams of review scientists in a dynamic, highly challenging, and innovative atmosphere of development, evaluation, and research of drug and therapeutic biologics.
- Refine your consulting, communication, and presentation skills and present at domestic and international professional meetings.
- Engage in an active collaborative regulatory research program which will allow you to advance your skills and professional development.
- Interact with national, international, public, and private organizations on statistical issues, and help develop guidance for the pharmaceutical industry.

QUALIFICATIONS

Applicants should possess an advanced degree with specific coursework in Statistics, Biostatistics or Mathematical Statistics. Applicants with a doctoral degree and associated experience are highly desirable. In addition to a background in statistics, applicants should have an interest in biostatistics, clinical trials, epidemiology, genomics, or risk assessment.

The ability to communicate statistical issues to non-statisticians is vital.

Non-US citizens may apply for term appointments.

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Paid Holidays Flexible Spending Accounts (FSA) Federal Retirement Plan Thrift Savings Plan (401k)

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LOCATIONS

Mathematical Statisticians are located in the Washington, D.C. area. Remote employment may be available.

FOOD AND DRUG ADMINISTRATION ● CENTER FOR DRUG EVALUATION AND RESEARCH ● OFFICE OF TRANSLATIONAL SCIENCES



Statistical Analyst

CENTER FOR DRUG EVALUATION AND RESEARCH OFFICE OF TRANSLATIONAL SCIENCES

The Office of Biostatistics is recognized for excellence in the application and communication of statistical science in drug regulation and development. We play a central role in promoting innovative, science-based, quantitative decision-making throughout the drug development life-cycle. To support our Center's mission, we provide statistical leadership, expertise, and advice to ensure that safe and effective drugs are available to the American people.

DUTIES AND RESPONSIBILITIES

- Work with a multidisciplinary review team to provide statistical programming and data management support, assess the quality and completeness of submissions, prepare clinical trial analysis datasets, validate sponsor results, assist in modeling and simulation, and suggest possible additional statistical analyses required to fully evaluate the evidence in the submission.
- Collaborate with scientists from the Office of Pharmaceutical Quality, statistical reviewers in OB, and management on
 a variety of computationally intensive projects to support and improve the efficiency of regulatory product review,
 evaluation of pharmaceutical quality and applied regulatory research.
- Use machine learning and natural language processing to assess internal and external data sources to support assessment of quality intelligence throughout the product life cycle.
- Develop, validate, implement, document, maintain and support programming tools and software according to standards and accepted validation procedures; Support efforts to develop, document and apply reusable code and/or tools.
- Develop software using the appropriate statistical programming packages for statistical reviewers to support
 programming-intensive review-related activities such as sensitivity analysis, Bayesian approaches, clinical trials
 modeling, genomic studies, psychometric Clinical Outcome Assessment (COA) validation, and simulation.
- Promote and improve the Center data standards initiatives mandated by the Prescription Drug User Fee Act; Monitor the quality of the implementation of data standards used in New Drug Application submissions.
- Apply your skills to address unique and precedent-setting problems, while refining your consulting, communication, and presentation skills.

REQUIRED QUALIFICATIONS

Master's degree in statistics or biostatistics.

Familiarity with R, SAS, data science tools, machine learning predictive techniques and natural language processing.

PREFERRED QUALIFICATIONS

Experience in clinical trials, epidemiology, genomics, or risk assessment. Strong skills in multiple programming environments.

Candidates should also have excellent oral and written communication skills.

The ability to communicate statistical issues to non-statisticians is vital.

BENEFITS

Health and Life Insurance Long-term Care Insurance Dental and Vision Insurance Annual and Sick Leave Paid Holidays

Flexible Spending Accounts (FSA) Federal Retirement Plan Thrift Savings Plan (401k)

WORK/LIFE BALANCE

Telework & Alternative Work Schedules
Child Care Center | Fitness Center
Employee Assistance Program/Resource Groups
Commuting and Transportation Programs



ARE YOU INTERESTED IN WORKING AT FDA?

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LOCATIONS

Statisticians are located in the Washington, D.C. area. Remote employment may be available.

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- > U.S. citizenship.
- > A Bachelor's degree or higher in Data Science. Computer Science, Mathematics, Statistics, or another directly related field.
- > A combination of progressively higher education and/or experience may be used to further meet the GS-09 to GS-13 requirements.

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This month's Top 10 is the 'Top Ten **Signs the Practical Significance Podcast Is a Success**:



Wasserstein

Amstat News continues its entertaining offering by ASA Executive Director Ron Wasserstein, who delivers a special Top 10—one that aired during a recent edition of Practical Significance. Kicking off a new season of the show, he says, "We've been at the podcast for a while now, and it is a good time to take stock of how we are doing. Here are the 'Top Ten Signs the Practical Significance Podcast Is a Success.'"

We have a steady number of sponsors. (Zero, but it's steady.)

We are one of the top statistics podcasts in Moldova.

08

Listenership has tripled since the podcast began. We have nine listeners now.



To listen to the **Practical Significance** podcast, visit https:// magazine.amstat.org/ podcast-2.

Donna never gets any complaints about the podcast content.

06

Our budget still allows for a top 10 list. Plans to reduce it to the top eight were scrapped.

Plans to reduce to one podcast host (you can guess which one) were also scrapped.

We have a rating of 5 on Spotify. Just one rater—but that person loves us!

Some guests have even been willing to make a second appearance.

Our podcast is THE favorite on my iPhone.

#01

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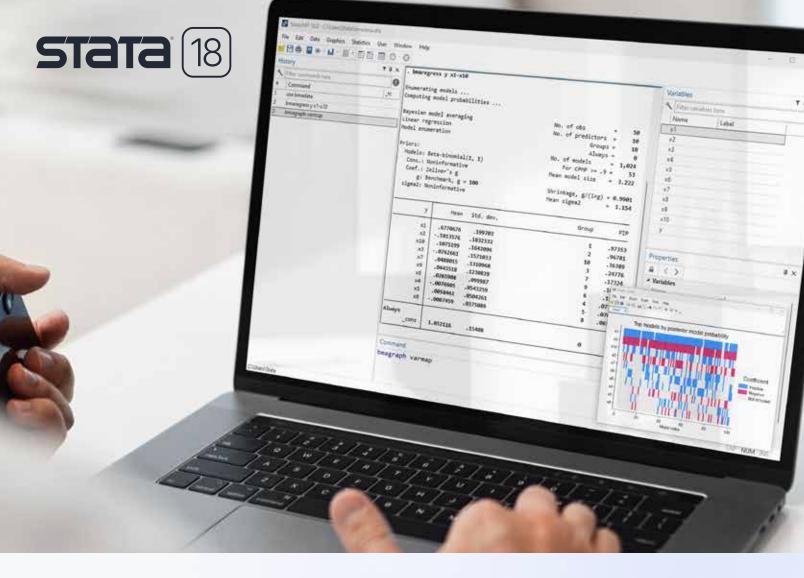
Join participants from all over the world in Glasgow, Scotland—famous for its art, architecture, and culture—to discuss emerging issues and improved techniques related to business, farm, and institution data. Topics will include statistical techniques, survey methods, and emerging technologies and feature data from sources such as censuses, sample surveys, and administrative records.

Participation is open to all who are interested in establishment surveys, which is typically those in academia or at national statistical institutes, private businesses, and statistical organizations. Whether your area of interest is estimation strategies, frame development, questionnaire design, data collection, dissemination, or data visualization, you will find something to like at ICES VII.

ICES values its truly international character—plan to gather in Glasgow in 2024.

Learn more at ww2.amstat.org/meetings/ices/2024.





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