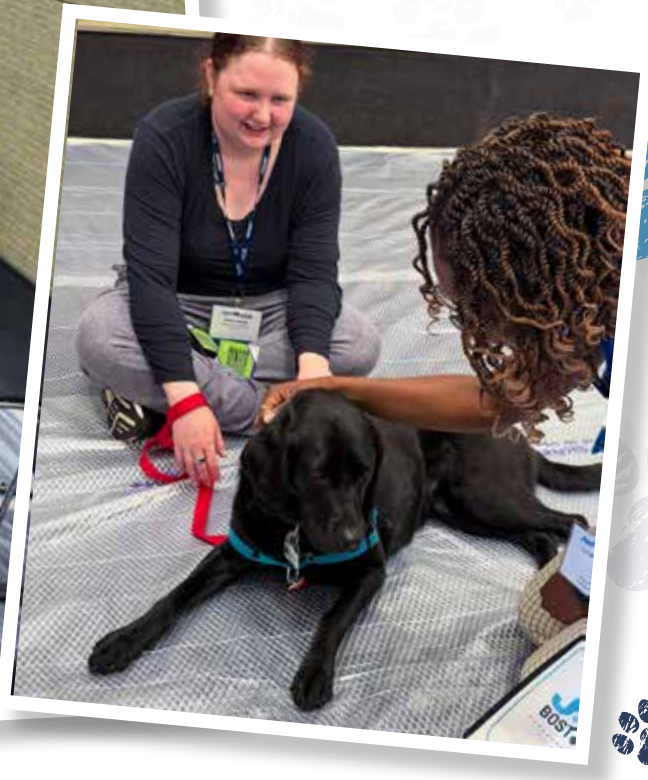
November 2026 • Issue #593

AMSTATNEWS

The Membership Magazine of the American Statistical Association • *https://magazine.amstat.org*





Caring Canines Therapy Dogs Bring 'Pawses,' Smiles to JSM

ALSO:

AAAS Mass Media Fellow Lauren Chan: Advancing Evidence-Based Science Through Storytelling

ASA Founder Alex Hanlon: A Career Built on Collaboration

Become a MentorLink Mentor

Help shape the next generation of statisticians & data scientists

Through **MentorLink,** ASA members can connect with mentees looking for guidance, perspective, and support as they navigate their careers.

Interested in becoming a mentor? It's easy:

- Create your profile on the ASA Community.
- Make sure you're included in the membership directory so potential mentees can find you.
- Connect with mentees as interests and opportunities arise.

Sign up to become a MentorLink mentor.

MentorLink

WHERE MEMBERS MEET, MATCH, AND GROW — TOGETHER.

AMSTATNEWS

NOVEMBER 2026 • ISSUE #593

Executive Director
Ron Wasserstein: *ron@amstat.org*

Associate Executive Director
Donna LaLonde: *donnal@amstat.org*

Director of Science Policy
Steve Pierson: *pierson@amstat.org*

Director of Finance and Administration
Derek Curtis II: *derek@amstat.org*

Managing Editor
Megan Murphy: *megan@amstat.org*

Communications Strategist
Val Nirala: *val@amstat.org*

Advertising Manager
Christina Bonner: *cbonner@amstat.org*

Production Coordinators/Graphic Designers
Olivia Brown: *olivia@amstat.org*
Megan Ruyle: *meg@amstat.org*

Contributing Staff Members
Naomi Friedman • Kim Gilliam • Amanda Malloy • Kristin Mohebbi

Amstat News welcomes news items and letters from readers on matters of interest to the association and the profession. Address correspondence to Managing Editor, *Amstat News,* American Statistical Association, 277 South Washington Street, Suite 370, Alexandria, 22314-3646 USA or email *amstat@amstat.org*. Items must be received by the first day of the preceding month to ensure appearance in the next issue (for example, June 1 for the July issue). Material can be sent as a Microsoft Word document, PDF, or within an email. Articles will be edited for space. Accompanying artwork will be accepted in graphics file formats only (.jpg, etc.), minimum 300 dpi.

Amstat News (ISSN 0163-9617) is published eight times a year, February, March, April, June, August, September, November, and December, by the American Statistical Association, 277 South Washington Street, Suite 370, Alexandria, 22314-3646 USA. Business and Editorial Offices: 277 South Washington Street, Suite 370, Alexandria, 22314-3646 USA. Accounting and Circulation Offices: 2277 South Washington Street, Suite 370, Alexandria, 22314-3646. Call (888) 231-3473 to subscribe. **Periodicals postage is paid** at Alexandria, VA. POSTMASTER: Send address changes to *Amstat News,* 277 South Washington Street, Suite 370, Alexandria, 22314-3646 USA. Send Canadian address changes to APC, PO Box 503, RPO West Beaver Creek, Rich Hill, ON L4B 4R6. *Amstat News* is the member publication of the ASA. For annual membership rates, see *www.amstat.org/join* or contact ASA Member Services at (888) 231-3473.

American Statistical Association
277 South Washington Street, Suite 370
Alexandria, VA 22314 USA
(703) 684-1221
ASA GENERAL: *asainfo@amstat.org*
ADDRESS CHANGES: *addresschange@amstat.org*
AMSTAT EDITORIAL: *amstat@amstat.org*
ADVERTISING: *advertise@amstat.org*
WEBSITE: *https://magazine.amstat.org*

Printed in USA © 2026
American Statistical Association

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.

features

3 President's Corner

5 *JSDSE* Advances Statistics, Data Science Education with Multimodal Approach

6 AAAS Mass Media Fellow Lauren Chan: Advancing Evidence-Based Science Through Storytelling

8 *Journal of Statistics and Data Science Education* Highlights: Jackie Dietz Award Winners Announced in October Issue

9 Statistics Through Stories: Teaching Students the Why Behind the Numbers

10 The Statistician Behind the Legacy Page: Fritz J. Scheuren

12 Lessons in Co-Creation: Academia and Industry Building Better Science Together

14 ASA Founders Award Recipient Alex Hanlon: A Career Built on Collaboration

20 Caring Canines Therapy Dogs Bring 'Pawses,' Smiles to JSM

22 Member Showcase: Arun Chind: An Interdisciplinary Journey Through Statistics, Medicine, Economics, and Law

24 Welcome to Our Newest Members

25 New Member Spotlight: Bilal Shaikh

26 This Month in Statistics History: The Statisticians Behind Modern Sanitation Systems

28 *Practical Significance* Take Two: Real World Data Science—Who's Writing the Story?

columns

31 **STATS4GOOD**
Karl E. Peace Award Recognizes Outstanding Leaders in Data for Good

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.*

32 **STAT*tr@k***
Breaking Down the Impossible: How Applied Statistics Can Guide Humanitarian Response

STAT*tr@k* is a column in *Amstat News* and a website covering ideas, people, and career paths shaping the future of statistics and data science. 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*

34 **DECIDING FACTORS**
Not Everything Deserves a Decision: *Homer, the Inbox, and Getting Things Done*

Deciding Factors, a column by Mark Otto, explores decision analysis and how statistical scientists can apply their expertise to make better choices in their careers, communities, and personal lives.

ONLINE

ASA Directory of Statistical Consultants

The ASA's Section on Statistical Consulting has a new directory of statistical consultants. The goal of this website is to connect seekers of statistical consulting and collaboration with highly skilled statistical practitioners. If you're a statistical practitioner, consider joining and adding your name to the list so you can access webinars, educational resources, and more: *https://tinyurl.com/2snkku4p*.

International Conference on Health Policy Statistics

For more than 20 years, statisticians, data scientists, health services researchers, health economists, policy analysts, clinicians, and other experts have gathered at the International Conference on Health Policy Statistics to share perspectives, tackle methodological challenges, and explore how rigorous evidence can translate into better health policy and practice. Join us January 13–15 in Annapolis, Maryland, and add your voice to this important conversation. Register by December 10 to save: *https://tinyurl.com/rujy44az*.



ICHPS will be held in Annapolis, MD.

Nominate a Colleague

The ASA's extensive awards program recognizes statisticians who've made outstanding contributions to the association and statistical profession through research, teaching, consulting, and service. Likewise, ASA scholarships provide support for students studying statistics and related subjects. Nomination deadlines begin this month. View the complete list of awards for details: *https://tinyurl.com/3s35x487*.

Meet the Agency Head

Amstat News resumes its Q&A series with government officials, starting with an interview of Tristan Abbey, administrator of the US Energy Information Administration. Abbey discusses his priorities for the EIA, the agency's aging data systems, and how the statistical community can help shape its future. Meet Abbey and read more about his goals at *https://magazine.amstat.org*.

departments

36 **statistician's view**

When Doing Your Job Requires Courage

The Numbers That Run the World

41 **meetings**

Your Work Has a Place at SDSS: Call for Abstracts

SDSS
PITTSBURGH, PA • APRIL 27–29, 2027

member news

42 People News

43 Awards and Deadlines

44 Section • Chapter • Committee News

47 Professional Opportunities

Connect with us on LinkedIn
www.linkedin.com/company/american-statistical-association---asa

Join the ASA Community
https://community.amstat.org

Like us on Facebook
www.facebook.com/AmstatNews

Follow us on Bluesky
https://bsky.app/profile/amstatnewsbskysocial

Follow us on Instagram
www.instagram.com/AmstatNews

Subscribe to our YouTube channel
www.youtube.com/user/AmstatVideos

Visit *Amstat News* online

Counting What Counts: Reasons to Be Grateful, with Confidence



Jeri Mulrow

"I believe there's something remarkable that happens when we come together with genuine intention." That was the first sentence of my first President's Corner, and this year has reinforced this belief to me even more. Here, in the United States, we celebrate Thanksgiving in November, so I want to focus on gratitude in this month's column. Although this year has tested our community, our commitment to our mission and vision has carried us forward.

My theme for the year is Communities in Action, so I am grateful for the many communities that have worked together to advance the ASA's strategic vision of creating a world that relies on data and statistical thinking to drive discovery and inform decisions and the ASA's mission of promoting the practice and profession of statistics. For instance, even as we are making difficult decisions, my colleagues on the ASA Board of Directors have been a source of inspiration. The discussions in our board meetings are rigorous and dynamic and have led to responsible and trustworthy actions such as the recently approved AI Strategic Plan. I am grateful for their wisdom, guidance, and commitment to our community.

When a new initiative is launched, there is always uncertainty about how it will be received and its sustainability. Thanks to a dedicated steering committee guiding Communities in Action, a lot has been accomplished. Small working groups of volunteers are busy developing toolkits. Each toolkit is being designed to help people get started with a different kind of contribution. The first is for the statistician who wants to contribute but has limited time. It's a hands-on toolkit for introducing young audiences to data and statistics. If you are willing to visit a classroom or present at a library event for young people, please consider piloting our toolkit. The second is a repository of examples and resources for quantitative literacy. Think: how to spot a bad graph in the news, or better, how to recognize a good one. We know the first step in community work is starting the conversation, so this is the focus of the third toolkit. The fourth toolkit is built around tools people already have, such as Excel or Google Sheets, and provides practical templates to make it easier for groups to use their data. I am grateful for everyone who has contributed to getting this work started. I look forward to seeing where we will go next.

Communities in Action is, well, about action. I am grateful for the postcards that have been shared and want to highlight a few that show the breadth of how we show up in our local communities.

> "My story begins with helping my local middle and high school students to understand the job of statistics through real-world applications."

> "My story begins with helping my agricultural community to use data and statistics to make better-informed decisions about nutrient management."

> "My story begins with helping my local rapid response network to manage its membership and keep track of who and how many have trained for which roles."

I am so proud and grateful for all we are doing to bring statistical thinking into our communities. I would love to read your postcard, which you can submit at *https://tinyurl.com/54vtwcwz*.

The ASA relies on more than 75 committees to accomplish myriad activities supporting our membership's interests and needs. The willingness to serve on a committee means a willingness to show up and contribute. I am grateful for those who have served, are serving, or will serve on our committees, and I want to highlight a few here. I know members of the Committee on Professional Ethics have spent many hours working on a revision of the Ethical Guidelines for Statistical Practice. The Committee on Minorities in Statistics recently organized the Diversity Mentoring Workshop at JSM and coordinated StatFest. The Committee on Women in Statistics made the 2026 Women in Statistics and Data Science Conference a success. Our amazing awards ceremony at JSM is evidence of the substantial service of the various awards committees. The Data Science Certification Committee's work ensures this professional credential is available to our community. These are just a few and

MORE ONLINE
Submit your postcard for Communities in Action: *https://tinyurl.com/54vtwcwz.*



Photo by Eric Sampson
Jeri Mulrow gives the president's address at JSM 2026 in Boston, Massachusetts.

MORE ONLINE
Volunteer to be a mentor at MentorLink: *https://tinyurl.com/ubw8hxcm*

are illustrative of the formidable service by ASA committees. Thank you for showing up!

In my JSM talk, I acknowledged I had many mentors and colleagues who helped shape my path. As I shared in the talk, Fritz Scheuren and Lynda Carlson were always looking for ways to help advance my career. Each of us needs mentors to help us see what is possible. Fritz and Lynda encouraged me to pursue roles I wasn't always sure I was ready for. I am grateful for their support and that of all my mentors. As you read this column and think about your mentors, I hope you will consider showing your gratitude by volunteering to be a mentor in the new MentorLink initiative. You can do so by filling out the form at *https://tinyurl.com/ubw8hxcm*. It is possible to be both a mentor and a mentee, so while you are exploring the potential for yourself, you can also help a colleague see what is achievable.

My first ASA activity was attending a chapter meeting when I was a graduate student at Colorado State University. Chapters and sections are smaller communities within our broad ASA community and are often where acquaintances evolve into trusted colleagues. This has certainly been true for me throughout my career. This year, I was fortunate to be able to attend the Fall Technical Conference in Charlotte, North Carolina, and to visit with the Columbus Chapter. Even if you cannot travel, the webinars offered by the chapters and sections are a way to stay connected and develop new skills and knowledge. The diversity of chapter events and section conferences exemplifies how there is an event for everyone. It is truly wonderful how involved students are in chapter and section activities. It gives me great hope for the future to know our current statistics and data science students are being welcomed into the profession as I was. A sincere thank you to all the chapter and section organizers for their work to make these events possible—and to the presenters who share their expertise.

The ASA's work in statistics education is genuinely world-class. "*The Journal of Statistics and Data Science Education* (*JSDSE*) is an open-access, peer-reviewed journal published by the American Statistical Association. It disseminates accessible knowledge for the improvement of data science and statistics education at all levels, including elementary, secondary, post-secondary, post-graduate, continuing, and workplace education." This quote from the Aims and Scope for *JSDSE* is one example of our strategic commitment to education. The ASA also publishes *Statistics Teacher*, which is designed to support K–12 teachers through articles and classroom-ready resources. Countless hours from dedicated volunteers make these and other resources, as well as our guideline reports, possible. Our profession's commitment to education is essential to our vision. I am deeply grateful to the members of our community whose work ensures theory meets practice at all levels.

The ASA's publications represent scholarship and a commitment to the peer-review process, making good science available to the world. Our journals are widely recognized for their quality because editors, associate editors, and peer reviewers dedicate their time and expertise in collaboration with authors to ensure the highest standards. Our general-interest magazines ensure our science and profession reach the broader public. I am forever grateful to all of those involved in ensuring access to evidenced-based research and sound statistical thinking.

I am grateful to be a part of an amazing professional community willing to do the vital work needed to promote the practice and profession of statistics. Thank you for showing up, for enriching our profession, and for sustaining our community.



'JSDSE' Advances Statistics, Data Science Education with Multimodal Approach

The *Journal of Statistics and Data Science Education* is an international, open-access, peer-reviewed journal focused on the teaching and learning of statistics and data science. It advances the standards for teaching excellence by publishing high-quality papers with innovative and actionable insights. The intended audiences are statistics and data science teachers and those interested in related research. Since the first volume in 1993 (then called the *Journal of Statistics Education*), *JSDSE* has evolved alongside changes in technology, the growing availability of data, and evidence-based recommendations such as the *Guidelines for Assessment and Instruction in Statistics Education*. Journal editors select referees to conduct double-anonymized peer reviews to ensure submissions are well planned and well written.

JSDSE focuses on issues relevant to improving the process of teaching and learning statistics and data science in specific educational contexts. Topics include curricular reform in statistics, creative and tested ideas for teaching, innovative methods of instruction and assessment, research on student understanding, attitudes and beliefs about the field, use of technology and AI in teaching and assessment, new ways of looking at statistics and data science, and overviews of scholarly literature.

Authors offer clear, actionable insights for teachers and ground their advice in thorough reviews of statistics education literature, reproducible experiences and analyses, and assessments of student outcomes and experiences. Publications include detailed supplementary materials that guide readers through the author's process, including how they did it, how well it worked, and how it helped achieve their goals.

The journal discourages submissions that focus solely on theory, address educational statistics without considering the teaching of statistics and data science, or analyze data primarily for researchers in other disciplines.

This fall, the journal launched a new free podcast—*Learning Curves: Conversations from the Journal of Statistics and Data Science Education*—to explore the genesis of published papers, their impact, and how themes connect to the current statistics and data science education landscape.



More Information and Resources

JSDSE: *https://www.tandfonline.com/journals/ujse21*

Learning Curves podcast: *https://tinyurl.com/bdd95yar*

JSDSE/CAUSE webinars: *https://tinyurl.com/ym3yun6n*

The series hosts a range of authors, guests, and editorial board members.

Meanwhile, the *JSDSE/CAUSE* free webinars offer live, formal presentations of published papers by their authors, followed by audience questions and answers. Webinars are offered several times a year. Participants must register in advance.

JSDSE publishes approximately 40 papers per year in four issues. The acceptance rate is 15%. The journal gets more than 453,000 annual downloads, with an impact factor of 2.3. Accepted papers are published online in the Latest Articles section shortly after acceptance. Feedback and questions regarding the journal, podcast, and webinar can be emailed to Juana Sanchez, editor-in-chief, at *jsanchez@stat.ucla.edu.* ■

AAAS Mass Media Fellow Lauren Chan

Advancing Evidence-Based Science Through Storytelling



Lauren Chan

Lauren Chan, a postdoctoral scholar at The University of Chicago, was one of this year's Mass Media Fellows at the American Association for the Advancement of Science. Over 10 weeks this past summer, she collaborated with journalists, appeared on the radio, and contributed to news organizations, sharing her expertise in nutrition informatics, dietetics, and healthcare technology.

As a registered dietitian, Chan loves sharing knowledge about everything from the foods we eat to how our bodies metabolize them. In 2018, she created the award-winning Dietitians in Nutrition Support YouTube channel, where she reaches thousands of viewers every year with dietetics education.

We wanted to get to know her better, so we asked her the following questions:

You came into the fellowship with a strong background in science communication, but what was it like to suddenly be working as a journalist at *STAT*?

While this summer was my first time working in a newsroom, some parts of the work felt very similar to what I do as a scientist. Oftentimes, people describe science and research as being a detective, finding sources, generating data, and trying to connect the dots to discover new information. Similarly, journalism is a detective job, where you are finding the information and context of a story for your readers.

The biggest difference, I felt, when I came to *STAT* was the pace. Compared to academia, where it can take months to write a paper, newsrooms are putting out stories every day. It is a very specific skill set—writing at such a fast pace while interviewing, fact checking, and ensuring your story will be interesting to the audience. Working on a deadline can be stressful, but it also makes for exciting work, where you learn about many different topics in a short period of time.

During your time writing for *STAT*, you said you learned how to "find and craft a great story that advances evidence-based science." What makes a good science story?

Great science stories are ones that move people to action. Science is everywhere, and while some people (like myself) think about it constantly, others don't always see how science impacts them on a daily basis.

This summer, I was focused on finding stories based in science that had relevant, meaningful implications for readers. I'm a strong believer that science shouldn't be gatekept, so when a complex and important finding needs to be reported, it's critical to help the audience understand why they should care and how the knowledge can be used to impact their lives.

What do you think scientists and statisticians misunderstand about journalists—and what do journalists sometimes misunderstand about scientists?

It's important to remember that scientists and journalists often share the same goal of highlighting exciting research that will have a positive impact on the audience.

Some scientists worry about journalists not fully understanding their research, which can mean it does not get reported accurately. As a scientist, being able to clearly articulate why someone in the general public should care about your work helps the journalist understand and translate that information to the reader. Journalists are also looking for meaningful quotes from researchers that add emotion or feeling to the findings to create the human connection in a story.

For journalists, it's helpful to remember that not all scientists are media savvy, and those who are can sometimes end up becoming overrepresented voices. Integrating into science communities and regularly interviewing new sources—even in fields where you already have many contacts—can uncover fresh viewpoints and experiences, helping ensure science is represented more broadly.

Has the fellowship changed what you see yourself doing after your postdoc? If so, how?

Communication and writing have always been my favorite parts of science and research. After learning another style of writing and reporting this summer, I am eager as ever to pursue future roles where I can continue engaging with experts, advocates, and the public about news in science and health. This fellowship opportunity expanded my skills to be a more impactful writer with a greater focus on the public audience, while still robustly describing the science. I hope these skills will serve me well in my current and future science communication work.

You mentioned you'd like to continue freelance science writing. What are two or three stories you would like to tell?

My prior research, and some of my summer reporting, focused on how technology has impacted the healthcare industry. I would love to continue reporting on how AI tools—especially ambient AI scribes—impact patient trust in healthcare providers, insurance costs, and healthcare utilization by patients.

As a dietitian and nutrition researcher, I am closely following policy changes and trends in the nutrition space. I am eager to watch and report on the progression of policies like the Medical Nutrition Therapy Act. If passed, it could significantly expand access to nutrition services in the US for those on Medicare and Medicaid.

What advice would you give a statistician or scientist interested in science communication but isn't sure how to get started?

Starting in any new field can feel intimidating, but as scientists and statisticians, we are trained to learn new things all the time! First, consider who your audience is and what stories they would find interesting. Do they want daily news, summaries of trends across years of data, information about new technology? Do they prefer written, video, or other formats of content? Next, figure out which stories your audience needs to hear right now. Not a year ago and not in the future, but right now. Once you know who you are writing for and what your target audience wants to see, you may have a great idea (or a few) for a story. Even if you aren't sure what the exact story is, reporting (also known as doing research) will help you fill in the blanks as you ask questions, read, and interview experts. Then, all that's left to do is start writing! Scientists and statisticians, who are experts in research, have every skill they need to be successful at science communication. It's just using those skills in a new way.

You were sponsored by the ASA, and statistics is an important part of the scientific stories you encounter. What role do you think statisticians can play in communicating science to the public?

Statisticians are so critical to science, especially given their strong understanding of the value and impact research findings actually have. I would encourage statisticians working on scientific research to think about how their specialized knowledge can be important for the general public that reads science media. For example, the idea of "significance" is discussed frequently in research, but the general audience may not understand the statistical meaning of the word. Whether speaking directly to the public or by sharing their knowledge with journalists or other news media, statisticians can translate what the significance of a finding actually means in the context of a field. This is essential for helping readers understand the finding and make informed decisions about whether to consider it in their decision-making.

What is something you now know about being a journalist that you wish you'd known before you started the fellowship?

One lesson I wish I'd known ahead of time was how journalists need to be fearless in their pursuit of information. That means asking hard questions, speaking to very important people, or cold calling until you get someone on the phone. Creating a network of sources and experts is not an easy task, but it is essential to successful reporting and getting the information you need. Also, sometimes a story may upset people who don't share the same perspectives. Telling a representative and honest story that includes viewpoints from parties with differing opinions is a balancing act that can step on people's toes. There's no way around it, and that's ok.

Tell us something surprising about yourself.

Once I finish writing these questions, I'm about to bottle feed some four-week-old kittens. For the last five-plus years, I've fostered cats and kittens in the Chicago area, which includes everything from tiny bottle babies to super senior cats. I have rescued almost 300 cats since I started fostering and love to talk about animal welfare! ■

Jackie Dietz Award Winners Announced in October Issue

Juana Sanchez, *JSDSE* Editor-in-Chief

Volume 34, Issue 4, of the *Journal of Statistics and Data Science Education* announces the winner of the Jackie Dietz Best 2025 *JSDSE* Paper Award, an annual award granted by the American Statistical Association to the best paper published in the previous year. Lisa W. Kay interviews William Notz and discusses the history of the award. The Jackie Dietz Best *JSDSE* Paper Award Collection, accessible at *https://tinyurl.com/6ree29uk,* maintains a record of all the awards.

The 2025 winning paper, available at *doi.org/10.1080/26939169.2026.2721238*, was written by Nicole Dalzell, Zoe Rehnberg, and Allison Theobold. The story of how this paper came to life—a collaboration not detailed in this issue—is worth sharing here:

> Allison and Nicole met in the ASA Section on Statistics and Data Science Education mentoring program and started having regular chats both for friend time and to discuss topics in statistics and data science education. Through these chats, they learned that parts of both of their teaching styles were based on their own experiences of feeling excluded or isolated in the college classroom. They shared a belief that classrooms could—and should—feel different for their students. Zoe joined the pair with her own cool approaches to inclusion in the classroom from her lived experiences, and the group all decided to work together to try and show others how they might create a classroom where everyone feels welcome and valued. This led the three collaborating on a United States Conference on Teaching of Statistics workshop, which was later transformed into this *JSDSE* paper with the encouragement of Jack Miller and Jenny Green.

Episode 1 of the recently launched podcast series from *JSDSE*, titled "Learning Curves: Conversations from the *Journal of Statistics and Data Science Education*"—available at *https://tinyurl.com/4nvcffbj*—goes beyond the published text to offer details about the collaboration behind the research.

Issue 4 features more articles showcasing the wide scope of *JSDSE*. Johanna V. Loock and Alyssa Counsell scrutinized past *JSDSE* publications to show readers how to better show change during data analysis. For those seeking interesting datasets and stories they tell, the research article by Travis Weiland, Anthony Fernandez, and Ksenija Simic-Muller offers discussion and resources for facilitating the teaching of sensitive topics. William K. McHenry introduces a new lab exercise to illustrate how teachers can implement decision-based learning via canine data. Instructors can also learn about novel text-based class exercises for both middle school and college students in the article by Victor R. Lee, Elizabeth Finlayson Harris, Ruishi Chen, and Sarah Levine.

Additional topics featured in Issue 4 include computing tools for teaching statistical concepts, challenges in student learning, mathematical statistics, oral exams, and graduate student work with multivariate datasets. These topics are discussed by Katherine Zavez, Ofer Harel, Paulina N. Silva, Barbara W. Sarnecka, Peter E. Freeman, Matthew Ferrell, Justin Post, and Allison S. Theobold.

Volume 34, Issue 4, and all volumes of the journal can be accessed from the journal's webpage at *www.tandfonline.com/journals/ujse21*. Feedback for the journal and questions may be emailed to Juana Sanchez at *jsanchez@stat.ucla.edu*. ■

Statistics Through Stories: Teaching Students the Why Behind the Numbers

Megan Murphy, ASA Communications Manager

"When will I ever use statistics?" It's a question familiar to anyone who's taught an introductory statistics course—especially one filled with students taking it because their program requires it.



Chad Lower

It's a question familiar to anyone who's taught an introductory statistics course—especially one filled with students taking it because their program requires it.

For Chad Lower, an adjunct instructor who teaches MAT-115 Introductory Statistics online at Wilson College, the challenge isn't simply teaching students how to calculate a mean or construct a confidence interval. He wants them to understand why statistics matter in the first place.

His approach is to tell stories.

Each week, Lower introduces students to a statistician whose work connects to the statistical concept they're learning. Florence Nightingale opens the course. John Tukey appears when students learn about boxplots. Jerzy Neyman arrives with confidence intervals. Gertrude Cox, David Blackwell, C. R. Rao, and Dionne Price round out the group.

The idea began in 2022, when Lower was teaching statistics at Southern New Hampshire University. He found the ASA's *This*IsStatistics Famous Statisticians webpage and began using the profiles in his courses. When the page was no longer available, he rebuilt the series using profiles from *Amstat News*.

"That turned out better," Lower said, "because every profile can now send a student to a full article about the person."

Lower has taught MAT-115 at Wilson College five times—four online and once in person—and this fall will be his sixth time teaching the course. He's still an adjunct at Southern New Hampshire University, while now serving as senior curriculum manager for mathematics, science, and world languages at Laurel Springs School, an online K–12 school. He also serves as an AP Calculus reader and table leader for the College Board.

His path to statistics wasn't exactly planned.

As a mathematics major at Messiah College, Lower expected to choose computer programming over statistics. He had been programming since seventh grade and saw statistics as a requirement he simply needed to push through.

Then came a January-term statistics course in 1996.

Messiah's January term compressed an entire course into a month, with classes meeting four hours a day.

"What I didn't expect was that whatever we talked about at 8 a.m. came back at 11 a.m. the same morning," he said. "I could see how the topics connected because I met them twice in one day. I fell in love with statistics that month."

That experience stayed with him as a teacher. The irony, he said, is that the intensive schedule that drew him to statistics is the opposite of how he now wants his students to learn. "What sold me on statistics was a month of massed practice, and spacing material out is the thing I have worked on hardest as a teacher ever since."

Today, one of his biggest challenges is teaching students who have different relationships to statistics. "Most of my students are adults coming back to mathematics after a long gap. They are there because a program requires it for graduation, not because they came looking for statistics," he said. "Relevance is something I have to supply rather than assume."

That's where the "Meet a Statistician" announcements come in.

The series is not an assignment. Students don't have to respond to profiles, and nothing about them appears on a quiz. With the help of AI, he writes a short announcement—generally about 220 words—that includes a portrait, a few paragraphs about the statistician and their work, a link to the full *Amstat News* article, and a sentence connecting the person to what students are learning that week. He verifies the information against the *Amstat News* article or another primary source before sharing it with students. He starts with the statistical concept and finds the person whose work connects to it.

"Nightingale opens the term because she is the argument for why any of this matters," he said.

Lower doesn't know which statistician has generated the most interest. He does not measure engagement with the announcements, and comments are generally turned off.

MORE ONLINE
Download two installments of Lower's "Meet a Statistician" series:

Dionne Price at *https://tinyurl.com/52xxu5et*

Florence Nightingale at *https://tinyurl.com/mums6tat*

If a student . . . reads a number . . . and thinks to ask where the sample came from, that is worth more to me than anything they can do with a formula.

There is one exception.

During the fall of 2024, comments were open, and one student responded to the profile of Mario Marazzi. The student wrote about his work on the quality and transparency of official statistics, which demonstrated that one person's vision can change something on a large scale. The student was also struck by how he'd passed his love of mathematics on to his son.

Lower was glad to see students connecting with the person behind the numbers. But the lesson he most wants them to take away is how to think about what they're learning. "Check the thing that sounds right," he said. "Just because something sounds good does not mean that it is good."

That, he tells his students, is what statistics is ultimately about.

"A number in a headline sounds right. A percentage with no raw count attached sounds right. A bar chart with the bottom cut off the y-axis sounds right," he said. "If a student finishes my course, reads a number this year, and thinks to ask where the sample came from, that is worth more to me than anything they can do with a formula."

For Lower, teaching statistics is about helping students develop a habit of questioning what they see—and giving them a reason to care enough to do so. And that's where the stories matter. ■

The Statistician Behind the Legacy Page: Fritz J. Scheuren

Ask Fritz Scheuren how he became a statistician and he'll tell you it happened almost by accident. He didn't intend to spend more than 50 years shaping American official statistics, mentoring generations of researchers, and applying his skills to human rights investigations on three continents. He set out, first, to be an engineer like his father. Then an English teacher. Statistics found him somewhere in between, and it never let go.



Fritz Scheuren

Ask those who've crossed paths with him and another picture emerges—a statistician deeply curious about people, generous with his time and knowledge, and guided throughout his career by a simple idea: Statistics should be used to make a difference.

This month, we're highlighting Scheuren's Legacy Page in our series because his colleagues felt his impact couldn't go unmarked. His friends and collaborators rallied to establish a Legacy Page in his honor, one of the many ways the ASA community celebrates the people who've shaped our field.

Scheuren grew up in public housing in Boston, walking across an active dump every day to reach Boston College High School. His father, a civil engineer, expected his first-born son to follow him into the profession. Scheuren rebelled instead, enrolling at Tufts University as an English major.

After college, he took a technical job at the Internal Revenue Service. The agency wanted to hire a statistician, and although he was not yet one, they agreed to pay for his statistical training. Scheuren began taking classes at The George Washington University at night. After nine years, he earned his PhD.

His path into statistics may have been accidental, but his commitment to the field was anything but.

In 1966, he helped develop the first IRS estate-multiplier wealth estimates—a way to gauge the wealth of living Americans using estate tax data from the deceased. For Scheuren, the experience was personal. Looking at the wealth of the richest Americans made him reflect on his own journey out of poverty, a feeling he's called "survivor's guilt." He soon joined the Office of Economic Opportunity to work on the war on poverty instead. That connection between statistics and people's lives would follow him for the rest of his career.

At the Social Security Administration and later the IRS, Scheuren worked to improve the quality and usefulness of government data while wrestling with difficult questions of transparency, privacy, and statistical disclosure protection. He later brought that expertise



Fritz (left), Dalene Stangl, and Doug Zahn talk mentoring during the 2016 Joint Statistical Meetings in Chicago.



Fritz during the ASA's 175th anniversary celebration at the Joint Statistical Meetings in Boston, 2014.

to academia, social policy, and complex public-interest projects, including work related to the Cobell litigation, which involved Individual Indian Monies trust records, which he described as a chance to "help the little guy."

But it was his human rights work that brought his philosophy into sharpest focus. In 1994, Scheuren was asked to help evaluate reports of civilian casualties from land mines in Cambodia. He saw a role for statisticians in humanitarian work because they could bring objectivity to settings often dominated by advocates.

In 1999, he traveled to Albania to help document refugees fleeing Kosovo. At the border, he and Patrick Ball recognized the value of the records Serbian authorities kept and helped arrange for them to be scanned. The data later became key evidence in war crimes trials at The Hague. Scheuren went on to support humanitarian and human rights projects in Haiti, Guatemala, East Timor, Peru, and elsewhere. He also helped found Statistics Without Borders. In 2012, the ASA recognized his humanitarian contributions with its Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society.

Celebrate Legacy

Anyone can start a campaign to set up a Legacy Page for someone, living or deceased, and once a campaign reaches $5,000 in donations, the honoree receives a page on the ASA website featuring a photo, brief essay on their accomplishments, and a list of everyone who contributed.

Scheuren's career has crossed boundaries that are often treated separately: government and academia; theory and application; statistics and public policy; technical work; and humanitarian service.

Throughout it all, he continued to learn. Scheuren has described the Japanese concept of *Kaizen*, or continuous improvement, as a useful way of understanding his own life. Each person he meets, he suggested, can provide a "*Kaizen* moment"—an opportunity to learn and become a better person.

As the 100th president of the American Statistical Association in 2005, Scheuren chose the theme, "Use our discipline to enhance human welfare." The phrase captured a philosophy that had already shaped his career for decades.

It's easy to describe Scheuren through titles, awards, papers, and accomplishments. But the deeper story is about what he did with those opportunities.

Being a statistician, in Scheuren's example, can mean asking who is represented in the numbers. It can mean protecting the people behind a dataset. It can mean using evidence to understand inequality, document human rights abuses, improve public statistics, share knowledge, or simply help a colleague see a problem differently.

The statistics will remain. The papers, methods, datasets, awards, and institutional contributions will remain. But so will the people who learned from him, the projects he helped strengthen, and the communities he encouraged.

For Scheuren, becoming a statistician may have been an accident, but becoming the kind of statistician who uses the discipline to help people was clearly a choice. ■

MORE ONLINE
To learn more about Fritz and explore his accomplishments, visit his ASA Legacy Page: *https://tinyurl.com/4k7kf7ee.*

Lessons in Co-Creation: Academia and Industry Building Better Science Together

Elena N. Naumova and Katie Stebbins of Tufts University; Dantong Wang and Fabiola Dionis of Nestle Research, Switzerland

MORE ONLINE
Check out the *Amstat News* website for further reading: *magazine.amstat.org*.

Partnerships between academia and industry in nutrition and health data science are exciting, but inherently complex. At their best, they bring together complementary strengths. On one side, there's academic rigor and methodological innovation. On the other, practical application, scale, and resources. Yet, these collaborations are shaped by a fundamental tension—academia seeks to produce generalizable knowledge, while industry is driven to identify timely, actionable, and consumer-relevant solutions. Rather than a flaw, this difference is a defining feature—one that requires deliberate effort to achieve meaningful, lasting impact.

Our experience building the Global Nutrition and Health Atlas with Nestlé Research taught us that successful collaborations come less by eliminating differences and more by learning how to work with them. Along the way, we encountered practical questions that arise in almost every academic–industry collaboration: What data can be shared? What should remain proprietary? How much documentation is sufficient and comprehensive? How do we balance the desire to move quickly with the academic need for verification and reproducibility? And how do we know whether what we've built is actually useful?

In our experience, the tension between the two camps often comes down to data. Access to rich proprietary datasets helps industry contribute meaningfully to product innovation. However, sharing data can be challenging in environments with closely guarded intellectual property. Meanwhile, academia emphasizes openness, transparency, and reproducibility. In nutrition and health especially—where evidence informs both policy and public trust—data access, ownership, and governance are especially sensitive. And new hurdles related to interpretability and reproducibility are emerging as advances in analytical methods, artificial intelligence, and synthetic data become more prescient.

But these challenges don't have to derail a collaboration. Instead, parties should make expectations clear from the start. Rather than assuming all data should be shared, we had to work together to draw the line between what could be public and what required additional documentation or agreements. The resulting consensus helped us move forward while preserving important principles and practices for both sides.

Our experience has shown these challenges are not only manageable but also create opportunities for innovation. One clear example: the partnership between Nestlé Research and the Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy at Tufts University. This led to the Global Nutrition and Health Atlas—a publicly available platform that integrates nutrition and health data for more than 190 countries. Spanning more than 500 indicators across 26 topics throughout three decades, the Global Nutrition Health Atlas exemplifies transdisciplinary, use-inspired research. It consolidates data from international agencies, nongovernmental organizations, academic institutions, and peer-reviewed studies into six key domains—demographics, dietary intake, nutritional status, health status, health economics, and sustainable food systems. This framework allows users to navigate, analyze, and visualize information efficiently.

As a result, the Global Nutrition Health Atlas became more than a data platform—it was a shared workspace in which academic curiosity and industry experience flourished cohesively.

For our industry colleagues, platforms like the Global Nutrition Health Atlas are invaluable. Their researchers rely on robust public health data to inform the development of science-based nutritional solutions across diverse populations and life stages. The academic team, meanwhile, learned that building a useful platform required thinking beyond the scientific qualities of the underlying data. How users found, interpreted, compared, and visualized information mattered just as much.

The rapid expansion of food and nutrition information calls for new ways of data sharing and dissemination. Interactive platforms that integrate data portals and visualization dashboards can describe, monitor, and track information related to food and nutrition. Thus, building the Global Nutrition Health Atlas collaboratively demonstrated our shared capacity to translate complex data into actionable insights—an essential component of innovation in both public health and industry settings.

The project also pushed us to think differently about how we evaluate data dashboards. This led to designing a range of metrics and evaluation principles to improve data standardization and harmonization, dashboard performance and usability, information, and knowledge sharing among researchers,

practitioners, and decision-makers. In other words, we learned a technically successful platform is not necessarily a successful one. Success also depends on whether people can use, trust, and find value in it.

Our work together soon expanded beyond building the platform to include broader scientific engagement and information sharing, with more than a dozen presentations at national and international venues, including the annual meetings of the American Oil Chemists' Society. With invited talks on the potential of causal AI, the development of online surveys, and the usability of synthetic data, we addressed critical questions of reproducibility and methodological rigor. These activities reflect an ongoing joint effort to integrate academic depth with industry relevance. As we worked together on a narrative review of AI applications in lipid nutrition, we discovered new opportunities for data analytics—from nutrient interactions and lipidomics to molecular mechanisms, personalized nutrition, product development, and predictive modeling for public health at the global level.

Along the way, we also learned several practical lessons for sustaining such collaborations. Synchronizing academic calendars with industry timelines and project deadlines, for example, required careful planning—but we made it work. Establishing clear legal agreements and expectations early helped prevent misunderstandings and supported long-term trust. Perhaps most importantly, we learned that differences in perspectives were useful when they were discussed openly. Academic partners may ask whether a method is sufficiently validated, while industry partners may ask whether it's practical, scalable, and useful. Neither question is more important. Considering both equitably can lead to a stronger solution.

The joint research also created opportunities to bring these real-world challenges into graduate education. Integrating our projects into graduate coursework allowed students to engage directly with real-world data in learning about authorship, ethical responsibilities, and the iterative nature of research from abstract submission to publication. These experiences fostered a culture of open and transparent scientific practice while giving students a glimpse into how research works in the "real world."

We were also surprised by how effective the collaboration proved to be. We initially thought the greatest value would come from combining academic methodological expertise with industry data and resources. But we found the learning to be much more reciprocal. The academic team gained a deeper appreciation for the importance of usability, scalability, timelines, and practical decision-making. Our industry colleagues, in turn, grappled with questions of methodological rigor, reproducibility, and the broader scientific context in ways that strengthened the work. The alliance became more than a way to accomplish a project. It became a way for both teams to rethink how the project should be done.

Looking back, the strongest evidence of success didn't come from publications and presentations. It came from better workflows, deeper understandings, stronger trust, and broader opportunities. It changed how we thought about graduate education and how we prepared students for the realities of research. Looking forward, we emphasize the need for building modular project-based courses that incorporate feedback, feedback-on-feedback, finely tuned classroom teamwork, and engaging students in the cutting-edge initiatives of the Tufts Food & Nutrition Innovation Institute.

The impact of our collaboration grew from an initial effort between teams at Tufts University and Nestlé Research into a community of more than a dozen contributors, including five generations of graduate students at the Friedman School of Nutrition Science and Policy and three rounds of participants in the Health and Nutrition Division of the annual AOCS meetings.

What advice would we give someone starting an academic–industry partnership? Begin with agreeing on the purpose of the collaboration, but don't assume that everyone defines success in the same way. Establish expectations about data, ownership, authorship, timelines, and decision-making early. Make room for disagreements. Treat them as part of the scientific process rather than a threat to either side. Most importantly, create opportunities for both sides to learn from each other.

The strongest collaborations aren't those where one side provides expertise and the other applies it. They are when both sides elevate their thinking as a result the co-creation.

Perhaps the most important lesson: Successful collaborations depend on a shared commitment to advancing science and serving the public good. The Global Nutrition Health Atlas platform illustrates how jointly developed resources can serve a wide range of stakeholders—researchers, policymakers, practitioners, and industry partners alike. In addressing global challenges such as nutrition, health disparities, and food systems, solutions must extend beyond institutional boundaries. Our experience reinforced that the goal is not to eliminate the differences between academia and industry, but to align them toward common purposes—advancing knowledge, informing policy, and improving health outcomes in a scientifically robust and socially responsible way. ■

ASA Founders Award Recipient Alex Hanlon: A Career Built on Collaboration



Alexandra L. Hanlon

Alexandra L. Hanlon is a nationally recognized leader in collaborative biostatistics and health data science. As a professor in the department of statistics and the founding director of the center for biostatistics and health data science at Virginia Tech, she leads interdisciplinary teams working at the intersection of statistics, medicine, and public health. Over more than three decades, she's contributed to research across a wide range of areas, including cancer, cardiovascular disease, mental health, and women's health. She's also authored more than 450 peer-reviewed publications.

Her path to biostatistics has been deeply personal. She lost her mother to breast cancer at a young age—an experience that continues to inform her commitment to advancing health research and improving quality of life through data-driven insights. Through more than two decades of service to the ASA, Hanlon has held numerous leadership roles at the chapter and national levels, including serving on the ASA Board of Directors.

Known for her dedication to mentorship, communication, and team science, Hanlon is passionate about training the next generation of statisticians and fostering meaningful collaboration across disciplines. In recognition of her sustained and distinguished service to the profession, she was honored with the ASA Founders Award.

Background and Career Journey

Where did you grow up, and how do you think it shaped your outlook on life?

I have deep roots in Virginia. My mother was born in Alexandria, and her family was from that area. She loved history, and we lived in Fredericksburg when I was young, a place she cared about so much that she dreamed of writing a book about its history. She died from breast cancer when I was 11, near the end of my fifth-grade year.

After my mother died, I actually finished fifth grade in my paternal grandmother's classroom. She was a teacher, and I think about that now as one of those experiences whose significance I couldn't fully understand at the time. Education, family, and taking care of one another were simply part of my life from a very early age.

Afterward, we moved to Chambersburg, Pennsylvania, where my father was a professor of English at Shippensburg University. He was not only a professor, but also a mentor. His graduate students were part of our lives. They came to dinner, spent holidays with us, and occasionally even lived in our spare rooms. I watched him invest in them and saw, without really understanding it at the time, how much a mentor could shape another person's life. He also directed a summer program for underserved students who needed additional preparation for college.

My father's parents retired in Asheville, North Carolina. My grandfather spent 36 years with the US Forest Service and ultimately served as supervisor of North Carolina's national forests. We spent summers with my grandparents, driving back and forth along I-81 between Pennsylvania and Asheville. I remember passing Virginia Tech and being fascinated by it, long before I could have imagined that I would someday build a career there.

We also spent many holidays at the Peaks of Otter along the Blue Ridge Parkway, just north of where I now live in Virginia. Those mountains, forests, and times together remain incredibly meaningful to me.

As I got older and my own career began to take off, I continued visiting my grandmother. She was fascinated by what I was doing and where I was going. She used to tell me that she lived through my adventures. I loved that. Having someone I loved so much take such a genuine interest in what I was doing elevated me. She made my work and experiences feel interesting and important, probably at times before I fully believed that myself.

Looking back, I realize I grew up around people who cared deeply about things larger than themselves. My mother cared about history and place. My father cared about literature, education, and his students. My grandmother was a dedicated teacher who believed in me and took enormous joy in watching my world expand. My grandfather devoted his career to our national forests.

I don't think I consciously connected any of that when I was young, but I certainly see it now. I love science, but I also love the human side of science: curiosity, relationships, education, mentorship, and especially helping others discover what they are capable of.

In many ways, I've spent my career trying to do for others what others have done for me.

Your path to biostatistics was shaped by a deeply personal experience. How has that continued to influence your work and priorities today?

Losing my mother to breast cancer at such a young age certainly influenced my path to biostatistics, although I don't think I fully understood that connection until later.

Other experiences reinforced it. My first job after Rochester Institute of Technology was at Rockwell International in aerospace, where part of my work involved testing missile systems and studying reliability, essentially asking when systems might fail if the country were under attack. I wore a dosimeter every day because of potential occupational exposure, and given my family history, I was very aware of that risk. Two young women I worked alongside had been in that environment longer than I had. After I left Rockwell, both were diagnosed with breast cancer at very young ages.

Years later, I learned that I carry a pathogenic BRCA2 variant, which significantly increases a person's risk of developing breast cancer. By then, I had also been involved in the early high-risk breast cancer program at Fox Chase Cancer Center, contributing detailed family medical histories and pathology records at a time when our understanding of hereditary cancer risk was still evolving.

So, cancer has never been an abstract research problem for me. At the same time, I wouldn't characterize my career as being driven solely by cancer. Those experiences taught me that the questions behind the data matter. Statistics can be applied almost anywhere. I wanted to use it in settings where the answers could ultimately improve health and quality of life.

That perspective still guides me today. I am drawn to research where statisticians are genuine scientific partners, where the questions matter, and where our expertise can help a team design a stronger study, think differently about a problem, or generate evidence that can ultimately improve people's lives.

You began your career in aerospace before transitioning fully into biostatistics. What drew you to this field, and what has kept you here?

My route into statistics was not particularly linear. When I started thinking about college, computing was an emerging field, and I wanted to be part of it. I applied to exactly one school, RIT [Rochester Institute of Technology], because of its extraordinary placement record and co-op program, and entered as a computer science major.



2026 ASA President Jeri Mulrow and Alex Hanlon at JSM 2026 in Boston, Massachusetts

At RIT, I discovered that I loved STEM and had a real aptitude for mathematics. A wonderful professor, David Farnsworth, introduced me to statistics and helped me see its possibilities.

After graduating, I went to Rockwell International in Anaheim, California, and worked in aerospace for about three years. It was an excellent opportunity right out of college, but eventually I realized something was missing. I enjoyed the quantitative work, but I wanted to use those skills in a way that connected more directly to people and questions that felt meaningful to me.

I left Rockwell and entered graduate school at the University of California, Irvine. While I was there, the Joint Statistical Meetings came to Anaheim in 1990. I volunteered at the meeting, explored opportunities across an incredible range of fields, and made a connection with the American College of Radiology that ultimately led to my first position as a biostatistician.

That was when things really came together for me. I realized I could combine statistics with medicine and health research and use quantitative skills to contribute to questions that could affect people's lives.

What has kept me in biostatistics, though, is collaboration. Early on, I discovered how much

Have conversations without worrying about . . . an immediate payoff. You never know which conversation might change the direction of your career.

I enjoyed working with investigators, learning their science, and using my expertise to help move their scholarship forward. Throughout my career—at Fox Chase Cancer Center, Temple, Penn Nursing, and now Virginia Tech—I have repeatedly found myself building collaborative groups and bringing people together.

I am very comfortable being a driver behind the scenes. There is tremendous satisfaction in helping a team take an important scientific question and determine how to answer it rigorously. I get to keep learning, meet interesting people, and contribute to science across areas I never could have imagined when I started. More than three decades later, that still doesn't get old.

Your first role as a biostatistician came through a connection made at the Joint Statistical Meetings. What advice would you give to early-career statisticians about making the most of professional meetings?

I would tell them not to go to a professional meeting simply to attend sessions. Go ready to explore.

At the 1990 JSM in Anaheim, I was a graduate student trying to figure out what statisticians actually did. I volunteered. I went through the job binders. I talked with people from virtually every area I could find and interviewed with an extraordinary number of employers. I wasn't executing some carefully designed networking strategy. I was trying to understand all the possibilities that were out there.

That experience changed my life. A conversation with representatives from the American College of Radiology ultimately led to my first position in health research as a biostatistician at the ACR and put me on a career path I hadn't known existed before that meeting.

So, I encourage students and early-career statisticians to get involved. Introduce yourself to people. Ask them what they do. Attend something outside your specialty. Volunteer. Most importantly, have conversations without worrying about whether every interaction has an immediate payoff. You never know which conversation might change the direction of your career.

I would also tell them not to underestimate what they bring to those interactions. You don't need to be the most accomplished person in the room to belong there. Ask good questions, listen, and follow up. Relationships develop over time.

And when someone opens a door for you, remember it. Then, when you are in a position to do so, open a door for somebody else.

ASA Service

How has your involvement with the American Statistical Association shaped your personal and professional life?

The ASA has given me so much over the years. Some of my closest colleagues have become dear friends, and those relationships have enriched my life in ways I never could have imagined. The ASA also opened doors for me as a leader, giving me opportunities to contribute to the profession and mentor students and early-career statisticians. Those experiences helped me develop the skills and confidence to build educational programs and initiatives that create opportunities for others. Receiving the Founders Award is especially meaningful because it recognizes service to a community that has given me so much. I can't imagine my professional life without it.

Leadership

You lead a highly interdisciplinary center. What makes collaboration successful when so many fields and perspectives are involved?

For me, successful collaboration starts with respecting the expertise everyone brings to the table. Strong technical skills matter, but they are only part of what makes an interdisciplinary team work.

A collaborative statistician has to understand enough of the science to ask good questions, recognize what others contribute, and help define the real problem. I am often working outside the traditional biostatistical wheelhouse, and I have learned to be comfortable not being the expert in every part of the conversation.

My role is often to connect people, translate across disciplines, and create the conditions in which everyone's expertise can contribute. That requires organization and discipline, especially when moving among very different projects and teams.

The best collaborations are those in which people value one another and see the statistician as a scientific partner from the beginning. When that happens, the science is stronger and the team can accomplish far more together than any one person could alone.

Your work spans areas from cancer to mental health to health policy. How do you prioritize projects, and what makes a research question compelling to you?

It is almost never just the disease area or statistical method that determines whether I find a project compelling. It is usually some combination of the question, the people, and the potential impact.

I am drawn to methodological challenges and problems that let me learn something new. One of the great privileges of being a collaborative statistician is that someone can walk through the door with a scientific question I have never encountered before and suddenly I get to enter a whole new area.

But I also ask myself: Where can we make the greatest difference? Would our expertise help move this investigator's work forward? Can we contribute something meaningful to the science? And can we build a relationship in which everyone feels valued and invested in the work?

That distinction matters to me.

At this stage of my career, I'm also more thoughtful about where I invest my time and our team's resources. Some of my most rewarding collaborations have been with early-career or underfunded investigators who have important scientific questions but limited resources. I genuinely enjoy helping people find a path forward.

What matters most to me is whether there is a shared commitment to doing good science and valuing what everyone brings to the table. It can be challenging when statisticians are brought in at the last minute or when the time and resources allocated don't reflect what the work requires. Those situations often call for honest conversations about expectations, priorities, and what we can realistically accomplish together.

So, prioritization is not simply deciding which scientific questions matter. It is also choosing and cultivating relationships in which good collaborative science can actually happen.

You've emphasized the importance of communication in collaborative statistics. What does "good communication" look like in practice for a biostatistician?

Good communication starts with remembering that our job isn't to impress people with how much statistics we know.

Jargon can create distance very quickly. Instead, I want to understand what an investigator is really trying to learn. That often takes several conversations. We may start broadly, then gradually narrow the research question, outcomes, design, and methods together. I would much rather have three productive short meetings than rush through one meeting and discover six months later that we answered the wrong question.

We also need to meet people where they are. That may mean drawing something, using an analogy, explaining an idea several ways, or simply stopping and asking, "Does this make sense?"

Ultimately, communication is how we build trust. I want collaborators to feel comfortable saying, "I don't understand," and I want our statisticians to feel equally comfortable saying, "I don't know yet. Let me think about that."

Technical brilliance matters, but if people are afraid to ask you a question, it is not enough for collaborative science.

Mentoring

You've received recognition for your mentoring. What do you think makes a great mentor in statistics or data science?

For me, great mentoring starts with the relationship.

I learned that early without realizing I was learning it. My father's graduate students were part of our lives. They ate dinner with us, spent holidays with us, and occasionally lived in our home. He was fun. His students really enjoyed his company. But underneath that was something much more important. They knew he cared about them and was invested in who they were becoming.

My grandmother taught me something else: the power of genuine interest. As my career developed, she wanted to hear where I was going and what I was doing. She used to tell me she lived through my adventures, and her curiosity made me feel my work mattered.

That stays with me because mentoring isn't always about giving advice. Sometimes it is simply about paying attention, being interested, and letting someone know you see something in them.

My strongest mentoring relationships are with people I genuinely get to know, and who get to know me. We spend time together. They hear

MORE ONLINE
CUBE stands for Collaborative Undergraduate Biostatistics Experience. *https://tinyurl.com/3vze2bc8*

my stories, including the mistakes, and hopefully absorb some of what I've learned without having to learn every lesson the hard way themselves.

But mentoring cannot be formulaic. People need different things. One person may need encouragement and confidence. Another needs to be challenged. Someone else needs an introduction, an opportunity, or simply a person who will listen. I try to understand the individual and mentor accordingly.

At this point in my career, watching someone I've supported grow into a leader and begin guiding others is enormously satisfying. That's how I know the work continues.

How do you help students and early-career professionals build confidence when working with experts outside their field?

I understand that feeling better than people might imagine. At RIT, I was often the only woman in my mathematics classes, and throughout my career, there have been many times when I entered a room where everyone seemed to know something I didn't.

Even today, there are moments when I look around a room and am struck by the fact that people are looking to me for ideas and leadership. I don't take that for granted.

Remembering what it feels like to still be finding your voice makes me a better mentor.

I want younger people to understand that expertise does not require knowing everything. In interdisciplinary science, no one knows everything. Your responsibility is to know what you bring to the table, prepare well, listen carefully, ask thoughtful questions, and be willing to say when you don't know something.

Confidence comes from doing that repeatedly and seeing that your contribution has value. Part of my role as a mentor is creating opportunities for people to discover that for themselves.

Programs such as CUBE create opportunities for underrepresented students. Why is that kind of initiative so important to you?

CUBE is personal to me in ways that probably aren't obvious from the program description.

My father spent part of his career helping students who needed additional preparation to succeed in college. I grew up watching what happened when someone invested time in a young person and helped them see possibilities they hadn't necessarily seen for themselves. Talent is widely distributed, but access to opportunities, professional networks, and exposure to fields like biostatistics is not.

Programs like CUBE can provide that kind of exposure. Students receive training, but equally important, they get to work on real scientific problems, meet statisticians and scientists, and begin building a professional network. They can see what collaborative biostatistics actually looks like and start imagining themselves in the field. You cannot pursue a career you don't know exists.

That's one reason CUBE matters so much to me. Sometimes changing someone's trajectory begins simply by opening a door and saying, "Come in. Let me show you what's possible."

Statistics Career and Advice

With rapid changes in healthcare and data availability, what skills do you think will be critical for the next generation of statisticians?

Obviously, statisticians need to understand emerging technologies, including AI. We would be foolish not to embrace tools that can make aspects of our work better and more efficient.

What worries me is the assumption that access to sophisticated tools is equivalent to years of statistical training, scientific experience, and judgment. It isn't. We're already seeing situations where someone arrives with an AI-generated solution and asks a statistician to validate it or repair it after the fact. Sometimes, untangling what was done and why is harder than designing the analysis correctly from the beginning.

So, somewhat paradoxically, I think the rise of AI makes the distinctly human skills of a collaborative statistician even more important: critical thinking, understanding study design, recognizing when an answer doesn't make scientific sense, communicating uncertainty, asking the question nobody else thought to ask, and understanding the context in which data was generated.

AI can generate an analysis, including one that is not appropriate for the setting. AI cannot substitute for the scientific judgment and accountability required to understand the science, data, design, and people around the table.

The next generation needs technological fluency, absolutely. But my hope is they never confuse knowing how to use a tool with knowing how to think.

What is one piece of advice you would give to someone just starting out in biostatistics or data science today?

Don't underestimate the value of practice.

There is a difference between learning statistics and learning how to be a statistician. The

latter comes from working with people, encountering problems you haven't seen before, understanding enough about someone else's science to know why the question matters, and learning how to apply what you know in settings that are rarely as tidy as the examples in a textbook.

That has been a constant throughout my career. I learned by doing, by working across disciplines, by asking questions, and by being willing to get outside my comfort zone.

So, my advice is to seek out those experiences. Work with people. Take on problems you don't already know how to solve. Get outside your comfort zone. Find people you can learn from and eventually become someone other people can learn from.

And don't wait until you feel completely ready. Very few interesting opportunities arrive at exactly the moment you feel prepared for them.

> The next generation needs technological fluency, absolutely. But my hope is they never confuse knowing how to use a tool with knowing how to think.

Personal

Outside of your professional work, what brings you the most joy or helps you recharge?

Family is at the center of my life. We are a big blended Hanlon-Kolb family, including my husband, our children, siblings, parents, and in-laws. Our home tends to be the gathering place for holidays and celebrations. I love that.

I also love to travel. I started writing a travel column, much of it about home exchanges, and that eventually led to becoming an editor for two local magazines. Travel satisfies the same curiosity that drives me professionally. I enjoy discovering new places and meeting people.

But I don't need to go anywhere exotic to be happy. I can sit in my backyard watching deer graze and squirrels running around my feet and be perfectly content. I hike, bike, paddleboard, and probably go to a concert once a month. I also love the beach. Give me the sound of waves and sun on my face, and I'm pretty happy. And I am a sunset fanatic. Wherever I travel, I find myself looking for the best place to watch the sun go down.

The simplest answer is that I really love life. Family, music, nature, travel, new experiences, and time with the people I care about all matter to me. Work matters enormously, too, but there is a big world outside of it I don't want to miss.

Looking back, is there anything you would have done differently in your career?

I would have learned earlier to look up from the work in front of me and understand the bigger picture.

I've spent much of my career building collaborative groups, and I've learned that doing that successfully requires more than assembling talented people and doing excellent science. You have to understand the institution you're part of. What are its priorities? Where is it trying to go? What does leadership need? Where are the gaps? And where can a collaborative group contribute in a way that advances both the science and the larger mission?

Earlier in my career, I focused more on proving the value of the work itself. I thought that if we did excellent work and helped enough investigators succeed, the value would be obvious. Those things certainly matter, but leadership has taught me that you also need to understand organizational structures, build relationships across them, and communicate your value in ways that resonate with different audiences. The goal isn't simply to align with institutional priorities, but to help shape them by demonstrating where collaborative science can make a meaningful difference.

I've also learned the importance of diplomacy. As statisticians, we are trained to look at evidence, identify problems, question assumptions, and say when something isn't supported by the data. Those are strengths, but how you use that statistical voice matters. You can be rigorous without being rigid. You can disagree without being adversarial. And you can advocate strongly for what your team and the science need while still listening carefully to what the institution needs.

If I could give my younger self advice, it would be to understand that landscape earlier. Don't just build a great group. Understand where that group fits, why it matters to the institution, and how it can help move the larger organization forward.

That perspective has made me a better leader. ■



Left: Attendees pet one of the Caring Canines on Monday, August 3, at JSM 2026 in Boston. Right: Jamie Joseph and her therapy dog, Mia, interact with an attendee at JSM 2026 on August 4.

Caring Canines Therapy Dogs Bring 'Pawses,' Smiles to JSM

Caroline Birdrow, Jamie Joseph, Karen Childers, Jamie Roberman, Sunita Ghosh, and Soo Shin

MORE ONLINE
View more Caring Canines photos at the ASA's Flickr page in the JSM 2026 Monday and Tuesday albums. *https://tinyurl.com/dr8rt78j*

With everything going on in the world of scientific research, sometimes you just need a dog to love you unconditionally. That's what ASA GivesBack was thinking in the early stages of planning the annual Joint Statistical Meetings Impact Project, a philanthropic-based activity put together every year in conjunction with the host city.

While the conference is an annual highlight for many to connect and re-connect with colleagues, friends, and peers, it's also jam-packed with activities and presentations. This requires attendees to be "on" for up to 14 hours each day, which can be stressful. And what better way to fix stress than to hug a dog?

The idea was barked into reality by the Caring Canines Visiting Therapy Dogs Association in Boston. While many of the dogs had not worked events as large as JSM—and the organization wasn't accepting new facility visit requests at the time—they came anyway. And so did JSM attendees—to cuddle therapy dogs over their lunch breaks. Many hope the therapy dogs will become a JSM tradition.

The therapy dogs' visit to JSM is just one example of the many ways ASA GivesBack supports the member community. Other annual projects have included the Thank a Mentor program, which recognizes individuals who've made a difference for a mentee, the ASA Virtual Science Fair for K–12 students, the Fall Data Challenge for high school and undergraduate students, and the fall meme/haiku contest. Throughout the year, the group also hosts craft nights and other virtual meet ups, creating additional opportunities for ASA members to connect.

ASA GivesBack is always looking for new members and ways to support the statistics and data science community. Interested in getting involved? Email them at *asagivesback@gmail.com*. You can also follow them on LinkedIn and Facebook.

And if you enjoyed the Caring Canines visit to JSM—or even if you just resonate with their mission—consider donating to their organization at *www.caringcanines.org/donate.*

Q&A with Therapy Dog Owner Jamie Joseph

Jamie G. Joseph, a biostatistician at Henry Ford Health, knows firsthand the joy a therapy dog can bring. She brought her certified therapy dog, Mia, to JSM, where they spent two days visiting with attendees. We asked Joseph about Mia and their work together.

Tell us a little bit about you, your background, and how long you've been a member of the ASA.

I'm originally from New Jersey, but I got my PhD in biostatistics from Vanderbilt in 2024. I honestly don't remember when I officially joined the ASA, but I've been going to JSM/ENAR since close to my first year of graduate school. I've been with the ASA GivesBack community for a year or so at this point. I absolutely love working within my community, so I was delighted to learn from my cohort-mate, Caroline Birdrow, that a committee like this existed. I now work at Henry Ford Health in the department of public health sciences, where I get to do a ton of collaborative team science, especially in the women's health space, which I adore.

Tell me about Mia, your certified therapy dog. How old is she, what breed, and what is her personality like?

Mia is a 3-year-old black labrador retriever, and she's one of the three loves of my life, along with my non-therapy dog, Bernoulli, and my husband. She is an absolute angel. There are very few thoughts in her brain, but all of them are some version of "Hi, I love you!" or "Please kick the ball again!"

Mia was raised through Leader Dogs for the Blind to be a guide dog. But she got pulled for their breeding program and had nine puppies for the organization. My husband and I volunteered to host her and her puppies.

After Mia had her litter, Leader Dogs retired her, so we were able to adopt her. I learned how to get her certified as a therapy dog, and the rest is history.

What was it like bringing Mia to JSM? How did she respond to all the people?

It was exciting. I bring Mia to Henry Ford Hospital, so it's not like my volunteering is completely separate from my work life. But it's fun to bring your dog into a room full of professional colleagues.

She loves people, and I think she was thrilled to have so many folks loving on her. She was definitely wiped by the end of the second day. She usually only works one day per week, so the two-plus-hour shifts for two days in a row were a lot! But she was so happy. Anytime I take out her work harness and go, "Do you want to get to work?" she explodes with happiness.

What do you think people get from spending a few minutes with a therapy dog?

I think it's most often a few moments of joy, a smile in the middle of the day, or a distraction from other things going on in life. Especially at hospitals, but also at a stressful professional conference during a time when there is so much uncertainty in the scientific community. But sometimes, it means a lot more. There have been times when someone who hasn't been able to see their own dog for months gets to cuddle with Mia or times when a family is going through a loss or when a clinician has had a really hard case and just needs to hug a fluffy silly creature with no agenda other than to get pets. You can't always know what people are going through, but there are times when the encounter is so obviously meaningful and important.

Can you share a favorite memory from a therapy dog visit—at JSM or elsewhere?

Dogs aren't really allowed on the beds in hospitals, except for special cases. There was one time when Mia jumped on the bed without permission, and I was horrified. I was apologizing to the patient, trying to get Mia off, when the person started crying and said, "No, she could tell I really needed this!" and then proceeded to just snuggle Mia silently for a really long time. It's honestly amazing what therapy dogs can pick up on.

What is something people might not realize about having a therapy dog?

They are very different from service dogs. Mia doesn't provide any services to me. She isn't allowed anywhere that dogs aren't allowed (without special permission/planning), and she isn't trained as such. Her only job is to love the people who want loving and to be (relatively) well-behaved while on duty. My main job is to be her chauffeur really. The hardest part for me is monitoring Mia's emotional state and well-being while we do visits. Therapy dogs get tired quicker than you'd expect. Visits are typically under one to two hours, or three at most. She is too sweet and well-trained to ever act mean or hide when someone wants her attention, but there are subtle body language changes and signs of her feeling done for the day that I look out for. We do this for the people, but the dogs come first; after all, this work doesn't exist without them. ■

MEMBER SHOWCASE

Arun Chind: An Interdisciplinary Journey Through Statistics, Medicine, Economics, and Law



Arun Chind

Arun Chind is a statistical consultant, legal scholar, occupational health physician, applied economist, and expert witness for regulatory investigations. He is the current awards chair for the American Statistical Association's Statistical Computing and Statistical Graphics sections. We caught up with him to learn more about his career, work, and experiences.

You've worked across occupational health, economics, statistics, and law. How did these different areas come together in your career?

Medical school involves a curriculum of around 13 subjects, and I found each one riveting. Needless to say, the labor market conditions—both in India and the UK—have influenced my many career trajectories. I worked in many surgical (general surgery and urology) and medical specialties (emergency medicine, psychiatry, intensive care medicine, medical, and radiation oncology) before moving to occupational medicine, for which I passed exit exams in 2015. Given my unique background with formal training in several scientific specialties—and an inexplicable, curious, and incurable malady of #FindingEverythingFascinating—I can often communicate with clients in their lingo. And since I deliver sterling service worth more than the nominal dollar value, I have established myself as a consultant in independent practice.

How did you become involved with the ASA's Section on Statistical Computing and Section on Statistical Graphics?

I was a peer reviewer for medical journals for more than 20 years before I gained the GStat credential. For several ASA sections, I volunteered as a reviewer for the student paper awards. The computer and graphics sections needed a volunteer for awards chair. So, I did what I've been doing since primary school all the way through medical school (where I even got to assist in two forensic autopsies) and my professional life—step up to the challenge and serve as well as I can.

As awards chair of the Statistical Computing and Statistical Graphics sections, what are your duties? What did you gain from the experience that you didn't expect?

My appointment as awards chair was like leaving a kid in a candy store. There is no job description, so I read every single submission and tested software packages like a person possessed. For standout submissions, I mentor applicants to bring out the best in themselves, which can include offering suggestions for improving software packages. I liaise with colleagues on the awards committee to ensure fairness in the selection process (a concept drawn from economics and law). Since there are many worthy submissions and only a few awards to hand out each year, I have the painful duty of writing to those we've had to disappoint. If I had realized beforehand how much I didn't know about being the awards chair for the sections, I might have thought twice. Still, the sheer complexity, beauty, challenge, and intellectual reward of it continues to captivate me.

What has been one of your biggest professional achievements?

Formally qualifying as a statistician—even if things fell into place only a few years ago—was a landmark event for my career and helped boost my self-confidence. Some of my work deals with sensitive and confidential matters. One project I can acknowledge is a subcontract worth £6,000 ($7,200) with the Institute of Occupational Medicine for providing data analysis, policy impact analysis, and policy advice to the UK's Rail Safety and Standards Board in 2025. To the best of our knowledge, this was the world's first project to provide evidence-based policy advice data on recall intervals for fitness-for-work medicals of rail workers in safety-sensitive roles (train drivers, dispatchers, etc.). This work is likely to be cited in other jurisdictions. Anyone who's made a safe journey by train to anywhere may have me to thank.

What career advice do you live by, and who gave it to you?

I've led a very non-traditional career. I revel in intellectual challenge. Although I preach

work-life balance to others, I have given myself #WorkWorkBalance that suits me just fine. As to who gave me this strange/extraordinary/terrible career advice? I believe the Creator should take the blame—God Almighty it is! I appreciate the ASA's International Christian Statisticians group, whose table (many thanks, Tabitha Peter) I stopped by at the Boston JSM.

What is the biggest career challenge you've had to overcome?

My clients do their research and nowadays use AI before consulting with me. (Thank you, Google Gemini!) So, I've had to up my own game. My patients and clients include those who deal with genetic conditions and rare diseases, so I've been attending wet lab training to complement my work in statistical genetics. It has been humbling to realize that pipettes, electrophoresis gels, and practical experiments with genetic code are far more messy and less forgiving than raw data and computer code. But the pain has been worth the gain.

Can you tell us a little more about your educational background? What degrees have you earned, and where did you study?

After high school, I joined an undergraduate program in statistics, which was almost all algebra, no computers, and minimal graphics—all work and no play—so I dropped out. After medical school, I enrolled in computer programming and studied more biostatistics than the curriculum required. I completed core surgical training in Chandigarh, India, where I earned a Master of Surgery degree. Then, I qualified as a fellow of the Royal College of Physicians and Surgeons of Glasgow. After moving to the UK, I did summer schools in mathematics, practical physics, and astronomy at the Open University. I have since earned graduate-level degrees and diplomas in quantitative finance, with a focus on economics and econometrics, from the University of London; medical statistics from the University of Leicester; public health from the University of Florida; and public economics and data analysis—including mathematics, statistics, econometrics, and machine learning—from Purdue University. Using my 16-hour workdays, I also completed undergraduate modules in economics, including a capstone project from Colorado State University. Most recently, given my interest in policy impact analysis, I graduated with a Master of Laws from Leeds Beckett University, with an empirical analysis of labor law and market outcomes for the dissertation.

I am very respectful of the courts, but a judge in the UK once effectively ruled that I could not possibly be walking (working) and chewing (doing academic training in law) gum at the same time. Regardless of dissenting opinions, I plead guilty to continuing to do more than a few things at a time—despite stumbling blocks and sneaking in a smirk or three.

As a consultant, what types of problems do clients typically bring to you, and how do you draw on your background in medicine, economics, statistics, and law to address them?

I get varied problems flung at me in my occupational health private practice. Many have to do with occupational exposures (lead, ionizing radiation, asbestos, blood-borne viruses, chemicals, ergonomics, job stress, suicide risk, etc.) and causation. I do a lot of second opinions. Especially when they disagree with me, my favorite phrase to use with clients is: "Allow me to help you."

I draw on my training in medicine, economics, mathematics, physics, statistics, and law. I have worked at or visited client sites (Tata Steel, Nissan, London Zoo, railways, fire services, veterinary hospitals) to understand their processes and people and to provide evidence-based professional advice. I was recently approached by Instats, with whom I'll offer a course in medical statistics called Master of Medical Statistics. My other clients for strictly quantitative services include medical, health economics, and epidemiology journals; the International Society for Pharmacoeconomics and Outcomes Research; and the ASA. As part of the scientific peer-review process, they expect—and receive—hours of research and study on my part.

What is something you'd like people to know about you that we haven't asked?

I am very solution focused. (I'm not a don't-want-to-get-involved type.) It's a quality that helped me as a surgeon, in public service, and as an expert witness. I describe myself as a latter-day gentleman scientist. Resolved to boldly go where most would dread to tread. I nurture, mentor, and facilitate—but don't receive any grants and keep going despite being taken for granted.

Given my learning and experiences, I am understanding and empathetic toward human (and lately AI) follies and foibles. I realize I can't deliver a perfect service all the time, but I continue to work with colleagues and stakeholders, providing a wholesome and fulfilling experience to my clients in my paid and voluntary roles. Just as difficult people can be the bane of public service, bugs in code remain the bane of statistical computing. Debugging is definitely not my favorite chore: #DeliverUsFromWeevil. ■

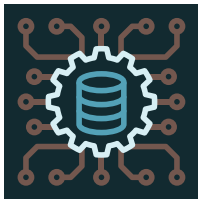
SDSS
SYMPOSIUM ON DATA SCIENCE & STATISTICS

SHERATON PITTSBURGH HOTEL AT STATION SQUARE • PITTSBURGH, PA • APRIL 27–29, 2027

Statisticians, data scientists, and AI practitioners ready to shape what's next in a rapidly evolving AI landscape should mark their calendars for **SDSS 2027**!

SDSS offers a dynamic environment in which to explore emerging methods, gain hands-on insights, collaborate across disciplines, and build connections with peers tackling today's most pressing data challenges.

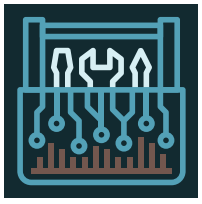
Innovative sessions focus on the following four tracks:



DATA SCIENCE APPLICATIONS



EDUCATION & PROFESSIONAL DEVELOPMENT



SYSTEMS AND INFRASTRUCTURE FOR APPLIED DATA SCIENCE



AI AND LLM APPLICATIONS



Key Dates for Attendees

Refereed Submissions
October/November 2026

Lightning Submissions
January/February 2027

Registration & Housing Open
January 7

Early Registration Deadline
March 25

Housing Deadline
March 30

Learn more at ww2.amstat.org/meetings/sdss/2027.

SDSS
SYMPOSIUM ON DATA SCIENCE & STATISTICS
ADVANCING AI, STATISTICS, AND DATA SCIENCE TOGETHER
PITTSBURGH, PENNSYLVANIA • APRIL 27–29, 2027



ASA CAREER CONNECT

is here to support you:

- **Create a jobseeker profile to customize your experience**
- **Access top employers**
- **Take advantage of career resources**
- **Explore curated jobs in statistics and data science**

https://careerconnect.amstat.org

ASA

ASA GIVING DAY 2026

Action Starts with Us

ASA GIVING DAY November 20, 2026

Investing in People. Advancing the Profession.

On Giving Day, your gift can help strengthen the future of statistics and data science by supporting programs that:

Invest in Future Leaders through scholarships, mentoring, leadership development, and career-building opportunities

Advance Education by equipping educators with resources and providing students with meaningful learning experiences

Strengthen Advocacy and Outreach by promoting sound statistical practice and evidence-based decision-making

Showcase the Profession's Impact by demonstrating how statisticians and data scientists improve lives, solve problems, and shape the future

ww2.amstat.org/givingday

ASA

International Conference on Health Policy Statistics

Evidence-Based Policy in Action: Statistics, AI, and Digital Health in Practice

January 13–15, 2027 • Annapolis, Maryland

REGISTRATION IS OPEN!

EARLY REGISTRATION AND HOUSING OPEN
September 10, 2026

REGULAR REGISTRATION
December 5 – January 15, 2027

HOUSING CLOSES
December 17, 2026

The International Conference on Health Policy Statistics brings together practitioners, health services researchers, methodologists, health economists, and policy analysts to exchange ideas, collaborate, and tackle methodological challenges in study design and data analysis, all while advancing solutions that shape the broader health policy community. Be part of the program!

Learn more at *ww2.amstat.org/ichps* or scan the QR code.

Welcome TO OUR NEWEST MEMBERS

Jiachen Ai
Maria Tope Akinyede
David Amakye
Joseph Antonelli
Emmanuel Arhin
Ernest Attakora
Esther Ntiwaah Awusah
Oluwatosin Dorcas Babalola
Brittany Barbush
Jesse Birchfield
Alice Blanner
Cheasequah Blevins
Benjamin Darkwa Boachie
Lucas Bowen
Katheryn Brigham
Prabhakara R. Burma
Karl Buvarp
Ronaldo Cardoso
Grant Carr
Leonardo Cella
Jiayou Chao
Huaqiu Chen
Chen Cheng
Alison Cherry
Mohammad Rabiul Chowdhury
Sofia Cing
Merlise A. Clyde
Celisa Counterman
Jiahao Cui
Rohan Dahal
Rob Daniels
Kingsley Y. Darko
Odbileg Davaadorj
Salem Omar Dehom
Fatoumatta Demba
Charlotte DeRosa
Janardan Devkota
Sophie DiMatteo
Danica Diva
Dina Drankus Pekelnicky
Kinspride Kwaku Duah
Yaqi Duan
Alaa Elsalem
Abayomi Dennis Epebinu
Maria Escobar
Haiyun Fan
Yuqing Fan
Ethan Fang
Sam Feinberg
Sarah Fischer
Jingwen Fu
Joy Garner
Arka Prasanna Ghosh
Anna Gleboff
Adam Goldman
Rushank Goyal
Casey Owen Grady
Nick Grener
Leying Guan
Jennifer Gulley
Kai Guo
Lalitha Gurajada
Nayeli Gurrola
Frank Gutierrez
Ryan Hafen Do Gyeong Han Sunwoo Han
Zachary W. Hannan
Hannah I. Hardy
Daniel W. Havens
Lichun He
Porscha Henderson
Jeanne S. Hill
Mason Hinman
Jianhua Hu
Xiqing Huang
Adam Idone
Eric Ingram
Samina Issa
Yunyi Jiang
Stuart Jones
Patrick M. Joyce
Baleria Juarez
Mark S. Kaiser
Himali Seneviratne Kalanchige
Natalia Kapliy
Bikram Karmakar
Elagipitiye Lakmali Karunathilaka
Richard Ellis Kennedy
Valeriy Korostyshevskiy
Michelle R. Krukas-Hampel
Sneha Kumar
Praveen Niranda Kumarasinghe
Prabhani Kuruppumullage
Don Jordge LaFantasie
Daoyuan Lai
Chaeyeon Lee
Hangbin Lee
Taylor Ward Lefler
Wentao Li
Xiaochun Li
Serena Lin
Amber Lind
Hong Liu
Richard Liu
Anthony M. Lomando
Clint Lovell
Myles Magee
Maria Malik
Suresh Mallikaarjun
Owen Marakovits
Jack Markert
Michael W. McHale
Emily McKay
Michelle Mellers
Sandeep Menon
Owen Mica
Semhar Michael
Blake Miller
Yumin Min
Michael Mitakidis
Ritwick Mondal
Swapnonil Mondal
Tyler W. Moore
Luis Carlos Morales
Cassandra Elizabeth Morgan
Xichen Mou
Salma Musaad
Edwin Mutimba
Szilard Nemes
Mariely Nieves-Plaza
David O'Connor
Akua Amponsaa Obeng
Noah Ochital
Aishat Olaosebikan
Kaodinna Onwumechili
William Palmer
Niharika Pandya
Veronica Belen Patterson
Daniel Clarence Pearson
Naydi Perez
Ella Peterson
Kyle Peterson
Wenqing Qian
Hazel Quesada Leitón
Ananya Rajan
Megan C. Rehbehn
Alec Reinhardt
Grzegorz Rempala
Federica Zoe Ricci
Sona Rivas-Tumanyan
Hansapani Sarasepa Rodrigo
Eduardo Salgado-Liceaga
Wako San
Taniya Sarkar
Tyler Schenck
Kimberly Schveder
Lakeesha Sebastian
Abigail Christine Sedory
Mengyao Shi
Tiange Shi
Yuanjun Shi
Rebecca B. Silva
Shobhit Singh
Susheela Singh

Melanie Sitler
Vishal Sivakumar
Grace Sohn
Samira Soleymani
Sanvesh Srivastava
Christine Staab
Dan Stevens
Kevin Straka
Kevin Surya
Ruoqian Tang
Francine T. Tarrazona
V. Rajani Kanth Tatiraju
Kay Tatsuoka
Nicholas Cleveland Taylor
Lydia Tillapaugh
Guanchao Tong
Kit Yee Tse
Daniel Tuyisenge
Ifeanyi Uzowuru
Courtney J. Walker
Minglu Wang
Xuzhi Wang
Kylie Warden
Liling Warren
Dennis Wilkens
Samuel Wilson
Jonathan Wisong
Nicholas Woolsey
Wenbin Wu
Zixuan Wu
Amanda Xu
Giles Xu
Yi Yao
Hyemin Yeon
Walter Orero Yodah
Zakaria Tarik Zerhouni
Yibo Zhai
Jiaying Zhang
Joy Zhang
Ziqian Zhang
Linda H. Zhao
Fanding Zhou
Jun Zhu
Yalin Zhu

New Member Spotlight
BILAL SHAIKH

This month, we spotlight Bilal Shaikh, a research biostatistician at Weill Cornell Medicine. He answered the following questions, so we could get to know him better:



How did you become interested in statistics and/or data science?

My interest grew naturally from my background in pharmacy and pharmaceutical product management. Early in my career, I saw how clinical trial data and market analytics directly affected patient care and strategic decisions. I wanted to move beyond just using these insights to actively generate them. This led me to pursue a master's in health policy and economics at Cornell University, where I acquired skillsets in advanced statistical modeling, data curation, and predictive analytics.

What do you consider your dream job?

I want to lead multidisciplinary teams that bridge the gap between complex real-world healthcare datasets and actionable public health policy to drive strategic decision-making in healthcare institutions.

What do you hope understanding statistics and/or data science helps you accomplish?

I hope to publish impactful, actionable public health research that optimizes treatments for complex diseases like cancer, diabetes, and cardiovascular conditions.

Is there a particular group of statisticians you would like to reach out to you?

As an active ASA member, I would love to connect with members of the Section on Statistics in Epidemiology and the Section on Medical Devices and Diagnostics. I am also keen to collaborate with researchers in the Health Policy Statistics Section to discuss Medicare and Medicaid integration and real-world evidence.

What is your favorite hobby?

I love to cook and travel!

What is something you would like people to know about you that we haven't asked?

Having started as a licensed pharmacist, transitioned into pharmaceutical marketing, managed cross-functional sales forces, and now working as an academic research biostatistician, I understand the entire lifecycle of therapy from lab bench to commercial market to patient outcomes.

This Month in Statistics History:

The Statisticians Behind Modern Sanitation Systems

Penny S. Reynolds

To honor UN World Toilet Day on November 19, we celebrate the statistical contributions (plus some missteps and false leads) of statisticians who helped build modern sanitation and public health systems. Basic sanitation measures have saved millions of lives, but approximately four in 10 people (more than 3 billion worldwide) still live without access to clean drinking water and adequate sewage disposal. And two in 10 lack access to private toilets.

1824: Alexandre Parent-Duchâtelet (1790–1836) publishes the first rigorous, empirical map of the Paris sewer systems. He uses the "numerical method" (developed by Pierre Charles Alexandre Louis) and occupational cohort monitoring to document structural failures, health risks, and worker hazards. His work fundamentally changes contemporary understandings of disease, sanitation, and the role of sanitation workers as essential service providers. (Paris today is one of the few cities to have a sewer museum.)



Alexandre Parent-Duchâtelet

1829: Louis René Villermé (1782–1863), one of the earliest users of epidemiological spatial mapping to understand disease distributions, helps found the first journal of public health, *Annales d'hygiène publique et de médecine légale* (*Annals of Public Hygiene and Forensic Medicine*). The journal puts global attention on the sanitary reform movement by publishing groundbreaking epidemiological studies and statistical tracking of diseases backed by data from intensive field investigations.



Edwin Chadwick

1842: Edwin Chadwick (1800–1890) publishes a report on the sanitary conditions of the working poor. Borrowing ideas from the French public health movement, Chadwick examines mortality as a population phenomenon affected by location and occupation. He argues that high premature death rates were largely preventable if sanitation could be improved. Although his statistical methods are criticized and later superseded by the likes of **William Farr**, his report is a crucial step in the translation of statistical evidence to public health policy.

1849: William Farr (1807–1883), president of the Statistical Society of London from 1871 to 1873, derives a mathematical model, $C = k/(e + a)$, expressing cholera mortality rate C as inversely proportional to mean housing elevation e. By grouping London's registration districts into elevation "terraces," the data neatly conforms to his model, providing evidence of the miasma theory of contagion. However**,** John Snow demonstrates the relationship is an ecological fallacy: The association between elevation and cholera mortality disappears when data is analyzed at the household level. Although Farr's own analyses provide evidence that cholera originated from sewage-contaminated drinking water, he maintains his belief in the "all smell is disease" theory of miasma. Not until 1866, after Snow's death, does Farr finally accept that cholera is a water-borne disease.



Lemuel Shattuck

1850: Lemuel Shattuck (1793–1859), one of the five founders of the American Statistical Association, publishes a "Plan for a Sanitary Survey of Massachusetts." Better known as the Shattuck Report, it is now recognized as the foundation of the American sanitation movement. Shattuck uses demographic and death records to link high mortality rates to unsanitary urban conditions and demonstrates the necessity of government oversight and intervention.

1854: Florence Nightingale (1820–1910) takes temporary leave from the Institution for the Care of Sick Gentlewomen to superintend patient care at Middlesex Hospital, which treated many patients during the Soho cholera outbreak. The statistical innovations by which she is best known come later. The experience she gains here will enable her to develop her signature hyper-efficient medical triage and administrative systems in the Crimea. She's later named first female Fellow of the Statistical Society of London in 1858 and honorary ASA member in 1875.



Florence Nightingale

1854: John Snow (1813–1858) has the handle of the Broad Street pump removed. This action pinpoints the source of the Soho cholera outbreak and establishes cholera as a water-borne disease, not airborne as was commonly believed. Snow's insights are more remarkable because they occurred 30 years before the definitive cause of cholera was established. His conclusions are based on extensive ground-truth research, statistical mapping, and spatial analysis, coupled with sound physiological reasoning.

1859: Florence Nightingale submits her report to the Royal Commission convened to investigate high mortality among soldiers during the Crimean War. While the report is an indictment of systemic failures that caused many preventable deaths, it also highlights the success of the 1855 Sanitary Commission, which slashed hospital mortality rates from 42% to 2% through targeted overhauls of sewage and ventilation.



William Farr

Nightingale applied the analytical methods of **Adolph Quetelet** (data equivalence before comparison, isolation of constant from variable "forces") in collaboration with **William Farr**, who prepared the data tables. Designed to make the maximum impact, the report is short and supported by compelling numerical evidence and her now-famous coxcomb diagrams.

1890: John Shaw Billings (1838–1913) and colleagues complete their "vital statistics" survey of New York City and Boston. An important innovation is the creation of small, permanent, geographic units (sanitary districts) for statistical mapping of environmental and municipal factors influencing urban sanitation and disease transmission. With the change in focus of the 1910 census from public sanitation to demographic tracking, the US Census Bureau renames these units "census tracts."

1892: William Thompson Sedgwick (1855–1921) and **Allen Hazen** (1869–1930) present their groundbreaking statistical track and trace analyses of the Chicago typhoid epidemic at the 53rd annual ASA meeting in Boston. They link the source of the epidemic to the sewage-contaminated municipal water supply. Their report is recognized as the beginning of American epidemiology.



William Thompson Sedgwick

1898: Major Walter Reed (1851–1902) and two other members of the Typhoid Board investigate a typhoid epidemic in US Army training camps that killed more soldiers than combat operations. After correcting thousands of case records that had been misclassified as malaria and other illnesses, they calculate localized incidence and tent-to-tent transmission patterns that showed that typhoid spread through person-to-person contact and houseflies carrying contamination from human waste. Their findings lead to recommendations for stricter sanitation and infection-control measures. A preliminary report comes out in 1900, and the final report comes out in 1904 after Reed's death.

1920: Pellagra (the "forgotten plague") was a debilitating, often fatal disease common throughout the southern states during the early 20th century. **Joseph Goldberger** (1874–1929) and **Edgar Sydenstricker** (1881–1936, ASA Fellow 1922) publish their study on South Carolina cotton mill workers, which demonstrates that pellagra was caused not by poor waste disposal as previously thought, but by dietary deficiency. Rather than relying on simple geographic spatial clustering and correlations typical of previous studies, Sydenstricker enables the correct conclusions to be drawn through novel analytical methods such as integration of multi-level data with interviews and food purchase records, control of confounding variables, and comparative group analyses. ■

MORE ONLINE
For more information, download the references at *https://tinyurl.com/426v9fxa.*

Practical Significance Take Two: *Real World Data Science*—Who's Writing the Story?

Real World Data Science, a publication of the Royal Statistical Society in partnership with the ASA, serves people working in data science who are looking for practical insights, methodological rigor, and thought leadership that informs their work and decision-making.



Annie Flynn



Monnie McGee



Willis Jensen

In the March 2026 episode of the *Practical Significance* podcast, cohosts Donna LaLonde and Ron Wasserstein welcomed managing editor Annie Flynn (Royal Statistical Society) and editorial board members Monnie McGee (Southern Methodist University) and Willis Jensen (CHG Healthcare) to talk about what stories need to be told.

Donna LaLonde: Tell us about your day jobs.

Monnie McGee: At Southern Methodist University in Dallas, Texas, I'm an associate professor of statistics and data science. I also chair the ASA Committee on Publications.

Willis Jensen: My day job is leading a business intelligence and analytics team at CHG Healthcare, and I'm also an adjunct professor of statistics at Brigham Young University.

Annie Flynn: I'm the head of content at the Royal Statistical Society, which is basically the UK equivalent of the ASA. And a big part of this is serving as managing editor of *Real World Data Science*.

Ron Wasserstein: Annie, what inspired the creation of *Real World Data Science*, and how has it evolved since it launched?

Annie Flynn: *Real World Data Science* was created by my predecessor, Brian Tarran, who's a great writer and editor in this statistical space. He wanted to fill a gap he felt existed between theory and practice.

There's a huge amount of excellent material out there on statistical methodology, but far less that shows what happens when those methods meet real data, real constraints, and real decision-making environments.

The RSS wanted to create a space that focused specifically on applied data science, how it gets done in practice, what challenges arise, and what lessons people learn along the way. All that sort of thing.

But then, we also wanted to provide the opportunity for practitioners in the field to respond more in real time to new developments and new ideas. And since launch, it's evolved in a few important ways.

The scope has narrowed a little bit. At first, the focus on accessibility led us to create a significant amount of content for students and early-career scientists. Since then, we've realized that this content is already covered well elsewhere, and what the world really needs are high-quality tutorials and case studies on cutting-edge methods relevant to established practicing data scientists.

Obviously, we still want our content to be inclusive and accessible, but our focus is now a bit more squarely on that established practitioner.

Ron Wasserstein: Monnie and Willis, what makes *Real World Data Science* different from other data science resources that are available?

Monnie McGee: One of the first articles we published was called "Keeping the Science in Data Science," so talking about using science

to drive the data analysis rather than the other way around. And of course, we want things that are statistically sound, but we also want them to be context-driven to ensure we're answering the question that was posed.

I believe ethics is also an important feature—the fact that ethical data science is good data science. And that's something I would love to see more features on, as well.

Willis Jensen: There's so much content out there, and generative AI is only making it harder to find good content. We strive to provide higher-quality content that's vetted and curated by experts.

You can trust the content because you know it's been reviewed by real data scientists—people doing this work in industry and practice. So, I believe the quality of the content is going to be so much higher than anything else you can find out there.

Donna LaLonde: What types of submissions make you stop and say, "We need to publish this?"

Monnie McGee: I like the idea of the honest-failure submission—the ones where research didn't go according to plan. I'd like to publish pieces that talk about the road there. An example from an author: "We tried this state-of-the-art LLM, and it failed miserably because of X. We used these statistical methods to show this is why it failed, and we had to make this shift to fix it."

Most people don't want to talk about their mistakes, but these are well suited for *Real World Data Science*.

Willis Jensen: We're looking for examples and case studies. Did the article answer a question? Did it make an impact on the decision? What was the impact?

Something that solves a problem or answers an important question—that's what makes me stop and say, "We need to publish this." Those articles are practical, real-world, and have an impact you can quantify.

Ron Wasserstein: Annie, in your role as managing editor, how do you balance the distinction between technical depth with accessibility for readers at different skill levels?

Annie Flynn: We want our content to be as accessible as possible in terms of how it's written, but not necessarily introductory in its technical level. Clear language, well-explained context, and good structure—these are areas where we can help authors. We focus on material that gives practitioners something they're less likely to find in standard learning resources.

We always encourage authors to make their reasoning explicit and to define their assumptions and explain their decisions without stripping away technical substance.

If an author has a great piece of work or a great method they want to explicate, we can help with the writing side of things. We also work quite closely with contributors during editing to improve clarity and flow and ensure technically rich pieces are still readable and engaging.

Donna LaLonde: Monnie, with ASA members in mind, what emerging areas would you like to see addressed?

Monnie McGee: I would really love to see a classroom-ready, end-to-end case study. Articles on communication and collaboration skills too. We have narratives that tell compelling stories about projects, but educators need more than the story—they need tools for bringing it into the classroom. Perhaps a teacher's kit.

I'd like to see articles about sports: how people acquire and analyze sports data and find real-world applications for it.

And more about ethics and the use of generative AI. When is it appropriate, and when is it not appropriate? How can you use it ethically and intelligently?

Donna LaLonde: Willis, what should your industry colleagues in the ASA be writing about?

Willis Jensen: As an industry practitioner, I've noticed it can be difficult to publish in traditional journals because they often prioritize novelty over more routine applications of regression, machine learning, or neural networks. We would welcome such contributions.

MORE ONLINE
Listen to the podcast: *https://tinyurl.com/2d6mtyv3*

Learn about submitting your work to *Real World Data Science: https://tinyurl.com/2ufkbxzt*

The emphasis is not necessarily on the novelty of the method, but on the novelty of its application or the significance of its impact.

Ron Wasserstein: Annie, walk us through the typical submission and editorial process for a potential contributor.

Annie Flynn: We've tried to design a process that's supportive, transparent, and familiar for people accustomed to technical workflows, but we support a range of different formats.

You can submit to us with a Word document or any normal text file, whatever you like to use. But we also support code-rich and reproducible documents. You could use tools such as Quarto, RStudio, or VS Code to work locally, then submit HTML drafts and QMD files.

I recommend you start by getting in touch with an idea. We'll then work with you to shape it into a content brief, thinking about the audience, key messages, and scope. We want to help set you up to succeed before you produce your first draft.

And then, the editorial review phase is more transparent and collaborative than people might be used to if they've already submitted to academic journals or other sorts of platforms. We provide clear feedback from the board and work with you to refine the article.

Obviously, we're intent on being as rigorous as we can and making the piece the best it can be, but it's also very collaborative. And you'll always get to preview the final version before it goes live to ensure you're happy with it. Then, we'll always support you with promotion and sharing.

Ron Wasserstein: How would I go about citing the article? What are you doing to make that work discoverable?

Annie Flynn: Every article closes with a linked citation, and we promote all the articles across different social channels. And we also encourage authors to share their articles on their platforms and networks. We'll support you in any way we can.

Willis Jensen: An academic or traditional ASA perspective typically looks down on website citations because they're not to the same standard as a journal article. However, this is changing with many quality publication venues beyond the traditional journal. Because of the curation and review process that we have with *Real World Data Science*, ours is a valid, high-quality citation. The articles have been vetted and undergone a rigorous review process.

Donna LaLonde: What advice would you give to an experienced data scientist who's never published before?

Willis Jensen: Put aside everything you know about the traditional publishing process. Our process is not an adversarial referee-writer relationship. It's very much a partnership.

If you have an idea that's not fleshed out, just share it with us, and we can work with you and help you develop something that would be really valuable.

Monnie McGee: Agreed. You don't need to submit a polished article. You can submit an idea or an outline. You can just brainstorm something you want to do and submit that. Just go for it, and get in touch.

Ron Wasserstein: What is your hope for *Real World Data Science* over the next few years?

Annie Flynn: Going forward, I would like to focus on the community side of it. I would love for some of the pieces to build connections between practitioners, researchers, and even decision-makers in the spaces the content references. To start conversations that provoke ongoing discussion. Data quality has become a hot topic for us. And that's where we can have real impact.

Monnie McGee: One of my visions for *Real World Data Science* is that it will be a place where people can go to find work they can trust because they know experts have evaluated the content and worked with the authors to make it accessible and technically appropriate.

Willis Jensen: As statisticians, we perhaps see data science as a separate field. Over time, I hope to see more merging or synergy within the discipline. And the ASA's partnership with the RSS in supporting *Real World Data Science* is just another step toward that synergy.

Editor's Note: At the time of recording, Willis Jensen worked for CHG Healthcare. He is now an associate professor at Brigham Young University. ■

STATS4GOOD

Karl E. Peace Award Recognizes Outstanding Leaders in Data for Good

Each year, the ASA's Karl E. Peace Award for Outstanding Statistical Contributions for the Betterment of Society honors statisticians making substantial contributions to the statistical profession, contributions that have led in direct ways to improving the human condition. The award was established in 2011 on behalf of biostatistician Karl E. Peace, an outstanding leader in the use of statistics to serve the public good. This year, the award committee named two recipients: Nalini Ravishanker of the University of Connecticut and Amy Braverman of the California Institute of Technology and NASA.

Much of Braverman's statistical work focuses on the science of data fusion—integrating multiple datasets from different sources and with different types, formats, and requirements into a single consistent whole for statistical analysis. An important example of this is integrating geospatial time series data from multiple sources, which has led to important work combining and analyzing massive data sources on Earth and climate data, including remote sensing data. This has resulted in models of complex and interacting processes affecting climate behavior that can be tested with observational data. Much of the data used in this research comes from NASA, where Braverman is a principal statistician at the Jet Propulsion Laboratory.

Braverman's work at NASA with massive data sources has made outstanding contributions to our understanding of the Earth and climate. These were recognized by the Karl Peace Award Committee members, who specifically mentioned her "leadership in pioneering statistical methodology for principled uncertainty quantification and climate data fusion that directly inform climate monitoring, air quality risk assessment, and associated policy relevant science for the society as a whole."

This work has had an impact on some of the most important questions we face as a society today. Just as one example, Braverman's methods are being used in research exploring the rapid growth of data centers as a potential driver of climate change.

Nalini Ravishanker is a noted statistician and professor at the University of Connecticut, where much of her research focuses on time series data and analysis. Her extensive body of research has had a wide-ranging impact across academia, government, and industry with important applications in finance, transportation, biostatistics, and engineering. As the author of multiple textbooks on time series analysis, her writing has influenced the work of many students. Ravishanker serves as the editor in chief of the journal *Applied Stochastic Models in Business and Industry* and is active in the ASA.

While these academic achievements are outstanding, it is Ravishanker's work internationally with government and industry professionals that brought the notice of the award committee. Much of this work has been through the International Statistics Institute, where she has served as a journal editor, mentor with the ISI Young Statisticians Committee, and a member of the ISI leadership team. Ravishanker is the ISI president-elect, with her term as president slated for 2027–2029. Recognizing this, the award committee noted in her citation, "For the international leadership, dedicated mentorship, and capacity building, with a particular emphasis on industry professionals and national statistical offices in developing countries."

Ravishankar has partnered with national statistical agencies to build bridges between academia, industry, and government to promote statistical science and applications, strengthen statistical standards of practice, share data, and mentor students to develop the next generation of scientists in places where she will have the most impact in the long term. She has been an outstanding leader in strengthening the benefits statistical science and practice can bring in places so in need of support.

The 2026 Karl E. Peace honorees have shown how research in statistical science can go far beyond research centers to have an impact on people throughout the world. Their inspiring example makes them models for all of us as we seek to benefit society through data for good. ■

Getting Involved

This month, the Committee of Presidents of Statistical Societies is accepting nominations for their 2027 leadership awards, including the Emerging Leader Award. Nominations are due by December 15. Details can be found on the COPSS website at *https://tinyurl.com/yc8m55uu*.

Also, you can learn more about the Karl E. Peace Award on the ASA website at *https://tinyurl.com/347596pd*. The nomination deadline for the 2027 award is March 1.



David Corliss
With a PhD in statistical astrophysics, David Corliss works as a data scientist in industry. He serves on the ASA Board as a Council of Chapters representative and is the founder of Peace-Work, a data for good nongovernmental organization.

STAT*tr@k*

Breaking Down the Impossible: How Applied Statistics Can Guide Humanitarian Response

Adam Barone, ASA Senior Editor (Contract)



Adam Barone has been recognized seven times for excellence in journalism by the New England Press Association, New Hampshire Press Association, and Hoosier State Press Association. He's covered a diverse range of topics, including technology, business, social issues, and sports.

Bring water to the Sahel, a vast region of Africa facing an ongoing water crisis. This was the challenge handed to one team of graduate engineering students last spring in MFE634 at Syracuse University, Jorge Romeu's Productivity and Quality Engineering class. The problem is different for every team—usually three or four per class—but the mission is the same: Use quality engineering principles, many of which draw on applied statistics, to tackle a humanitarian crisis.

The exercise offers a practical window into how statistical skills can apply to complex problems well beyond the scope of industry and classroom settings—a quality Romeu says makes the course much more engaging for students. "They are extremely motivated to do their work," he says, "much more than if they were just sitting there passively like a sack of potatoes ingesting all of the theory I give them."

The challenge comes in learning to apply those theories in environments where root causes are undefined, information is incomplete, and the stakes are human lives.

Plenty of people want to make the world a better place. What statistics and data science bring to that ambition is a disciplined way to decide what to do first, what evidence to trust, and how much confidence to place in a proposed solution. In humanitarian crises, this way of thinking can turn an overwhelming problem into a sequence of measurable decisions.

"Statistics is the heart of the tools we have because everything is uncertain and everything is constantly changing," says Romeu. "You have a devastated city. You have to reconstruct it. You have to bring in people. How do you bring them in? Where do you put them? Once they are there, all the equipment uses gasoline. Where do you get the electricity from? Where do these workers sleep? They have to eat. It's a very complex operation, and everything is based on estimations and consumption rates. All of that is just statistics."

In Romeu's view, many humanitarian crises can be understood as systems that have fallen out of balance—where needs have emerged faster than resources can respond. The statistical challenge is to estimate those flows well enough to restore that balance.

Romeu's decision to frame these classroom projects around humanitarian crises grew from his broader philosophy of professional purpose. Engineers and statisticians may be trained to solve technical problems, he says, but that knowledge need not remain confined to industry or the classroom. "We obtain a qualification, but we live in society," Romeu says. "We could use some of our knowledge to help society solve their problems."

In the Sahel, the problems are ongoing and myriad. A combination of prolonged drought, floods, rapid population growth, and inadequate infrastructure are converging to limit access to safe drinking water, while straining agriculture, sanitation, and regional economies.

For Romeu, these challenges are precisely where quality engineering becomes useful. It's a framework for turning one overwhelming problem into a series of smaller ones that can be measured and addressed systematically.

Without that framework, relief efforts can become reactive—built from experience, subject-matter expertise, and immediate necessity as conditions unfold. Those capacities remain essential, but statistical thinking can help direct resources where they are most likely to improve outcomes.

"It's applied statistics, and you have a lot of logistics," Romeu says. "You need to analyze the reliability of the different components. You need to compare different types of solutions and find out which is the most efficient—the one that provides the best solution with the lowest cost because you only have so much money."

In the classroom, this approach becomes a sequence of questions whose applicability extends far beyond the confines of academia. Can the available data be trusted? Where is the system most vulnerable? Which factors most influence the outcome? What happens if a critical component fails? And how will anyone know whether an intervention actually improved the problem?

Syracuse graduate engineering management student Emma Klein confronted those questions as part of the Sahel team in Romeu's spring 2026 class. Her group began by identifying possible causes of the region's issues. But before drawing conclusions from any of it, they had to answer a more fundamental question: Could they trust the measurements?

Klein's primary assignment involved Gage R&R, a measurement-system analysis used to determine how much of the observed variation came from the process itself and how much came from the measurement system. When the team's initial Gage R&R analysis showed excessive variability, they revisited the data rather than build conclusions on questionable foundations.

"With the measurement system analysis, the numbers we were given didn't give good results," Klein said. "They had high variability. And in the case of the Gage R&R, it was unfavorable for the processing if we couldn't trust the data we were given from the sampling tool. So, after we determined that the data was insufficient, we were able to go back and use a second dataset that Professor Romeu provided, run the test again, and compare the before and after to find the differences between the datasets."

In a humanitarian setting, that distinction is consequential. If the measurement system is adding more noise than the process itself, the team may be fixing the wrong problem, misallocating scarce resources, or mistaking random variation for improvement.

Learning by Doing

Knowing which statistical tools to use is one thing. Applying them in a real-world context is another. Integrating those capabilities, Romeu believes, can elevate professional practice in a wide range of statistically oriented fields—like quality engineering.

Romeu says his teaching method draws heavily from educational philosopher John Dewey's concept of learning by doing: "You don't regurgitate a definition, you apply it. Then you see the problems in applying it. So, in all my courses, even in my applied statistics course—which was a prerequisite for this class—I always use the approach of learning by doing."

Romeu's approach teaches students to recognize what information matters, when an analysis isn't working, and when assumptions must be questioned—skills that translate to most problem-solving scenarios that involve applied statistics.

Learning this way can be uncomfortable, but Romeu supports his students by ensuring they have the statistical foundation to begin pulling apart the problems he gives them.

Making an Impossible Problem Smaller

The Sahel exercise gradually turned one enormous instruction—bring water to the region—into a series of smaller engineering questions. What was driving the gap between water supply and demand? Where could groundwater be accessed? How reliably could it be pumped and treated? How could extraction be monitored to avoid exhausting the source? Where were the likely failure points?

Different quality engineering methods addressed different parts of that system. Root-cause analysis helped organize the sources of problems. Measurement-system analysis tested whether the data was trustworthy. Designed experiments explored factors affecting performance. Statistical process control and reliability analysis offered ways to monitor the system and anticipate failure.

The students ultimately proposed a conceptual decentralized system involving groundwater extraction, solar-powered pumps, filtration, elevated storage, and local distribution. The point wasn't to claim they had "solved" a global crisis from a classroom in Upstate New York. It was to learn how to turn a seemingly impossible challenge into a series of questions, measurements, decisions, and feedback.

"By breaking the problem down and focusing on one system at a time, I think it really helped and made the project more manageable," Klein says.

Beyond the Classroom

Over the years, Romeu has built projects around hurricanes, earthquakes, volcanic disasters, mining accidents, war zones, and large-scale reconstruction.

Though MFE634 projects don't lead directly to action in crisis zones, Romeu has spent years applying his quality engineering methods to make an impact in the field. He leads the Quality, Reliability and Continuous Improvement Institute, a public-service initiative he created through the Juarez-Lincoln-Marti International Education Project to make practical resources in applied statistics, reliability, and quality engineering freely available to relief workers on the ground. The institute serves as a repository for tutorials, papers, and teaching materials, including work developed in his courses.

But Romeu is also clear about the limits of the framework. Some of the hardest problems aren't statistical at all. In crisis settings, stakeholders may withhold information, provide false data, or actively obstruct relief efforts. And no model can compensate for distorted evidence or evidence that never reaches the analyst.

For Klein, the exercise ultimately changed the meaning of the calculations. The models and measurements led to pumps, water supplies, infrastructure, and failure rates—but behind each of those variables were people. "4.2 million people were forced to flee. Those are huge numbers. It really puts everything into context that what we're dealing with is someone's life," she says. ■

MORE ONLINE
Check out the full version of this article online at *https://magazine.amstat.org.*

DECIDING FACTORS

Not Everything Deserves a Decision

Homer, the Inbox, and Getting Things Done

Mark C. Otto and MinJae Lee



Mark C. Otto is a retired, but not retiring, US Census Bureau and US Fish and Wildlife Service statistical scientist. He is chair of the ASA's Committee on Applied Statisticians and has served as the president of the Washington Statistical Society and as the Membership Council vice chair.



MinJae Lee is a biostatistician and professor at McGovern Medical School, UT Health Houston, where she leads the division of clinical and translational sciences. Her research focuses on developing and applying innovative statistical methods to address real-world research challenges.

Homer Simpson has been making bad decisions for more than 30 seasons. He picks the wrong button at the nuclear plant, backs the horse whose name he cannot spell, and does it all again next week. The show is comedy precisely because Homer's decisions are terrible. Meanwhile, the creative team behind him is one of the best-organized creative shops in television. Something must be answering the small questions well enough that the big ones ever get answered at all. Statisticians can borrow the team's methods for the small decisions that fill the rest of our lives.

In a 2016 episode of David Allen's *Getting Things Done* podcast, three of the show's writers—Rob LaZebnik, Dan Greaney, and Danny Chun—describe their creative-by-committee process (*https://tinyurl.com/8kx85s74*). What they describe is not decision analysis. It is more granular, faster, and closer to what most of us spend our days on. It is organizing decisions that require little thought.

Up to this point, this series has been on decisions that deserve a structured framework. Frame the problem, list your objectives, generate alternatives, estimate consequences, and work through the tradeoffs discussed last month.

In a 2004 Decision Analysis essay titled "Making Better Decision Makers," Ralph Keeney offered a canonical account of how our decisions are resolved. Of every 10,000 decisions Keeney figures we face, 7,000 are of small consequence, another 2,000 are no-brainers, and the next 750 can be resolved by clear thinking. That leaves 220 that require parts or all of the SDM process and 30 that require Keeney-level decision analysis.

David Allen's *Getting Things Done*, or GTD, is a discipline for the 9,750. We statisticians often carry the mental load of everything unfiled—every promised follow-up, unanswered collaborator question, half-remembered idea, incomplete task, and upcoming deadline. This load is what makes even the today's handful of decisions feel exhausting. The decisions themselves are not the problem. The other several thousand items, silently consuming cognitive bandwidth, are.

First, Allen observes that the human mind is very good at generating ideas and very bad at storing them. Anything you try to store in your head will bother you at the wrong time. You remember the cat food at 3 a.m., not at the pet store, or that brilliant turn of phrase while you are in traffic.

Second, *the level of nagging is not tied to the importance of the task*. You need to buy cat food and replace your programmer, and they bug you just as much, at equally inconvenient times. You have to get these out of your head, regardless of their size.

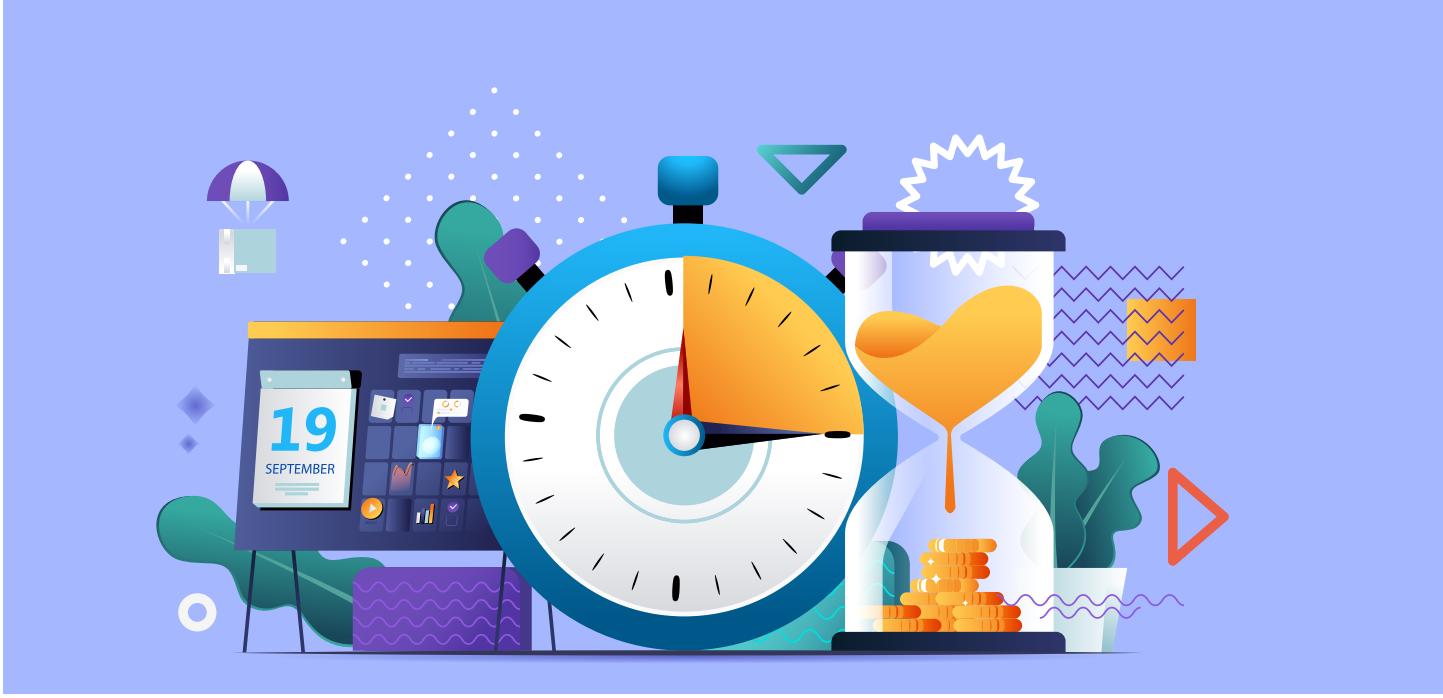
The GTD move is to get every unfiled item out of your head and into what Allen calls an *inbox*—one physical or digital location, or a small set of them, where every incoming item lands. *Not to act on it.* To hold it until you can process it deliberately. Your head is for having ideas, not for holding them. The inbox holds them.

GTD has five steps for processing your stuff: capture; clarify; organize; review; and engage. The clarify questions are key: Is it actionable? If not—if it is reference material, equipment, decoration, or supplies—it gets stored. For actionable items, we ask, "Does it take less than two minutes?" If yes, do it now; the tracking overhead outweighs the benefit of doing it later. If no, the item is either delegated (with a note on your Waiting For list) or deferred to your Projects or Next Actions list.

In GTD, a *project* is anything that requires more than one step. You need two things: (1) what the finished project looks like, and (2) what the very next physical action is. We statisticians are trained to plan analyses from top to bottom. Be a Markov process; take the first step; discover the rest.

Organize is where the material goes. Reference goes to where you can find it again. Projects go to a projects list. Next actions are sorted by *context*—the place, tool, or state of mind you need to be in to do them. @computer. @office. @home. @phone. @errands. You do not want to look at a list of 40 next actions when you are standing in the grocery store; you want the four items that are @grocery. Contexts turn the day into a series of batch-processed queues.

Engage is the payoff. When you have a few minutes, you look at the context you're in and pick from the list what fits your time and energy. No re-deciding. No re-remembering. The thinking is



already done. The meeting hasn't started; make a few calls from @phone.

The review step separates people whose systems work from those whose systems don't. Once a week, at a time you protect, go through the whole apparatus. Collect any loose papers into the inbox. Empty your head onto the same page: What have you been carrying around that hasn't been filed? Get email to zero. Look at your Next Actions list and mark off what is done. Review the past two weeks of your calendar for anything that generated a follow-up. Review any future event that needs preparation. Check the Waiting For list and the people you are waiting on. Review Projects to make sure each still has a next action. Review Someday/Maybe and cross off the things you have stopped wanting or get creative with the ones you do.

Statisticians recognize this as calibration to keep your system from drifting into untrusted territory. Otherwise, Homer is back in your head, thinking about cat food. That is the horizontal workflow. The GTD vertical system is the *Horizons of Focus*, which ties into the rest of this series.

At ground level is what you are doing right now: the next action. At 10,000', the current projects. At 20,000', your Areas of Focus—the roles you play: parent, partner, data masseuse, committee chair, homeowner, friend. At 30,000', your one- to three-year goals. At 40,000', the vision of what the world looks like if your work succeeds. Then, at 50,000', the mission—what you are doing with your life. These are the strategic objectives from last month's article. The elevation analogy helps you go up for perspective and down for more concreteness and action. You don't need to get lost either in the weeds or the clouds—move up and down deliberately.

Consider what this suggests about a particular kind of institutional failure. Volkswagen's emissions scandal, Boeing's 737 MAX, Wells Fargo's fake accounts, and Twitter's various collapses were not caused by a single catastrophic decision at the top. They were caused by thousands of small decisions at the ground level that were disconnected from any mission at 50,000 feet. When the ladder is broken, ground-level decisions optimize for ground-level pressures—quarterly numbers, next quarter's promotion, next week's demo—and the accumulation eventually shows up as a public disaster. Big problems are made from small decisions.

One more note, aimed at anyone senior enough to have felt the following pain: The higher you rise in an organization, the more of your day is taken up by interruptions. This is not a distortion of the job. It is the job. Interruptions are what a leader is paid to catch. Everything routine is managed below. When someone appears in your office with the next crisis, you set your current work aside in the inbox, deal with the crisis, and return to the inbox when it is done. There is no lost train of thought. It survives in your inbox, and that next interruption may just as well be an opportunity.

A research study can be viewed as a GTD project: define what "done" looks like—an answered scientific question; a completed analysis; a paper, report, or other client deliverable—and identify, not the next intellectual action, but the next physical one. "Open the data file and run summary statistics." This is familiar territory for collaborative statisticians, helping investigators turn broad scientific questions into clearly defined, estimable quantities.

And the weekly review is what any well-run analysis pipeline needs: Check the queue, catch the drift, confirm the next step, and move on. ■

NEXT TIME
Back to PrOACT and the step where objectives finally meet options: generating alternatives and why the ones that come to mind first are usually not the ones you want to choose from.

When Doing Your Job Requires Courage

James J. Cochran



James Cochran is professor of statistics and operations research and the Mike and Kathy Mouron Research Chair at The University of Alabama Culverhouse College. He is an ASA Founder and Fellow, as well as a fellow of the African Academy of Sciences and INFORMS.

Upon learning of the complete legal vindication of my good friend Andreas Georgiou, I allowed myself the luxury of a few moments of elation. His long and painful ordeal was finally over.

Then I began to seethe again over what had been done to him.

What follows is a confluence of fact and reflection. I have tried assiduously not to allow my anger to outrun the evidence and to distinguish between what the record establishes and what I believe that record requires us to confront.

Andreas became president of the Hellenic Statistical Authority, known as ELSTAT, in August 2010, an extraordinary moment in Greek history. By the time he took his post, the credibility of Greece's government finance statistics had been badly damaged and the country was already in the midst of a sovereign debt crisis.

Among Andreas' responsibilities was ensuring Greece produced credible government deficit and debt statistics consistent with European statistical standards.

In November 2010, he transmitted revised deficit and debt statistics to Eurostat. He did not first submit those statistics to a vote of ELSTAT's governing board.

Why?

Because official statistics are not supposed to be decided by vote.

That decision helped consume nearly 15 years of his life.

Beginning in September 2011, Andreas faced a succession of legal prosecutions, suits, and investigations. Allegations that he had artificially inflated Greece's deficit ultimately produced no conviction, and by 2019, the case was finally dropped. But a breach-of-duty prosecution based on his failure to submit the statistics to the ELSTAT board persisted.

He was acquitted at first instance. Prosecutors appealed. He was subsequently convicted and received a two-year suspended prison sentence.

At the heart of his defense was a principle that should be familiar to every statistician: professional independence.

The European Statistics Code of Practice assigns responsibility for statistical methods, standards, procedures, and the content and timing of statistical releases to the appropriate statistical authority, and specifically its head, to ensure accountability. Andreas maintained that submitting official statistics to a board vote would have surrendered a responsibility the statistical system explicitly placed elsewhere.

In 2023, the European Court of Human Rights unanimously found that his right to a fair hearing had been violated. In August 2026, Greece's Supreme Court annulled his remaining conviction.

The statistics stood.

The principle stood.

Andreas Georgiou stood.

But nearly 15 years had passed.

That last fact is the one I cannot get past.

We statisticians speak often about ethics. We teach our students not to fabricate data, manipulate analyses, conceal inconvenient results, or misrepresent uncertainty. All of that matters.

But Andreas' ordeal exposes a harder form of statistical ethics.

Sometimes doing the ethical thing means refusing to surrender statistical authority to someone who should not possess it.

And sometimes doing so has a price.

Andreas' ordeal is particularly disturbing because it is far from an isolated incident. Graciela Bevacqua in Argentina faced retaliation after resisting political pressure surrounding inflation statistics. Gordana Radojević in Montenegro was dismissed after resisting pressure surrounding the conduct of a national census; her dismissal was subsequently ruled unlawful. And in August 2025, Bureau of Labor Statistics Commissioner Erika McEntarfer was dismissed immediately following the release of a politically controversial employment report containing substantial downward revisions to previously reported job growth.

Different countries. Different statistics. Different circumstances.

The same uncomfortable question: **What happens when the numbers say something powerful people do not want to hear?**

A deficit does not become smaller because a government would prefer a smaller estimate. An inflation rate does not fall because acknowledging inflation is politically damaging. A population

does not acquire a different composition because the actual composition is politically inconvenient. Nor does an employment estimate become wrong because its revision is politically unwelcome.

Evidence can be challenged. Methods can be scrutinized. Errors must be corrected.

But evidence is not open to negotiation.

This is why I worry that merely celebrating Andreas' vindication allows us to learn the wrong lesson.

Andreas Georgiou is a hero of official statistics. I do not use that word casually.

But a healthy statistical system should not require heroes.

If exercising professional independence requires extraordinary personal courage, then something is wrong with the institution supposedly guaranteeing that independence. A code of ethics is not enough. A statutory declaration of independence is not enough. Independence must be protected when its exercise becomes inconvenient.

Otherwise, we create a chilling effect.

Imagine being the next director of a statistical agency. You know what professional standards require. You know what the evidence says. And you know what happened to Andreas.

Perhaps nobody needs to telephone you.

Perhaps nobody needs to threaten you.

Perhaps nobody even needs to ask you to change a number.

You already know the potential price of saying no.

The resulting distortion may never appear in a statistical diagnostic. It may instead appear in an analysis not undertaken, a revision postponed, a methodological concern softened, or a release delayed.

The most effective interference may be the interference that never has to occur.

Everyone has already learned the lesson.

That is why professional solidarity matters. Statisticians and statistical organizations around the world supported Andreas throughout his ordeal. European institutions defended the validity of the statistics and the importance of professional independence. Colleagues attended proceedings, issued statements, and refused to allow the case to disappear from view.

That support mattered.

Andreas' final legal vindication therefore deserves celebration. But celebration is not enough, and self-congratulation can be delusional.

Professional independence must mean more than permission to make the right decision. It must include meaningful protection for the statistician who makes it.

We should not congratulate ourselves for defending professional independence while accepting institutions in which someone can spend 15 years defending himself for exercising it.

Andreas Georgiou is a hero of official statistics. But if we stop at celebrating his heroism, we risk allowing institutions to evade the harder lesson.

Individual integrity is necessary. Institutional design must make integrity structural rather than heroic. A well-designed system should not require heroic behavior merely to produce the behavior the system claims to want. Professional independence must mean more than permission to make the right decision. It must include meaningful protection for the statistician who makes it.

Sometimes the numbers will tell us something we do not want to hear, and sometimes that is precisely their purpose—*sometimes we need most to hear what we least want to hear*.

The test of our commitment to statistics comes at precisely that moment.

For nearly 15 years, Andreas was required to take that test again and again. He endured it. He defended the integrity of his statistics, his profession, and its principles. And, finally, he was completely vindicated.

I am angry about this, and I think you should be angry, too.

Two questions now belong to us.

Would we have had the courage to do what Andreas Georgiou did?

And perhaps the more important question: What are we doing to build statistical institutions in which the next person who does will not have to pay the same price? ■

The Numbers That Run the World

Why Economic Statistics Matter More in the Age of AI

Dharmateja Priyadarshi Uddandarao

The real story of the AI economy is not the data. It is the judgment required to decide what the data actually measures, and that judgment is the statistician's craft.



Dharmateja Priyadarshi Uddandarao is a data scientist and statistician whose work bridges the gap between advanced analytics and practical economic applications. He holds a bachelor's in computer science from the National Institute of Technology, Trichy, and a master's in analytics from Northeastern University, where he specialized in statistical modeling. He currently works as senior data scientist at Amazon.

Economist Rebecca Riley writes in the December issue of *Finance & Development* that assessments of the world's economies may be off by trillions of dollars. "GDP, CPI, and total factor productivity for aggregate economy-wide are struggling to keep up with the speed of change of technology, business models and consumer behavior in a data-driven economy."

Measuring the economy to determine whether to encourage growth or control inflation to keep prices from rising requires good economic data. Understanding where different communities are in terms of economic well-being and which industries are producing value in their economies and where mere numbers are being shifted from one location to another requires good economic data.

Additionally, in many economies, now more than half of intangible investments are data-related and only recently started to be included in the economic accounts. Large portions of companies' investments in software, in algorithms, in organizational capital, in AI-related systems and activities are not captured by the accounting systems designed to track the physical stock of factories and physical goods.

The gap between what data shows and what data means for users is a fundamental challenge in working with data. For none of the areas where data is used do the tensions surrounding working with data seem to matter more than they do for economic statistics, which inform decision-making by central banks, fiscal authorities, and investors influencing billions of people worldwide.

This is where the work of a statistician comes in. Economic statistics are not facts that can be collected. Rather, they are estimates based on several decisions. The choices of what to measure and how to measure it all must be taken, and an assessment of the uncertainty involved in the estimates must be made. As the economy evolves at a pace at which the choices made regarding what to measure and how cannot keep up, it will be necessary to ask whether what one is measuring is what one thinks one is measuring. Questions such as these are what a statistician brings to a study of the AI economy.

Four Statistical Problems Hiding in Plain Sight

Four major problems need to be addressed behind the headline "measurement gap," and they all need a good statistician to solve them.

First, unobserved activity. National accounts do not have a line item for the value of AI. So, we must observe its impact indirectly. And, as with all latent variables, the statistics about them are necessarily rooted in modeling assumptions and thus subject to wide latitude, just as the epidemiologist's best estimate of an unseen exposure is based on the trace it leaves.

Second, prices and quality may move together and thus be observed only in combination. For instance, a laptop that has the same price but is twice as fast as before may indicate that prices for laptops have fallen or that the quality of laptops has increased. A statistician would make a model to separate these two effects, and different reasonable choices about which characteristics to include would result in significantly different measured growth.

Third, zero-price goods. This is the familiar problem that a good with zero price does not equal a zero value. Many free online apps and services are saving millions of hours per week, and much of this is not being recorded in GDP. These are not zero value activities, and statistical models are needed to value them, such as willingness-to-pay experiments or choice models, to record value on accounts that only record transactions on invoices.

Fourth, identification under structural change: AI-induced changes are structural in nature; thus, we cannot use past data for predicting future ones. Adopting firms are not a random sample; the

Table 1—Economic Measurement: Traditional Frameworks vs. AI-Era Realities

Dimension	Traditional Framework	AI-Era Reality
Primary assets measured	Factories, equipment, inventory	Software, algorithms, organizational capital
Investment visibility	Capital expenditure on balance sheets	Intangible spending often expensed, invisible in GDP
Price measurement	Physical goods with observable quality	Digital services consumed for free or bundled
Productivity signal	Output per hour, directly attributable	Indirect, delayed, distributed across functions
Data latency	Quarterly or annual surveys	Real-time digital traces available but unintegrated
Causal attribution	Before-and-after policy comparison	Entangled interventions requiring counterfactual methods

ground under their feet is shifting as other forces affect them simultaneously. The job of a statistician here is to establish whether the AI-induced effect can be identified at all.

And, through all of these, judgment (i.e., whether one can trust a number or not) plays a major role.

AI Makes the Problem Worse Before It Makes It Better

One expects an economy increasingly running on data, processing it ever faster, with more information at one's fingertips all the time, must increasingly be able to be quantified and measured. And in fact, AI does promise all this.

The Bureau of Economic Analysis is doing important work to figure out how to measure the influence of AI and the contribution of AI to US macroeconomic accounts. For now, there is no direct line item for AI in the US national accounts, and their findings must be inferred from indirect evidence. For example, their baseline model of labor market activity found AI was associated with higher productivity and a reduction in the use of inputs, including labor, but these results were considered preliminary and subject to a wide range of assumptions. IT investments increased in cost before generating increases in revenue. And even though everyone knew IT was transformational in terms of operations, there were years of further research by economists required to track its contribution to GDP.

Just as earlier technologies such as the IT of the 1990s had to wait for years for their economic impact to be quantified by productivity statistics that had been designed for a completely different purpose, AI too will have to wait before its impact can be accurately recorded by economic statistics. Not least because of a special feature of this new technology: unlike IT of the 1990s whose economic effects had been obvious to firms long before they could be measured by statistics, today's investments in AI first increase costs before any revenues will be generated—indirectly and in unforeseeable quantities. And it is precisely this special feature of AI that also makes the measurement of its economic effects so particularly complex.

From Prediction to Intervention

In economics, predicting GDP growth of 2.3% in the last quarter is not enough. We want to know how this came to pass, how some other policy would have worked, and how long this growth is going to last. These are all causal questions and require the kind of judgment a good statistician can bring to bear on the data.

A real-world problem for policymakers is that the regions with the highest AI adoption also have the highest share of younger, less-educated workers. This could be the case of AI pushing out experienced workers or AI opening doors for new workers to enter. In both cases, the chart appears to be convincingly supportive of a particular policy direction, but correlation is not causation. To make good policy decisions, the correlations must be unpacked and the lines of causation determined. This is what good statisticians do for a living.

Specific methodologies help answer specific questions. Quasi-experimental designs test for the counterfactual change that would have occurred in the

absence of the policy change under consideration. They are particularly faulty when the groups being compared are never identically situated. Quality-adjusted price indexes try to strip away changes in price that reflect changes in quality rather than cost. However, they are prone to error if the set of characteristics used to measure quality is not optimal. Alternative data to official national accounts contains a host of representative errors (e.g., nonrepresentativeness of the sample). Measures of uncertainty for any given statistic can highlight the extent to which that number is likely to be wrong and thus serve as a useful check on false precision. And counterfactual models of what would have occurred in the absence of a policy intervention are essential for making sensible policy decisions.

What any method can do wrong is far more valuable to understanding the economy than what it can do right. The use of a particular tool to ask a question is not as important as the questions that are asked using it.

Why the Statistician Is Central

A popular conundrum being watched by many within the profession is outlined in a July 2026 FEDS Note. That note organized the 'many indicators of the influence of AI' into three groups: the capabilities and costs that firms are investing in; the investment and adoption that follows; and the changes in output and labor resulting from that investment and adoption. Notably, the note identified a wide gap between the responsiveness of financial markets to the AI narrative and the data on aggregate output and labor.

Instead of rushing to answer the question of a puzzle the profession is currently following (The influence of AI – a FEDS Note from July 2026 Organizing public indicators into three areas: 1. the AI capabilities and costs that firms are investing in; 2. investment and adoption by firms; and 3. changes in productivity and labor resulting from that investment and adoption), the statistician sits with the puzzle for a while. The puzzle has three possible answers: the transformation has not yet taken place; there are other forces at work counterbalancing its impact; or the statistics we have do not capture what is already happening.

This is where the statistician's way of thinking becomes interesting to follow. First, is the data really measuring what one thinks it is? A statistic, labeled as "AI investment" or "AI productivity" is only as good as the definition behind it. Then, inspecting the assumptions of a model, looking at parallel trends, checking for stable relationships, and checking for a representative sample as opposed to blindly "churning out" numbers and inserting them into a pre-built model becomes important. Then, there is the issue of correlation vs. causation, which is probably the biggest pitfall of them all when working with data. After that, it's a case of honest uncertainty assessment and providing a range with caveats as opposed to blindly churning out numbers that can end up being wrong.

Skeptical scrutiny, of course, is not something that can be "automated" or even enhanced using better software. With more data and more computing power available, the role of a statistician is not to pass along smooth and confident forecasts to decision-makers, but rather to warn them about the use of numbers—by machines or humans—that deserve not to be trusted.

Statisticians are the mapmakers of the modern economy. When the territory shifts, they are the ones who redraw the map so the rest of us do not get lost.

Why This Matters Now

A nation's economy is growing or contracting by trillions of dollars, and much of this activity often goes unmeasured or is measured inadequately. While the economy is rapidly transforming due to the influence of AI, our statistical systems are struggling to keep up. Decisions will be made based on these measurements for years to come, influencing interest rates, welfare, business contracts, and the national budget.

Data scientists and statisticians recognize that the same causal reasoning skills that can determine the optimal launch strategy for a new product or drive higher returns on investment by optimizing processes also need to be brought to bear on economic measurement. Such analysts would bring a healthy dose of skepticism to bear on the headline numbers reported by national statistical offices, questioning whether the indicators reported upon (whether it be unemployment, inflation, GDP, etc.) are in fact being measured in a manner that is comparable across space and time.

We must ask the same questions of the economic statistics that measure the economy of an entire society that we ask of any other dashboard: Are we measuring what matters, or just what's easy to count? ■

Your Work Has a Place at SDSS: Call for Abstracts

The Symposium on Data Science and Statistics program committee members invite practitioners, researchers, educators, and statisticians working in data science and AI to share their work with the data science and statistics community by submitting an abstract through November 30.

Why SDSS?

SDSS is the American Statistical Association's annual symposium dedicated to the intersection of data science, AI, and statistics. While the Joint Statistical Meetings covers the broad field of statistics, SDSS has a more focused mission: exploring how statistical thinking and methodology advance data science and AI—and how data science and AI are, in turn, changing the practice and development of statistics.

The symposium brings together professionals from diverse disciplines to share current work, explore new approaches, and build collaborations that can advance the field and bring value to society.

The program committee is particularly interested in abstracts that showcase innovative methodologies, practical applications, emerging technologies, and lessons learned in the following four areas:

- **Data Science Applications:** Case studies and novel contributions involving machine learning, computational statistics, and statistical methodology, particularly applications that demonstrate how these approaches are being used to address real-world problems
- **Education & Professional Development:** Innovative approaches to AI, data science, and statistics education, as well as efforts to develop the skills and workforce needed for the future
- **Systems & Infrastructure for Applied Data Science:** Work addressing the systems, technology, and infrastructure required to support applied AI, data science, and statistics—including the underlying tools and environments that enable practitioners to put these methods into practice



- **AI & LLM Applications:** Innovative applications of AI and large language models in data science research, practice, and education

Join Us in Pittsburgh

The 2027 symposium will be held April 27–29 in Pittsburgh, Pennsylvania. The program will feature hundreds of presentations about emerging methodologies and applications across AI, data science, and statistics.

SDSS also offers opportunities to expand your skills and perspectives with the following:

- Four half-day continuing education courses, with one course included in every registration (new for 2027)
- Two keynote speakers from industry (Noor Aftab) and academia (Robert Gramacy), who will offer today's perspective in an ever-changing data science and AI environment
- A panel focused on the future of data science, AI, and statistics
- Opportunities to connect and collaborate with professionals working across industry, academia, and government

Whether you are developing a new methodology, applying existing methods to solve a business or scientific problem, exploring the use of AI and LLMs, or developing the next generation of data science professionals, your work has a place at SDSS. Visit *ww2.amstat.org/meetings/sdss/2027* to submit your abstract and join us in Pittsburgh, Pennsylvania, April 27–29, 2027. ■

Bin Yu Named 2026 Myles Hollander Distinguished Lecturer

The Department of Statistics at Florida State University has announced that Bin Yu, the chancellor's distinguished professor in the departments of statistics and electrical engineering and computer sciences at the University of California, Berkeley, is the 2026 Myles Hollander Distinguished Lecturer.

Yu will present "Veridical Data Science Towards Trustworthy AI" November 6 in the Chemical Sciences Building Auditorium on the FSU main campus in Tallahassee.

Yu earned a bachelor's in mathematics from Peking University, as well as a master's and PhD in statistics from the University of California at Berkeley. Prior to becoming chancellor's distinguished professor, she was a member of the technical staff at Lucent Bell Labs, a distinguished researcher in the deep learning group at Microsoft Research, an assistant professor at the University of Wisconsin-Madison, and Miller Research Professor at UC Berkeley. She also serves as core faculty at the center for computational biology and senior adviser at the Simons Institute for the Theory of Computing.

Yu's research focuses on interpretable machine learning, causal inference, and the development of stable, reproducible methods for scientific discovery. Throughout her career, she has made fundamental contributions to statistical theory, including pioneering work on VC theory for time series analysis, minimum description length and entropy estimation, sparse modeling, boosting, spectral clustering, and MCMC convergence analysis. Her interdisciplinary applied work spans neuroscience, genomics, remote sensing, and precision medicine.

Yu is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. She was a Guggenheim Fellow and a Chan Zuckerberg Biohub Investigator. She has delivered several distinguished lectures, including the Breiman lectures, the COPSS Distinguished Achievement Award and Lecture, the Tukey Memorial Lecture, and the Wald Memorial Lecture.

The Myles Hollander Distinguished Lectureship was established by the Robert O. Lawton Distinguished Professor and statistics professor emeritus at Florida State University Myles Hollander in appreciation of the university, its statistics department, and the statistics profession. The annual lectureship recognizes an internationally renowned leader and pioneering researcher in statistics who has made a sustained impact on the field, and the lectures will feature topics spanning the breadth of statistics.

For information about the lecture, visit *https://tinyurl.com/26tzxdfh*. ■

Remembering Four Longtime ASA Members

Sadly, several of our long-time ASA members passed away in September: Vince Barabba, Mel Kollander, Bob Starbuck, and Steve Selvin.

Vincent P. Barabba, 1990 ASA president and ASA Fellow, built a career spanning government, business, and market research. He served two terms as director of the US Census Bureau—the only person appointed to the position by presidents of different political parties—and held government positions under five presidents. He also held leadership roles at Xerox, Eastman Kodak, and General Motors and helped establish the ASA Statistical Graphics Section. Barabba died September 21.

Mel Kollander, an ASA Fellow and founding member of the Washington Statistical Society, died September 1. After beginning his career at AT&T Bell Laboratories and MITRE Corporation, he worked as a statistician for the Social Security Administration and Environmental Protection Agency, where his projects included studying the health effects of smoke from Kuwait's burning oil wells after the 1991 Gulf War. After retiring from the EPA, he led a research department at Temple University focused on social issues. He later founded a tax preparation and accounting practice.

Robert Starbuck, an ASA Fellow and 2011 recipient of the ASA Founders Award, died September 11 at age 77. After earning his master's and PhD degrees in statistics from North Carolina State University, he spent 32 years in the pharmaceutical industry, developing expertise in clinical trials and serving in leadership roles at Burrough Wellcome, Warner-Lambert/Parke-Davis, and Wyeth Research. A member of the ASA for more than 50 years, he held numerous volunteer leadership positions and continued mentoring and educating statisticians after retirement.

Steve Selvin, emeritus professor of biostatistics at the University of California, Berkeley, died September 30. A gifted teacher and influential biostatistician and epidemiologist, Selvin was widely known for introducing the "Monty Hall problem" in *The American Statistician*. He also played a major role in developing Berkeley's public health programs and received numerous honors for his teaching and service.

Read the complete obituaries at *Amstat News* online at *https://magazine.amstat.org*.

Nominations Open for 2027 COPSS Awards

2026 Emerging Leader Award Recipients Recognized

The Committee of Presidents of Statistical Societies is seeking nominations for its 2027 awards, which will be presented at the 2027 Joint Statistical Meetings, to be held in Chicago, Illinois, August 8–12.

COPSS honors outstanding contributions to the statistical profession across research, leadership, education, and service. Nominations are an important part of the process, and members of the statistical community at every career stage are encouraged to identify and nominate deserving colleagues.

Awards for which nominations are currently being sought include the COPSS Presidents' Award, Distinguished Achievement Award and Lectureship, Florence Nightingale David Award, George W. Snedecor Award, and COPSS Emerging Leader Award. Details about eligibility, award criteria, committee membership, and nomination procedures are available on the respective award webpages. Nomination materials for all awards are due December 15.

Among these honors, the COPSS Emerging Leader Award recognizes early-career statistical scientists who demonstrate leadership potential and a commitment to shaping and strengthening the future of the profession. The award highlights individuals whose accomplishments and vision suggest they will play important roles in advancing statistics and data science in the years ahead.

COPSS recently recognized the following eight recipients with the Emerging Leader Award:

- Xu Shi (University of Michigan)
- Briana Stephenson (Harvard University)
- Linda Valeri (Columbia University)
- Dootika Vats (Indian Institute of Technology Kanpur)
- Gwendolyn Eadie (University of Toronto)
- Nhat Ho (The University of Texas at Austin)
- Fan Li (Yale University)
- Alex Luedtke (Harvard University)

The 2026 awardees represent a broad range of contributions to statistics and data science, including methodological innovation, interdisciplinary collaboration, leadership in health and biomedical research, statistical education, mentorship, and service to the profession. Their work reflects both the diversity of modern statistical practice and the importance of cultivating the next generation of leaders.

"One of the greatest strengths of our profession is the next generation of statisticians and data scientists who are bringing new ideas, energy, and leadership to our field," said Rebecca Hubbard, COPSS chair. "The COPSS Emerging Leader Award gives us a chance to celebrate some of these remarkable early-career leaders and the contributions they are already making. As we celebrate the 2026 recipients, I hope members of our community will also think about the rising leaders around them and nominate deserving colleagues for the 2027 awards."

COPSS awards are jointly sponsored by the American Statistical Association, Institute of Mathematical Statistics, Eastern and Western North American Regions of the International Biometric Society, and Statistical Society of Canada. Collectively, these awards provide discipline-wide recognition of exceptional achievement and leadership across the statistical sciences.

Members of the statistical community are encouraged to review the award descriptions at *https://tinyurl.com/2da2m4n3* and consider submitting nominations. ■



SFASA Summer Project Program Celebrates Seventh Year of Student Research

Mason Chang, Gabriel Lamant, Alexei Khodakovsky, Li Zhang, Alexandra Piryatinska, and Tao He

The seventh K–12 Student Summer Project Program of the San Francisco Bay Area Chapter ran from June through early September, pairing students with volunteer mentors from Bay Area universities and biotech companies to design and complete original data analysis projects.

The program launched on June 9 with a kick-off meeting during which students were matched with mentors and began selecting topics. Throughout the summer, teams met regularly to choose datasets, explore their data, learn statistical methods, and interpret results. Program coordinator Tao He of San Francisco State University encouraged students to build a strong foundation in core concepts rather than reaching immediately for sophisticated methods.

The program culminated on Labor Day, September 7, with a virtual showcase in which students presented their work to chapter members, mentors, family, and friends. This year's projects spanned forest ecology, financial markets, cancer immunotherapy, dementia, drug policy, and political elections.

Predicting Immunotherapy Response Beyond Tumor Mutational Burden

Returning student Mason Chang (10th, The Harker School), mentored by Xuelian Wei of Vera Therapeutics, investigated whether routine pretreatment clinical factors improve prediction of immunotherapy response beyond tumor mutational burden (TMB) in metastatic urothelial carcinoma. Using the IMvigor210 cohort, he combined LASSO, or Least Absolute Shrinkage and Selection Operator, stepwise, and stability selection to screen 22 candidate predictors. His first model performed no better than a coin flip. The final model (log-TMB, metastatic site, and Eastern Cooperative Oncology Group performance status) raised cross-validated Area Under the Curve by roughly 0.08 over TMB alone. "Rather than forcing my original hypothesis, I learned to redirect," he said.

The AI Investment Boom and the Stock Market

Gabriel Lamant (11th) and Alexei Khodakovsky (11th) of Lycée Français de San Francisco and Nikita Hlupnov (11th) of Claremont High School, mentored by Xuefong Hou of Genentech, used the Capital Asset Pricing Model to study how the AI investment surge since 2022 has reshaped the stock market. More than $500 billion in private AI investment preceded major stock gains by roughly 12–18 months. NVIDIA's beta peaked at 2.7, while diversified companies such as Apple, Microsoft, and Google held steadier betas of 0.7–1.2. Actual returns far exceeded Capital Asset Pricing Model predictions, suggesting the market initially underestimated AI's effect on earnings. "The project was more interesting because we chose a topic we actually cared about," the team said.

Predicting Forest Collapse from Space

Allinah Zhan (12th) and Steve Zhang (11th) of Aragon High School, mentored by Alexandra Piryatinska and He, asked whether satellite data can predict forest die-off. Using only 2000–2014 trends in vegetation greenness and canopy water content, they grouped Sierra Nevada pixels into stress tiers. When checked against 2015–2016 bark beetle mortality and wildfire records, which were never used to build the model, damage rose consistently with stress tier. "Real research is messy; there are no pre-defined answers," the team reflected.

Searching for New Leukemia Biomarkers

Rachel Li (11th, Stanford Online High School) and Kathy Zhang (12th, Crystal Springs Uplands School), mentored by Shagun Gupta of Calico Life Sciences, analyzed a proteomics dataset comparing healthy and acute myeloid leukemia cells alongside Fitbit data from leukemia patients. Differential expression and pathway enrichment analyses pointed to affected mitochondrial and nuclear pathways. In the wearable data, a subgroup with typical heart rates had significantly lower step counts and VO2 max, suggesting wearables could serve as practical proxies for cardiopulmonary exercise tests. Because the datasets did not share patients, "we learned that we have to be careful about the conclusions we draw between datasets," the students noted.

Modeling Cognitive Decline in Dementia

Jasper Verma (12th, Carlmont High School), mentored by Tuan Nguyen of Alector, applied a mixed model for repeated measures to Mini-Mental State Examination scores in the OASIS dataset. Patients with dementia declined more sharply than those

without, and patients with fewer years of education declined significantly more. Verma learned R from scratch to complete the analysis.

What Really Impacts Sleep?

Alexander Li (10th, Internatsgymnasium Schloss Neubeuern), also mentored by Nguyen, worked independently to identify the lifestyle, demographic, behavioral, and biological factors that best predict sleep disorders. Li said the project taught him problem-solving, rigorous data management, and how to communicate research findings.

Revisiting a COVID-19 Treatment Trial

Elvis Yang (10th, CAVA San Mateo) and Darran Shin (10th, Hillsdale High School), mentored by Yinqi Zhao of Kite Pharma, analyzed randomized trial data from RCT Bench on whether ivermectin plus doxycycline improved recovery in patients with grade 1–2 COVID-19. Using logistic regression and receiver operating characteristic analysis, Yang found higher recovery rates within seven days in the treatment arm, while Shin found fewer delayed recoveries beyond 12 days. The pair credited their mentor's step-by-step structure, from a written proposal to reviewing plots at every meeting.

Did Marijuana Legalization Change Teen Use in California?

Returning student Daniel Kudzelka (11th, Carlmont High School) and Julia Avzan (10th, Sequoia High School), mentored by Anandamayee Majumdar of San Francisco State University, used National Survey on Drug Use and Health survey data and the synthetic control method to build a "synthetic California" from 29 states that did not legalize. Teen use in California fell relative to its synthetic counterpart, but placebo tests yielded a p-value of 0.31, so the team could not attribute the difference to legalization. They said the project sharpened their skills in reformatting inconvenient datasets.

The Age and Gender Gap in the 2024 Election

Returning student Avery Chen (12th, Sacred Heart Preparatory), also mentored by Majumdar, used US Census Bureau data and both parametric and nonparametric tests to compare registration and turnout. Turnout rose steadily with age, except for a sharp drop among women 75 and older, while the gender difference was not statistically significant ($p \approx 0.13$). Originally part of a team with members in Japan and Russia, Chen completed the project solo when time zones proved unworkable.



Students present their projects during the virtual showcase.

Summary

Across all projects, the most valuable lessons came from the moments when the analysis did not go as planned. Several teams pivoted after early models failed, reported honest null results, or learned to make conclusions drawn from datasets never designed to be combined. For many students, this was their first experience carrying a project from initial question to final presentation, and they left with new fluency in R and Python and greater confidence communicating statistics. Returning students showed how the program builds skills over multiple summers.

Participants expressed deep gratitude to their volunteer mentors, and with the support of the ASA, the program continues to show how local chapters can inspire the next generation of statisticians. Planning for the 2027 program is already underway. ■

Second NYC Chapter Workshop Recognizes AI, Statistics Intertwined

The second AI Workshop New York City brought together more than 100 scientists, engineers, clinicians, technologists, students, and industry leaders to explore the intersection of artificial intelligence and statistics.

The July 26 workshop in Tarrytown, New York, examined AI applications in healthcare, biopharma, and beyond, with sessions on generative and agentic AI, responsible AI, machine learning, clinical applications, and emerging regulatory considerations. Participants also took part in mentoring, hands-on demonstrations, a mini-hackathon, and a roundtable discussion. Throughout the day, speakers emphasized the importance of statistical rigor, scientific judgment, interdisciplinary collaboration, and responsible innovation in developing trustworthy AI.

Visit *Amstat News* online to read the complete recap: *https://magazine.amstat.org*.

Survey Research Methods Section Calls for JSM Proposals

James Wagner,
University of Michigan

Submissions for topic-contributed sessions for the 2027 Joint Statistical Meetings, which will be held August 8–12 in Chicago, Illinois, will be accepted from November 17 to December 10. The theme for JSM 2027 is "People Powered. Science Driven. Future Ready."

Survey Research Methods Section members submitting a topic-contributed session proposal who want to have SRMS as the sponsoring section must select SRMS at the time of submission. Each topic-contributed session proposal should have five presentations, including the discussant. For instance, the session can have five papers, four papers and one discussant, or (rarely) three papers and two discussants.

Visit *ww2.amstat.org/meetings/jsm/2027* for submission details. ■

Have News to Share?

We want to help you share your own news with colleagues and showcase your latest successes.

If you have any news you would like to share, email *megan@amstat.org*.



IMSI Institute for Mathematical and Statistical Innovation

2027-2028 Long Programs

Modeling and Control of Vehicular Traffic and Transportation Systems
March 8 — May 28, 2027

Collaborating Frontiers Integrating Mathematics, Statistics, and Biology in Healthcare Innovation
March 6 — May 26, 2028

The Institute for Mathematical and Statistical Innovation invites applications for Research Memberships for each of its Spring 2027 & 2028 long programs. Financial support is available. Research Members typically spend at least two weeks in residence during the course of a program.
For more information, and to apply, see:
https://www.imsi.institute/programs

Propose an Activity

IMSI welcomes proposals for research applying statistics and mathematics to problems of scientific and societal interest. Areas of interest include data & information, health care & medicine, materials science, quantum computing, and uncertainty quantification.
Proposals are considered twice yearly, with deadlines **March 15** and **September 15**. Typical activities include:

- Long programs
- Workshops
- Interdisciplinary Research Clusters
- Research Collaboration Workshops

For more information, see:
https://www.imsi.institute/proposals
To discuss ideas before submitting a proposal, please contact **proposals@imsi.institute**

U.S. National Science Foundation

1155 East 60th Street
Chicago, Illinois 60637
info@imsi.institute

Pennsylvania

■ The Wharton Statistics and Data Science Department, University of Pennsylvania, seeks applicants for an assistant or associate professor, beginning July 2027. Applicants must show outstanding capacity and achievement in research and teaching. Applicants must have a PhD (expected completion by June 30, 2028, is acceptable) from an accredited institution. Please visit: *https://statistics.wharton.upenn.edu/recruiting/facultypositions*. Questions can be sent to *statistics.recruit@wharton.upenn.edu*. Deadline is November 15. The University of Pennsylvania is an equal opportunity employer. Candidates are considered for employment without regard to race, color, sex, sexual orientation, religion, creed, national origin (including shared ancestry or ethnic characteristics), citizenship status, age, disability, veteran status or any class protected under applicable federal, state, or local law. ■

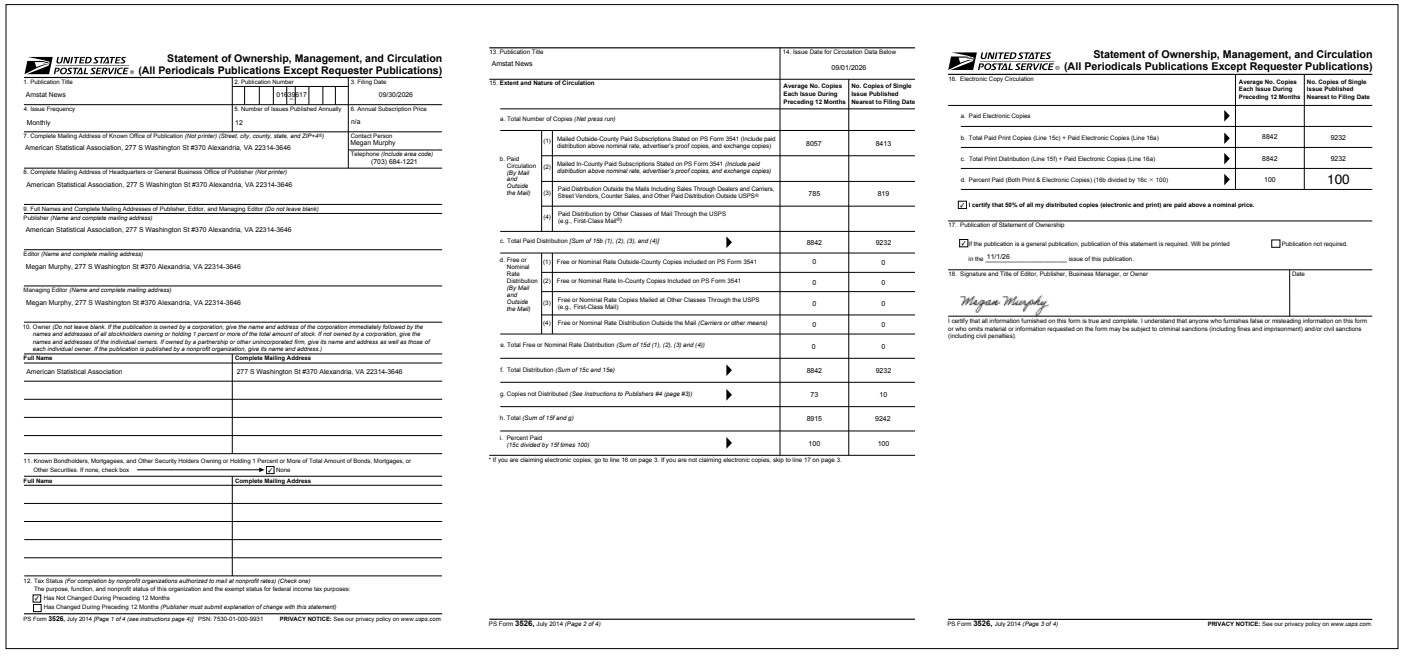
Professional Opportunities

Professional Opportunity listings plus equal opportunity information are due the 20th of the month two months prior to when the ad is to be published.

These listings and additional information about these ads can be found at *https://careerconnect.amstat.org/jobs.*

To advertise in *Amstat News,* email *advertise@amstat.org*

To find the latest jobs in statistics and data science, visit ASA Career Connect at *https://careerconnect.amstat.org.*



UNITED STATES POSTAL SERVICE® **Statement of Ownership, Management, and Circulation (All Periodicals Publications Except Requester Publications)**

1. Publication Title	2. Publication Number	3. Filing Date
Amstat News	0163-8017	09/30/2026
4. Issue Frequency	5. Number of Issues Published Annually	6. Annual Subscription Price
Monthly	12	n/a

7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4®): American Statistical Association, 277 S Washington St #370 Alexandria, VA 22314-3646 — Contact Person: Megan Murphy; Telephone (Include area code): (703) 684-1221

8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer): American Statistical Association, 277 S Washington St #370 Alexandria, VA 22314-3646

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)
Publisher (Name and complete mailing address): American Statistical Association, 277 S Washington St #370 Alexandria, VA 22314-3646
Editor (Name and complete mailing address): Megan Murphy, 277 S Washington St #370 Alexandria, VA 22314-3646
Managing Editor (Name and complete mailing address): Megan Murphy, 277 S Washington St #370 Alexandria, VA 22314-3646

10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)

Full Name	Complete Mailing Address
American Statistical Association	277 S Washington St #370 Alexandria, VA 22314-3646

11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box → ☑ None

Full Name	Complete Mailing Address

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)
The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes:
☑ Has Not Changed During Preceding 12 Months
☐ Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)

PS Form **3526**, July 2014 (Page 1 of 4 (see instructions page 4)) PSN: 7530-01-000-9931 **PRIVACY NOTICE:** See our privacy policy on www.usps.com.

13. Publication Title: Amstat News			14. Issue Date for Circulation Data Below: 09/01/2026
15. Extent and Nature of Circulation			Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Total Number of Copies (Net press run)				
b. Paid Circulation (By Mail and Outside the Mail)	(1)	Mailed Outside-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)	8057	8413
	(2)	Mailed In-County Paid Subscriptions Stated on PS Form 3541 (Include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)		
	(3)	Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®	785	819
	(4)	Paid Distribution by Other Classes of Mail Through the USPS (e.g., First-Class Mail®)		
c. Total Paid Distribution (Sum of 15b (1), (2), (3), and (4)) ▶			8842	9232
d. Free or Nominal Rate Distribution (By Mail and Outside the Mail)	(1)	Free or Nominal Rate Outside-County Copies included on PS Form 3541	0	0
	(2)	Free or Nominal Rate In-County Copies Included on PS Form 3541	0	0
	(3)	Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g., First-Class Mail)	0	0
	(4)	Free or Nominal Rate Distribution Outside the Mail (Carriers or other means)	0	0
e. Total Free or Nominal Rate Distribution (Sum of 15d (1), (2), (3) and (4))			0	0
f. Total Distribution (Sum of 15c and 15e) ▶			8842	9232
g. Copies not Distributed (See Instructions to Publishers #4 (page #3)) ▶			73	10
h. Total (Sum of 15f and g)			8915	9242
i. Percent Paid (15c divided by 15f times 100) ▶			100	100

* If you are claiming electronic copies, go to line 16 on page 3. If you are not claiming electronic copies, skip to line 17 on page 3.

PS Form **3526**, July 2014 (Page 2 of 4)

UNITED STATES POSTAL SERVICE® **Statement of Ownership, Management, and Circulation (All Periodicals Publications Except Requester Publications)**

16. Electronic Copy Circulation	Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Paid Electronic Copies ▶		
b. Total Paid Print Copies (Line 15c) + Paid Electronic Copies (Line 16a) ▶	8842	9232
c. Total Print Distribution (Line 15f) + Paid Electronic Copies (Line 16a) ▶	8842	9232
d. Percent Paid (Both Print & Electronic Copies) (16b divided by 16c × 100) ▶	100	100

☑ I certify that 50% of all my distributed copies (electronic and print) are paid above a nominal price.

17. Publication of Statement of Ownership
☑ If the publication is a general publication, publication of this statement is required. Will be printed in the 1/1/26 issue of this publication. ☐ Publication not required.

18. Signature and Title of Editor, Publisher, Business Manager, or Owner: Megan Murphy — Date:

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

PS Form **3526**, July 2014 (Page 3 of 4) **PRIVACY NOTICE:** See our privacy policy on www.usps.com.

Looking for a JOB?

The ASA CAREER CONNECT is here to support your career journey

Use your ASA credentials to log in to ASA Career Connect today! https://careerconnect.amstat.org

Top Ten Names for Your **Statistics Department Volleyball Team**



Wasserstein

Amstat News continues its lighthearted series from ASA Executive Director Ron Wasserstein with his traditional "Top 10" list, first shared on the *Practical Significance* podcast. As Ron puts it, "Fall is here, and volleyballs are flying all over the country. It's great to see the spike in interest in volleyball, pun entirely intended."

Always ready to serve up a little inspiration for the statistics community, *Practical Significance* offers its latest suggestions with the "Top Ten Names for Your Statistics Department Volleyball Team."



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

10

The Starting Six Sigma

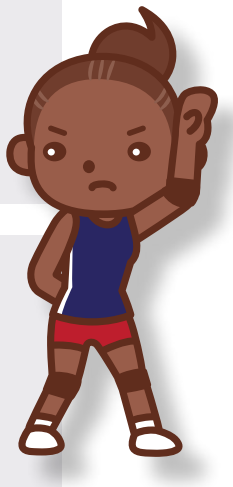
09

The Data Dumpers

08

The Optimization Aces





07

The Bell Curve Bumpers

06

The Dedicated Servers

05

The Regression Line Shooters

04

The Mutually Exclusive Setters

03

The Libero Degrees of Freedom

02

The Overfit Bayesians



#01

The Randomized Complete Blockers





Assistant, Associate and Full Professor positions in the Department of Statistics & Data Science

The Department of Statistics and Data Science at the National University of Singapore (NUS) invites applications for tenure-track and tenured faculty positions in statistics, data science, computer science, and related areas at the Assistant Professor, Associate Professor, and Professor levels. The anticipated start date is July 2027. Applicants should hold a PhD in a relevant field by the time of appointment.

NUS offers internationally competitive salaries, generous research funding, travel support, relocation assistance, and comprehensive benefits. The Department currently has nearly 40 faculty members and provides a vibrant and collaborative research environment. Faculty members benefit from a research-friendly teaching load and strong institutional support for research activities.

The Department offers undergraduate programmes in Statistics, Data Science and Applied AI. We are committed to excellence in both research and education and welcome applicants from all areas of statistics, data science, machine learning, artificial intelligence, computer science, and related disciplines.

For Assistant Professor positions, we seek candidates with outstanding research potential and a strong commitment to teaching. For Associate Professor and Professor positions, we seek candidates with established records of excellence in research, teaching, and academic leadership.

Please submit a cover letter, curriculum vitae, research and teaching statements, and at least three letters of recommendation through mathjobs.org.

Recommendation letters should be directly uploaded by the referees.

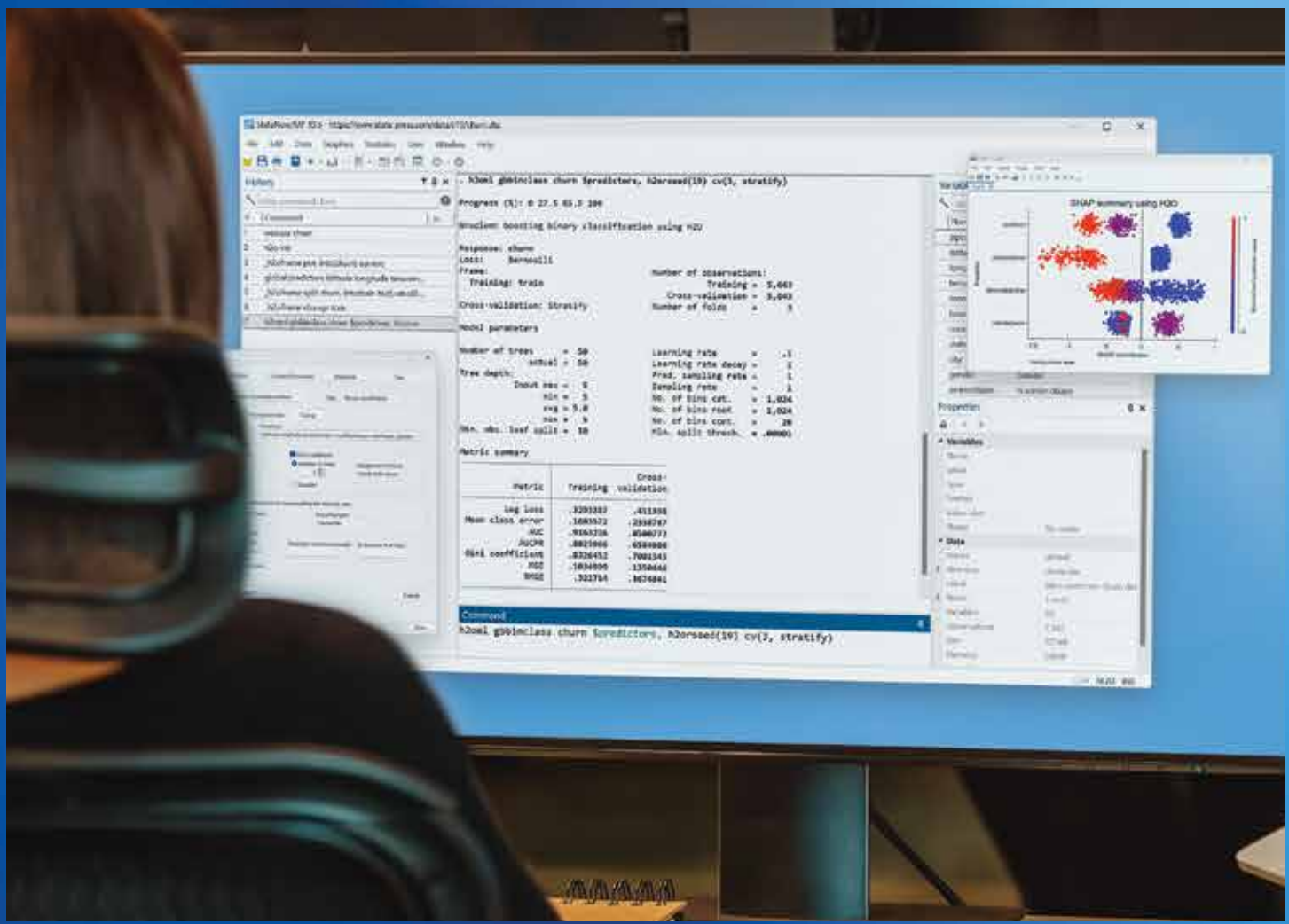
Review of applications will begin immediately upon receipt and continue until the positions are filled.

More information about the university and the department can be found at https://www.nus.edu.sg and https://www.stat.nus.edu.sg/.

Research with confidence.

Powerful statistical methods, reproducible results, and a complete research workflow.

Whatever your research demands, you can rely on Stata.



STATA

stata.com/amstat-confidence

© 2026 StataCorp LLC | Stata is a registered trademark of StataCorp LLC | 4905 Lakeway Drive, College Station, TX 77845, USA.