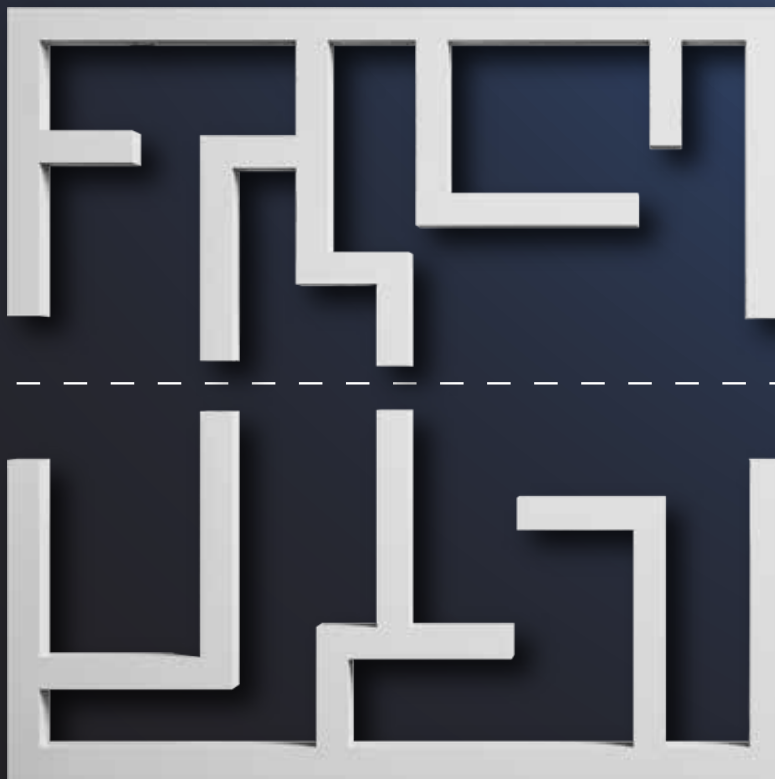


December 2025 • Issue #582

AMSTATNEWS

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

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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 Member Showcase: Yuelin Zou
- 6 Aleksandra Slavković to Give ASA Links Lecture
- 7 Write for ASA Career Connect
- 7 TV Ratings, Food Myths Featured in November *Significance*
- 8 Q&A with ASA Founder Barry Graubard
- 11 *Practical Significance*, Take Two: Amplifying Global Impact Through Educational Ambassador Program
- 14 ML/AI Innovation in Regulatory Statistics: Interview with Andrea Manfrin
- 18 Welcome to Our Newest Members
- 19 New Member Spotlight: Sithija Manage
- 20 This Month in Statistics History
- 22 Tips and Hints for Successful ASA Fellows Applications
- 25 Kelly H. Zou Talks Real-World Evidence

columns



28 STATtr@k How a Statistician Can Get a Job at a Tech Company

STATtr@k is a column in *Amstat News* and a website geared toward people who are in a statistics program, recently graduated from a statistics program, or recently entered the job world. To read more articles like this one, visit the website at <http://statttrak.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.

30 STATS4GOOD Data for Good: The Year in Review and 2025 Challenge Winners

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

Upcoming Events and Opportunities

Registration Open for STATBOLIC

The ASA Biopharmaceutical Section's Working Group in Cardiometabolic Health (STATBOLIC) is hosting its second annual conference February 23–24 at the Hilton, Washington, DC. This conference will bring together experts and thought leaders to discuss cutting-edge research, clinical trials, operations, and drug development in the cardiometabolic health space. Register today: <https://community.amstat.org/statbolic/registration2>.

Data Viz, Project Competitions to Take Place in Spring

Introduce K–12 students to statistics through the annual ASA Data Visualization Poster Competition and Project Competition directed by the ASA/NCTM Joint Committee on Curriculum in Statistics and Probability. The competitions offer opportunities for students to formulate questions and collect, analyze, and draw conclusions from data. Winners will be recognized in *Amstat News* and receive plaques, cash prizes, certificates, and calculators. Posters for grades K–12 students are due every year on April 1. Projects for grades 7–12 students are due on June 1. Details: <https://bit.ly/34VmGNg> and <https://tinyurl.com/ycxemjmj>.

ASA DataFest Hosts Wanted

To be an ASA DataFest host, organizers must agree to use the official data set, abide by a few ground rules, and hold the event sometime between March 13, 2026, and May 3, 2026. Register your institution's intent to host a local ASA DataFest event by February 7, 2026. For more information, join a virtual town hall January 21, 2026, at 3:30 p.m. EST. Register for the town hall at <https://tinyurl.com/we53upde>. Visit the DataFest website for details: www2.amstat.org/education/datafest/hosting.cfm.

Share Your Expertise on STATtr@k!

Do you have insights or experiences other statisticians could learn from? STATtr@k welcomes articles, news items, and letters from readers about topics that matter to early-career professionals. Articles should be nontechnical with a journalistic tone. Interested? Send your article or ideas to ASA Communications Manager Megan Murphy at megan@amstat.org.

departments

32 meetings

Submit Proposal, Abstract to Be on JSM 2026 Program

33 education

2026 Internships



Submit Proposal, Abstract to Be on JSM 2026 Program. Page 32.

member news

38 Awards and Deadlines

41 People News

43 Section • Chapter • Committee News

46 Professional Opportunities



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A Year of Bridges, Resilience, and Community

As I write this final column of my presidency, I take a long breath. What a year. A year of building bridges and community, but also one during which our resilience was tested in unexpected ways. We celebrated Grace Wahba's transformative work with the award of the International Prize in Statistics, launched *ASA Discoveries*, held successful conferences, and welcomed new members while we navigated uncertainty and a world being reshaped by applications of artificial intelligence. Through all of it, the American Statistical Association Board of Directors has been steady, thoughtful, and deeply committed to our community. I am grateful for their leadership and partnership every step of the way.

Looking Back: The Goals

In January, I began this journey with a simple message: Let's build strong, sustainable bridges. That theme came with purpose and urgency. We set out to do the following:

- **Grow visibility:** Elevate the role of statistics in science and society.
- **Enhance opportunities:** Expand professional development and leadership programs.
- **Foster inclusion:** Strengthen our diverse and welcoming community.

Every initiative, every meeting, and every decision this year aimed to advance those goals.

On the Road: Meeting You

Serving as ASA president means you become a sort of traveling ambassador for our profession. I was invited to universities, industry research groups, and conferences of every kind, from the Women in Statistics and Data Science Conference to the Nonclinical Biostatistics Conference to the Fall Technical Conference to several ASA chapter meetings.

Through these visits, I got to know members I would not have met otherwise. Seeing their dedication to their work and our profession reminded me of how much quiet excellence keeps our field moving forward.

I especially loved the conversations. Many of my talks focused on *unpacking the questions* I live with as a collaborative biostatistician: How do we find joy in work that is sometimes invisible? How do we show the impact of what we do when numbers alone can't tell the whole story? How do we explain that data are not abstract objects, but traces of human life, reflecting strength, struggle, and resilience? Those conversations reminded me why we do this work. They reminded me of you.

Highlights from Nashville: Our Joint Statistical Meetings

We gathered in Music City this summer for JSM 2025. More than 4,600 statisticians and data scientists came together, energized by the sunshine, the music, and the chance to exchange

ideas in formal sessions and serendipitous encounters.

Together, we gave awards to acknowledge our creativity, curiosity, and impact. We shared challenges and solutions. And we confirmed, once again, that the statistics community is alive, growing, and essential.

Partnership and Progress: Milestones of the Year

This year, we launched several major initiatives that strengthen the role of statisticians in biomedical science.

ASA and *Nature Medicine* signed a groundbreaking memorandum of understanding, leading to the recruitment of 48 statisticians across oncology, metabolic diseases, infectious diseases, and neurology/psychiatry to serve as the journal's first statistical advisory panel. Following its success, *Nature Aging* is now exploring a similar partnership with the ASA Interest Group on Statistics and Data Science in Aging.

In September, we announced the launch of the Clinical Certificate Program. This is a long-needed training pathway that prepares statisticians, biostatisticians, and data scientists to excel in clinical research. Expert-designed and practice-focused, it will launch in spring of 2026 and help build the talent pipeline that drives innovation in patient care and public health.

StatsForward is one of the initiatives led by our beloved former ASA president, Dionne Price, whom we lost last year. I am committed to continuing its intended purpose. It rests on a simple but



Ji-Hyun Lee



Photo by Stan Altan, Johnson & Johnson

From left: Don Bennett, John Kolassa, Ji-Hyun Lee, and Eve Pickering meet at the Non-Clinical Biostatistics Conference in June.



ASA Board members Melinda Holt (left) and Jennifer Schoendorf (right) with Ji-Hyun Lee during the 2025 Joint Statistical Meetings

powerful belief: Early-career professionals are not just future leaders, but they're ready now. StatsForward creates a sustainable path for leadership, bridging the gap between technical strength and leadership growth. The 2025 cohort has already been selected, and participants have begun their work with a SWOT analysis reflecting on their strengths, weaknesses, opportunities, and threats.

The AI Era: Questions We Must Not Avoid

As AI advances, what is the role of our profession? This is the question I heard more than any other this year from students worried about the job market, senior colleagues concerned about the future of academic departments (even the future of higher education), and practitioners who want to ensure their expertise remains respected.

The concern is real. But so is the opportunity. Data-centered disciplines are more important

now than ever. AI requires statistical thinking for design, evaluation, and truth-seeking. We cannot stand on the sidelines. We must lead. That means buckle up, stay engaged, and help shape how AI is used in science, industry, and policy. Now, more than ever, we must work together to shape the future of our profession. The ASA is already addressing this challenge through multiple initiatives and collaborations.

New Channels, New Voices

This year also brought the launch of *ASA Discoveries*, a groundbreaking open-access journal dedicated to advancing research across the interconnected fields of statistics, data science, and artificial intelligence. This reflects the interdisciplinary nature of modern data sciences. New journals mean new voices and wider paths for visibility. They broaden what is possible and showcase the creativity of our community.

A Musician's Reminder

I would be lying if I said this year was always smooth. Several times, I came close to quitting my local orchestra and chamber groups. The ASA schedule, teaching, mentoring, and research, all of it stretched me thin. My music practice slipped. In rehearsals, my playing sometimes felt like more of a burden than a contribution.

But my conductor and fellow musicians showed patience and kindness. They gave me space to keep going. And during one of our holiday concert rehearsals, as we played *Betelehemu*, I felt tears fall—a mix of exhaustion, gratitude, and relief. Those tears held the entire story of this year: the weight of the challenges we have faced and the strength we have shown together. Resilience. That's what keeps us going as musicians, scientists, and human beings.

What This Year Meant to Me

Serving as your president was a deeply meaningful experience. I

have always believed leadership is about service. Although my year as ASA president is coming to an end, I will continue to amplify voices, create opportunities, and help strengthen the profession we all care about.

What moved me most was seeing the dedication within our community, people working in every corner of science, health, business, and society to make life better for others. Even when your work is unseen, its impact is undeniable.

Thank you for your trust. Thank you for showing up, for supporting one another, and for advancing our field with integrity and heart. I am honored to serve alongside you.

Looking Forward

I am excited about what comes next. President-Elect Jeri Mulrow will focus on strengthening local communities and member connections. I love this direction, and I will fully support her. With her leadership and your continued energy, the ASA will remain strong, modern, and inclusive. I will continue working alongside you, not from the front, but from within the community that made me who I am.

Not Goodbye

So, this isn't a farewell. It is a thank you for a job well done and encouragement to keep going.

As the 2025 ASA president, the 120th in our history, I hand the baton to the next leader with pride and confidence. I will always hold this year close to my heart.

I look forward to seeing you again in meetings, on trains, and wherever our paths cross.

Let's keep building bridges.

Let's stay resilient.

And let's continue shaping a future in which statistics and data science enrich society boldly, thoughtfully, and together.

See you soon.

Ji-hyun

Member Showcase: Yuelin Zou

The ASA is built on the strength of its members—their work, expertise, and dedication to the field. This month, we're highlighting Yuelin Zou, who shares with us details of his career, research, and future goals.

How did you become interested in statistics and data science?

I majored in applied math before pursuing a statistics major. My interest shifted after I met David Draper, former professor of statistics at the University of California at Santa Cruz and an elected ASA Fellow (2007). He had such great enthusiasm for Bayesian statistics that he made me appreciate how elegant and powerful statistical thinking can be: No longer were stats about “numbers,” but rather it was about using statistical reasoning under uncertainty.

Inspired by that, I went on to pursue my bachelor's degree in statistics at the University of Illinois Urbana-Champaign and later earned my master's in business analytics from Columbia University. From there, I began my professional career in data science within the tech industry, where I apply statistical modeling and natural language processing to solve real-world business problems.

What is your current role or area of expertise in statistics and/or data science?

In my current position, I focus on developing predictive models through machine learning and generative AI. Most of my work is centered on statistical modeling and time series forecasting, with a focus on using structured data (such as financial and operational

metrics) and unstructured data (text and transactions) to assist in the strategic financial decision-making process.

Much of my statistical modeling uses gradient boosting frameworks and time series models to predict various financial, lending, and risk metrics. To ensure the complex models can be interpreted by business stakeholders, I use SHAP [Shapley additive explanations] values, which allow me to ensure the complex models are understandable and explainable to the business stakeholders. In addition to providing transparency into the models, I provide for seasonality, cohort effects, and user growth, which allow for daily-level forecasting.

Overall, my expertise combines statistical learning theory, machine learning interpretability, and financial analytics, enabling organizations to develop data-driven, scalable, and explainable forecasting strategies.

How are you applying GenAI and statistical methods in the finance sector?

For me, the use of GenAI in finance is a matter of achieving an appropriate equilibrium regarding operational efficiencies versus the oversight of risk.

I have been developing a series of large language model-based forecasting and analytical agent systems that leverage internal financial data sets in conjunction with GPT-4 to automate many previously manual and



Yuelin Zou

repetitive tasks, such as rolling forecasts, variances, summaries of data, and interactive financial reporting and analysis chatbot systems that enable executives to ask questions of their data in plain English.

To make these systems trustworthy and compliant, I've employed various efficient reasoning methodologies, in addition to using supervised fine-tuning on a proprietary set of financial documents. The output from the models is therefore not only contextually correct but also aligns with the data governance practices and compliance regulations of the enterprises.

The GenAI solutions I have developed have demonstrated clear positive effects, enabling executives to act more quickly when making decisions and reducing the amount of repetitive analytical effort required by finance teams, which permits finance professionals to spend more time focused on developing and implementing

Would you like to participate in the *Amstat News* Member Showcase? Email ASA Communications Manager Megan Murphy at megan@amstat.org and she'll email you some questions.

business strategies, rather than wrestling with data.

What motivates your current research focus on model explainability and unlearning?

I often say GenAI wouldn't exist without statistics. Statistics provides a means for translating abstract ideas into tangible information and therefore provides a basis for the transition to concrete results. Beyond this, my statistical education has also allowed me to think about uncertainty and causal relationships, all critical skills to develop when you are working with models like large language models.

Currently, researchers continue to study how to get past the "black box" nature of GenAI systems; however, there remains an enormous amount we do not yet know about how GenAI systems retain, recall, and lose knowledge. That's what drives my research on model explainability and unlearning.

In the context of banking and finance, these questions

are especially important. Trust in strategic financial decisions takes years to build, and one opaque model output can ruin everything. We need to know the reasoning behind a model's prediction, we should try to prevent the likelihood of a hallucination, and we need to provide a way to safely unlearn or modify data based on regulations or fairness. Ultimately, I would like to assist in creating transparent, manageable AI systems that companies will be able to trust to make strategic financial decisions responsibly.

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

I think the most valuable career guidance I have received from anyone was from my mother. She told me, "Do what you love or, alternatively, if you cannot do what you love, then do what you feel passionate about." I have been able to carry this concept through all steps of my own journey. New career paths are emerging every year, especially

in data and AI. Ultimately, the idea will be to identify an area in which your curiosity exists and pursue it. Curiosity, as I said earlier, when fueled by passion, produces persistence—and it is persistence that will turn your curiosity into expertise.

Are you a member of an ASA chapter or section? Have you volunteered with the ASA in the past? If so, what did you learn from that experience?

I'm currently a member of the ASA New York City Chapter. I recently had the opportunity to serve as a panelist and judge for the ASA x AI4Purpose 2025 Annual AI Workshop, where I gave a talk titled "Benefits, Risks, and Hallucinations of Generative AI."

Through that experience, I was incredibly inspired by the innovative problem-solving skills of today's college seniors and recent graduates, many of whom are already building creative AI-driven solutions to real-world problems. Seeing their capabilities made me reflect on my own experiences during my internship in data science, long before GenAI existed, and the time it would take to accomplish what is achievable today in a matter of hours using the right tools.

This experience has further solidified my view that the future of AI has the potential to transform numerous industries, particularly in health care and financial technology, and responsibly innovating within these industries will lead to quantifiable improvements in people's lives. ■

Aleksandra Slavković to Give ASA Links Lecture

Aleksandra (Seša) Slavković will present the 2025 ASA Links Lecture, "Praivacy (noun) Pronounced: /'prā-və-sē/ Balancing Data Confidentiality and Utility," on January 23 from noon to 1:30 p.m. EST. Saki Kinney will serve as the discussant. This free virtual event is in honor of Constance Citro, Robert Groves, and Fritz Scheuren—three pioneers who advanced the US federal statistical system's ability to meet growing data demands.

Each year, the award recognizes an individual whose contributions have advanced official statistics and whose vision helps address critical data needs. Register for free at <https://lnkd.in/escykQSf>.



Aleksandra Slavković

Write for ASA Career Connect

If you have a passion for writing and want to make a meaningful difference in the American Statistical Association community, consider writing for the Career Connect blog.

Blog posts can be specific to your academic or professional interests. Examples include the following:

- How to break into the field (“What education do I need to be a statistician?” or “What education do I need to be a data scientist?”)
- How GStat or PStat accreditation helped your professional growth
- Specific skills such as the importance of networking or interview tips
- Your involvement in the ASA (committee, chapter, section, interest group) and how it helped you grow professionally
- A career success story such as how you landed your first or most recent job
- How to overcome a career setback or failure and the value of such experiences
- A day in your current role



View the Career Connect blog at <https://careerconnect.amstat.org/careers> for ideas. Articles may be emailed to ASA Membership Marketing Coordinator Christina Bonner at cbonner@amstat.org.

TV Ratings, Food Myths Featured in November Significance

TV producers really should read this issue's cover feature by Ashley Mullan—“For Better or for Worse: The ‘Kiss Effect’ on Television Ratings”—which examines how a TV show's ratings are affected when a will-they-won't-they couple finally gets together (Mulder and Scully in *The X-Files*, Ross and Rachel from *Friends*, Jess and Nick from *New Girl* ...).

More soberingly, there is a deconstruction of the latest study to unconvincingly link consumption of ultra-processed foods to bad health.

Finally, the November magazine is a double issue—a result of last year's cover date changes.



November 2025 Issue Highlights

Art world “sleepers”

Estimating the missing Modiglianis

Data governance at the United Nations

An overview of recent developments

Early Scottish statisticians

Our 2025 writing competition winner

Language barriers

Are statisticians and data scientists speaking the same language?

The espresso point

Turning student absences into coffee breaks



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Q&A with ASA Founder **Barry Graubard**

A longtime American Statistical Association member, Fellow, Founder, and mentor, Barry Graubard spent his career as a government statistician at the National Cancer Institute's Division of Cancer Epidemiology and Genetics before retiring in 2024. At the NCI, he developed new statistical methods that helped researchers better understand cancer trends in populations.

Beyond his technical contributions, Graubard has been an exceptional mentor. His commitment to mentoring statisticians has been recognized with the NCI Mentoring Award, ASA Mentoring Award, and ASA Jeanne Griffith Mentoring Award.

In 2025, Graubard received the ASA's most prestigious honor—the Founders Award—recognizing, in part, his dedication to mentoring future statisticians.

We wanted to get to know him better, so we asked him to answer the following questions.

Background

Where did you grow up?

I was born in Washington, DC, and grew up in Fairfax County near Alexandria, Virginia.

What or who influenced you to become a statistician?

I always liked numbers and, as a child, pored over the numbers in the *World Almanac*. In high school, I was most interested in my science and math courses, but it was not until my last year as an undergraduate majoring in mathematics at the University of Maryland, College Park that I took my first statistics course. In fact, taking that course was the result of my mother basically suggesting it as an occupational backup to my plans to teach mathematics. Professor Piotr Mikulski in the UMD Department of Mathematics statistics program, who was my professor in graduate school, had the greatest influence on convincing me to switch from mathematics to statistics and probability.



Barry Graubard

Career Journey

You started your career in 1977 at the National Center for Health Statistics. Was this your first job out of college?

Yes, although, at that time, I left UMD with a master's degree, intending to find a problem for a PhD thesis and then return to UMD to complete my PhD.

What did you work on there?

At NCHS, I worked directly for Monroe Sirken on applications and extensions of network sampling to estimating rare diseases or conditions in national household surveys and for potential use in estimating the undercount of the upcoming 1980 Population Census, a collaboration with the US Census Bureau.

You earned your PhD in 1991, more than a decade into your career. What motivated you to pursue doctoral studies at that point?

Well, that is a long story. As things went, I did not make much progress searching on my own for a good thesis problem. There were several people who kept encouraging me to work on my PhD thesis. Two of the most important ones were Mitchell Gail and Edward Korn, both at the National Cancer Institute, who suggested working with me on various topics that used my experience and knowledge in survey methods in conjunction with biostatistical methods. Also, at UMD,

professors Grace Yang and Paul Smith kept encouraging me to return to finish my PhD work. Both Mitch and Ed served as unofficial PhD advisers on my thesis committee, and Paul was my official UMD adviser. Basically, my motivation to pursue my doctoral studies was simply my desire to complete the PhD degree, but this could never have happened without the support of these people and my family.

What drew you to the work at the National Cancer Institute? Looking back, what aspects of your research do you think made the most impact?

When I was a graduate student in the statistics program at UMD, Mitchell Gail gave a seminar about work he did on his PhD dissertation at The George Washington University while at the NCI. Gail's presentation made a huge impression on me, so much so that I decided to eventually work at NCI as a biostatistician. Also, I was drawn to NCI because of the amazing contributions their biostatisticians like Gail were making in statistical methods to understand the causes of cancer and best treatments for cancer.

However, my journey to realizing that goal turned out to be a rather circuitous one. After nearly three years at NCHS, I took a position at the Alcohol, Drug Abuse, and Mental Health Administration, working with Robert Rawlings, my branch chief on discriminate analyses methods for identifying abusive drinkers using clinical markers. After several unsuccessful attempts at applying for statistical research positions at NIH, I was offered and accepted a position working with Howard Hoffman in the Biometry Branch, National Institute of Child Health and Human Development, on perinatal epidemiology. It was there that I began to learn more about biostatistics and how to collaborate as a statistician with epidemiologists.

My PhD was completed after being hired to work at my first job at NCI for Sylvan Green and David Byar, who was the branch chief in the Biometry Branch, Division of Cancer Prevention and Control. In 1997, Gail, chief of the Biostatistics Branch, Division of Cancer Epidemiology and Genetics, NCI, hired me as a senior researcher, and I continued to work until my retirement in 2024. I now have the position of scientist emeritus at NCI.

I think my research made its biggest impact by combining statistical methods from both survey research and biostatistics to develop new methods that contributed to improving the design and

analysis of cancer and other chronic disease studies in epidemiology and surveillance. This work started with my PhD research thesis and, up to 1999, was summarized in our book, *Analysis of Health Surveys*, and has continued to this day. The impact of my research after 1999 has been mainly due to the work I have done with PhD students and post-doctoral fellows I supervised. Their contributions have been immeasurable.

What were some of the challenges you faced in your work at NCI?

I had challenges nearly every day that I worked at NCI. Rather than pick specific examples, let me say that encouraging NCI to make their epidemiologic and surveillance studies more population-based for scientific soundness through the use of random sample designs, national health and demographic survey data, and proper statistical methods for data analyses was my overriding challenge.

Mentoring

You have won numerous mentoring awards. In your opinion, what makes someone an effective mentor?

Wow, that's a difficult question. I don't have any formulas for this. My approach has been to respect my mentees in every possible way. I carefully listen to them tell me their goals, ideas, and concerns and help them in any way possible to be successful. As a mentor, I work to cultivate these strengths and provide advice and help to address their perceived weaknesses.

What has been the most rewarding part of mentoring for you?

Everything about mentoring is rewarding, and it has been truly an honor for me to be a mentor. I try to stay in contact with my mentees, and one of the most rewarding parts of mentoring is watching and hearing about the progress they have made in their careers.

What advice would you offer to aspiring statisticians just starting their careers?

I advise them to choose career paths and work that they are passionate about. As our professional environments are changing so rapidly, I advise young and older statisticians to stay nimble in their profession, to continuously learn new skills and subject area applications.

Becoming involved in the ASA gave me the opportunity to meet members who worked in different areas of statistics and to make suggestions on various committees.

ASA Leadership

You have served in an array of ASA leadership roles, including chair of the Biometrics Section, Committee on the Outstanding Statistical Application Award, Committee on Fellows, and Task Force on Replicability. How did you first become active in the ASA?

In 1994, I agreed to be ASA Biometrics Section Program chair and, that same year, Gail, who was the ASA president-elect, asked me and I agreed to serve as member of the ASA Continuing Education Advisory Committee.

Would you encourage other statisticians to get involved with the ASA? If so, why?

Absolutely. Becoming involved in the ASA gave me the opportunity to meet members who worked in different areas of statistics and to make suggestions on various committees that I felt could help enhance the ASA to benefit our profession.

You proposed the David P. Byar Young Investigator Award for the Biometrics Section, which inspired similar awards by other ASA sections. What's the story behind creating this award?

I recall that when I attended my first Biometrics Section executive committee meeting as the program chair, Ronald Brookmeyer, chair of the section, spoke about a young investigator award and wanted suggestions for naming it. I suggested the award be named after David Byar, who had recently died. Ron knew Dave had been especially interested in mentoring young statisticians at NCI. The

members of the board approved the naming of the award, and it has been successful in attracting large numbers of nominations over the years.

Can you share a memorable moment from your years of volunteering with the ASA?

The one such moment that comes to mind is when I served on the ASA Continuing Education Advisory Committee. At my first planning meeting, I proposed professor Martin Tanner be asked to give the two-day invited course at the upcoming ASA annual meeting, which would be based on his highly cited work with Wing Hung Wong on Bayesian inference and computational methods that was published in the *Journal of the American Statistical Association*. Martin enthusiastically agreed but wanted to include his hands-on software for the students to use during the course. This required access to laptop computers loaded with S-Plus. The ASA staff told me the cost of renting the laptops with S-Plus would be too expensive. I suggested the ASA contact the S-Plus company to ask if they would provide their software and laptops with Martin's programs in exchange for advertising their role in the course. This worked out beautifully, as S-Plus was completely accommodating and the course was entirely sold out with excellent participant reviews and a large financial saving for the ASA.

Beyond Statistics

What are some of your favorite hobbies or pastimes?

My main hobby is working in statistics, which explains why, since my retirement, I continue to work without pay in an emeritus position at NCI. Other hobbies include regularly seeing art exhibits and attending lectures at various galleries—including the National Gallery of Art and the Phillips Art Gallery in Washington, DC—listening to music, and reading about various science topics. My major pastime is taking care of my three-year-old grandson on an as-needed basis.

Is there a quote or philosophy that inspires you?

I usually don't like using quotes, and I am not a philosophical type.

What goals are you looking forward to pursuing in the next few years?

Basically, I want to continue what I am presently doing as long as I can, particularly helping and promoting young statisticians with their careers. ■

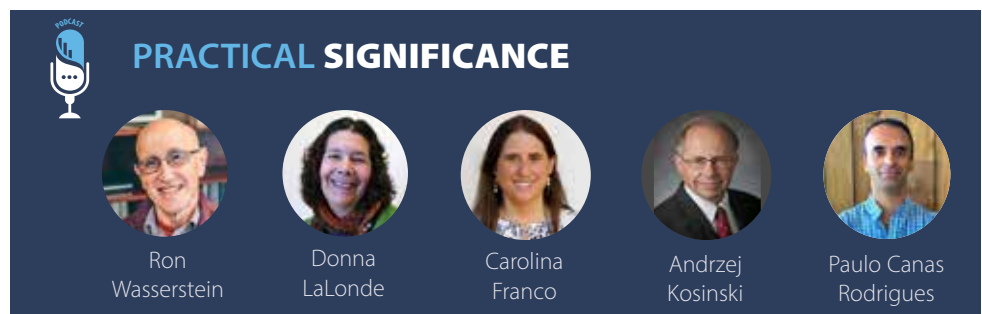
Practical Significance, Take Two: Amplifying Global Impact Through Educational Ambassador Program

What happens when you combine statistical expertise, cross-cultural collaboration, and a mission to build statistical capacity internationally? You get the ASA Educational Ambassador Program. In a recent episode of *Practical Significance*, Carolina Franco, Andrzej Kosinski, and Paulo Canas Rodrigues joined cohosts Donna LaLonde and Ron Wasserstein to discuss the mission of this initiative (established in 2005), which empowers statisticians from countries with a demonstrated need to attend the Joint Statistical Meetings, gain advanced training, and go back to spark lasting change in their home countries. This program is based on a commitment to principled statistical practice and the power of sharing knowledge across borders.

Donna Lalonde: Tell us about your day job.

Carolina Franco: I'm a principal statistician at NORC at the University of Chicago, which is a nonpartisan research organization that provides research and consulting services across many sectors. And in my role, I lead statistical methodology efforts for projects in social sciences and public health, bringing expertise in statistical modeling. And beyond my work at NORC, I'm also active in the service to the profession, including serving on the ASA Committee on International Relations in Statistics.

Andrzej Kosinski: I have been a member of the ASA Committee on International Relations in Statistics for several years, and, this year, I will finish serving as



the chair of this committee. I'm a professor of biostatistics in the department of biostatistics and bioinformatics at the Duke University Medical School in Durham, North Carolina, and a member of the Duke Clinical Research Institute.

Paulo Canas Rodrigues: I'm a professor of statistics and data science at the Federal University of Bahia, in Brazil. I also lead here the Statistical Learning Laboratory, where I coordinate teaching research and outreach activities at the interface of statistics, machine learning, and artificial intelligence. Among other activities, I also serve as the president of the International Society for Business and Industrial Statistics and president-elect of the International Association for Statistical Computing.

Ron Wasserstein: Carolina, as a member of the ASA Committee on International Relations in Statistics, share your perspective on the mission of the Educational Ambassador Program.

Carolina Franco: This is a great program, and I'm excited to talk about it. Scholars from various countries are sponsored to attend the Joint Statistical Meetings and take continuing education courses on emerging topics in statistics. Then, they're expected to return home and teach what they learned.

The minimum requirement is to offer the equivalent of one graduate-level course—equivalent to a one-semester course—with no fewer than 10 people, but many ambassadors go far beyond that and organize courses and webinars that reach audiences across their country and even multiple countries.

The first educational ambassador, who was from Argentina, was selected in 2005. We are celebrating the 20th anniversary of the program, which is very exciting.

The ambassadors are selected through a competitive process, and the goal of this process is to maximize the impact of the award. We typically focus on countries where access to the kinds of advanced statistical training at JSM may be more limited.

Over the years, we had several countries represented, including Brazil, Indonesia, Mexico, Pakistan, Namibia, Nigeria, Costa Rica, and many more. The program is administered by the Committee on International Relations in Statistics and is extremely impactful in fostering the exchange of knowledge and international collaboration.

Ron Wasserstein: Paulo, as a former educational ambassador, how would you describe the program?

Paulo Canas Rodrigues: I discovered this great program by chance. I became an ASA member not so long before and received a newsletter with the information to apply. I feel this program is a very special and prestigious opportunity, especially for people who live and work in developing countries.

The program is not just about attending one of the major conferences in our field, it is also about learning, connecting, and sharing. This allows people from underrepresented countries to take a chance and attend one of the largest gatherings of statisticians from all around the world. It is very important to support early-career colleagues and researchers from developing countries.

At JSM 2024 in Portland, I took two courses: one on text analysis and another on large language models, because I would like to grow my expertise in these fields. JSM was a very nice learning and networking experience, and I left with many ideas and resources I continue to apply and share at home, which facilitates a more meaningful impact.

Donna Lalonde: Andrzej, you've led the committee, so you have a good sense of what makes an ideal candidate. What qualities make an ideal candidate for the Educational Ambassador Program—beyond the academic and professional credentials?

Andrzej Kosinski: I want to stress that we opened the applicant pool beyond strictly requiring a doctoral degree in a statistical field, as it used to be. Now we ask the applicants to just hold a postgraduate degree. While a PhD is still preferred, this flexibility allows compatibility with varied academic environments around the world.

Beyond academic credentials, it's very important that the can-

didate is involved in teaching and dissemination of statistical methods at a recognized university or research organization so they can share and spread the knowledge learned at JSM.

We are looking for applicants who are likely to keep in touch with us and may be willing to join potential future initiatives.

For example, we are hoping to initiate an ASA "international data quest" for students. So, with such an initiative, collaboration with past educational ambassadors can be very valuable. Keeping in touch and being engaged is very important.

Ron Wasserstein: Paulo, please share your experiences as the educational ambassador. You've talked about learning, connecting, and sharing. Can you speak further about what you did when you returned home and some of your goals for the future.

Paulo Canas Rodrigues: In fact, I did not go back home to Brazil. I was on a sabbatical leave in 2024, so I went back to Indonesia and worked there throughout the end of 2024. I gave a couple of talks and a half-course there related to text analysis and large language models. I'm teaching one month per year in Cameroon, and I also gave talks there on this field.

When I got back to Brazil in early 2025, I launched a new master's- and PhD-level course called Large Language Models: Foundations and Inference. This is a course for our graduate program in statistics and data science. This course combines both theoretical and practical components, and it covers topics such as embedding attention mechanisms and statistical inference for large language models. My plan is to offer this course annually.

I also began organizing open seminars on generative AI, fea-

turing international speakers—including one of the lecturers from the CE courses I attended at JSM 2024—and have been sharing resources with academic networks across Latin America and Africa.

In addition, I have started involving graduate students in research on LLMs and generative AI.

So, the impact of the Educational Ambassador Program has been truly meaningful, not just for me personally, but also for my students and broad academic network, reaching diverse audiences across several countries.

Donna Lalonde: Carolina, you've provided a rich history of the Educational Ambassador Program, which is certainly a measure of success. Would you share more in terms of the successes of the program?

Carolina Franco: One thing I'd like to say is that Paulo is a great example of the success of the program. He had an impact that went beyond his home country to various other countries. And, in fact, Paulo exemplifies what I view as success, and there are two aspects of it. One is bringing new educational opportunities to places where they may not have existed otherwise, and we saw a lot of that with Paulo's experiences.

But there's a second important aspect, and that's relationship building. The ASA is enriched by bringing in voices and perspectives from around the world. And as we've already mentioned, we often stay in touch with educational ambassadors for years after they were active with us. In fact, I could give a couple of examples.

One of our past ambassadors from Nigeria helped establish the first ASA student chapter in Africa. That was very exciting. This reached students and universities across the country.

There's another cool example. During the pandemic, many educational ambassadors spoke about how their countries were affected by the pandemic and how they adapted to the challenges that were brought about by it, and this resulted in a very interesting article in *Amstat News*, written by members of the Committee on International Relations in Statistics.

Donna Lalonde: Paulo, as you reflect on your time at JSM and as an educational ambassador, what else would you like to highlight in terms of successes of the program?

Paulo Canas Rodrigues: I believe success is not only about meeting the formal requirements of the program, but also about making a lasting impact. That can be done in classrooms, training, research, and professional networks.

When the knowledge gained at JSM becomes new courses, collaborations, student mentoring, or outreach activities, then we can say the goal is really being achieved.

I also think success means helping statisticians from the developing countries and underrepresented regions to gain more visibility and confidence to take leadership roles in the international statistics community.

Donna Lalonde: Andrzej, what's your perspective on the success of the Educational Ambassador Program.

Andrzej Kosinski: The success of a program happens, indeed, when dissemination of knowledge happens. And Paulo, clearly, is a wonderful example. Another part is it leads to an ever-expanding circle of statistical thinking and connections around the world.

We are planning to organize a conference call with past educational ambassadors

available so they can share their current work or teaching methods. So, keeping in touch and developing further connections is very much part of this program and ultimately a measure of its success.

Ron Wasserstein: The deadline to apply to be an ASA educational ambassador is December 15. Paulo, since you prepared an application for the program, let's start with you. What are some tips for someone to apply for this program?

Paulo Canas Rodrigues: I have two pieces of advice. One, which I apply to my own life, is to be honest and realistic. For this proposal, it is important to try to describe in a clear and practical way how this knowledge will be shared after JSM. It will be important to show that you have some ideas, some structure, and some motivation to make it happen. It can be through teaching or organizing events, or webinars, or collaborations.

Secondly, don't be afraid to show your passion. The committee is looking for people who truly care about education and the development of statistics in different regions of the world. So, it's important your enthusiasm is shown in the proposal, so that the committee members who are making the selection can understand you are passionate about education and about sharing knowledge.

Ron Wasserstein: Andrzej, because you've evaluated candidates, from your perspective, what are some tips for applying for the ASA Educational Ambassador Program?

Andrzej Kosinski: Well, the first is a practical one. Please apply early. Occasionally, it happens, for example, a support letter does not come on time, and then, unfortunately, we cannot consider such an application.

But emphasizing what Paulo mentioned, please be clear about your teaching environment. Also explain in reasonable detail how you intend to share your knowledge during the year after you attend JSM as an educational ambassador. So, detail and clarity are important. And, of course, a strong dose of enthusiasm in the application is always impressive, and I'm glad Paulo mentioned it.

Ron Wasserstein: Carolina, what is your advice for those applying to the program?

Carolina Franco: This is my sixth year on the committee, so I evaluated a lot of applications. My advice is to make sure every part of your application highlights the impact your selection as an educational ambassador would have on your country, region, and beyond.

Of course, you want to emphasize your own qualifications and to show you're well positioned to make the program successful. But we really care about impact, as well. Be specific and concrete. Like Paulo and Andrzej mentioned, provide a clear and concrete plan of how you will disseminate the knowledge you gain. Explain who will benefit, why there is a need for this training in your country or region, and how your proposal will address that need. So, that would be my advice. Just be concrete.

And I absolutely agree about the *passion*. How can we not? Right? That's everything in life. Be passionate about what you're doing!

The deadline to apply for the ASA Educational Ambassador Program is just around the corner: **December 15**. Learn more and submit your application soon at www.amstat.org/education/educational-ambassador. ■



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ML/AI Innovation in Regulatory Statistics: Interview with Andrea Manfrin

Di Zhang, Teva Pharmaceuticals, and Maria Kudela, Pfizer

Editor's note:

This interview originally ran in the 2025 spring issue of the *Biopharmaceutical Report* and is republished here with permission. View the report online at <https://tinyurl.com/2t6amryt>.

Andrea Manfrin has more than 30 years of international experience as an academic, consultant, and entrepreneur in the health care sector. He joined the Medicines and Healthcare Products Regulatory Agency in June of 2023 as deputy director of clinical investigations and trials. His ambition is to facilitate regulatory change, making the United Kingdom one of the best places for sponsors and patients to conduct clinical research. Before working at MHRA, Manfrin was at the University of Central Lancashire as the faculty director of research and innovation in the faculty of clinical and biomedical sciences and chair professor of pharmacy practice, where he led the conceptualization and development of clinical trials in medicine, dentistry, pharmacy, and health services research. He continues to hold a visiting professor position there.

What are some of the artificial intelligence/machine learning–related initiatives at the Medicines and Healthcare Products Regulatory Agency?

We are now planning to test and deploy AI/large language models in three areas: 1) support assessors during the clinical trial review; 2) support training of new assessors; and 3) support sponsors by providing AI-driven assistance for common regulatory queries via the MHRA web system.

We manage a significant volume of clinical investigation and trial applications. Last year alone, we processed more than 5,300 applications—including 83 initial clinical investigations and 290 amendments—761 initial clinical trials, and more than 4,200 amendments to existing applications. These documents are often extensive and detailed, requiring a considerable amount of time for our assessors to review and extract critical information from. To address this challenge, we focused on clinical trials and spent the summer of 2024 exploring various digital tools to enhance our efficiency. We tested several off-the-shelf AI tools but found none



Andrea Manfrin

that met our specific needs. Consequently, we partnered with a company through our digital and technology team to develop a custom AI tool from scratch. This tool was designed to help assessors quickly locate necessary information, significantly reducing the time spent on this task from hours to just 34.5 seconds. This frees up assessors to focus on more complex and knowledge-intensive activities, such as evaluating the safety and benefit-risk profiles of the trials.

We also developed a training tool to help new assessors onboard more efficiently to not only help assessors get up to speed but alleviate the pressure on senior staff who were previously responsible for mentoring new employees.

We are also creating a tool for sponsors to pre-check regulatory concerns, which helps strengthen their submissions.

Our AI tools will continuously improve using sources of information held in our data bank such as a data set including 110,000 grounds for nonacceptance we use to train the system. This data set helps the AI identify potential issues and improve its accuracy over time. Evidence from the literature shows AI and natural language processing save up to 70% of the time required to find information. By adopting this approach, our assessors should have more time to engage in more valuable activities, such as providing scientific advice to sponsors.

On April 22, following two successful proof-of-concept studies conducted between October 2024 and March 2025, we deployed the first two AI/LLM tools: 1) a general manufacturing practice compliance checker and 2) the knowledge hub using the searchable database for past global non-conformance assessment and assessment reports. Overall, our efforts should lead to significant improvements in efficiency and effectiveness in managing clinical trial applications, benefiting both our team and the sponsors we work with.

It's important to understand that while AI can provide valuable insights, we want to ensure humans—our assessors—are ultimately responsible for making the final decisions. For instance, consider a medical doctor conducting a brain or body scan on a patient. The machine performs the scan and generates the information, but the doctor interprets the data and makes the final decision, determining whether treatment is needed or if the scan is clear. We're using AI to support our assessment activities, not as a replacement. Only the assessors will make the final decision.

What unique challenges do you face when implementing AI/ML in a regulatory environment?

I must say we ventured into uncharted territory, as we've never done this before in our division and in my career. It was entirely new for us, and to the best of my knowledge, we're among the few divisions in the MHRA testing this kind of activity, especially while supporting the assessment of submissions. Given our funding constraints and workload pressures, we knew we needed to find innovative ways to support our work. This led us to explore new avenues.

While I've used machine learning before, for example artificial neural networks, I had never applied it at this level. Fortunately, my colleagues, who are open-minded and passionate about AI, helped us start looking for solutions. Collaboration with the external partner was fundamental. The biggest challenge was realizing we needed to create a solution from scratch, as there wasn't an off-the-shelf option available.

Through my colleagues in the digital team, we connected with an external, which has a great multidisciplinary with diverse skills. Statistics and machine learning were the common themes that united us, as we aimed to develop something truly innovative in our field. We followed the law of diffusion of innovation, starting with early innovators who think outside the box and gradually building interest across the agency. Now,

many people are involved in this program, and it has been a great experience.

What trends do you see shaping the future of AI/ML in regulatory settings?

Currently, there are numerous AI projects underway across the MHRA, although I'm not familiar with the specifics of each program. So far, we've focused on controlled pilots to ensure the tools are consistent and reliable. Now, we're branching out into areas such as assessment support and training, with more branches to come. These branches are all part of the same tree: a regulatory system supported by AI.

We see potential in using AI for various purposes, including finding solutions for clinical investigations and improving team efficiency. For instance, one of our teams—the Clinical Investigation and Trials Operation Team—is already using basic AI tools like Copilot to manage workload and data analytics, handling vast amounts of information and data. They are involved in many areas, such as developing clinical trial guidance for the new clinical trials regulations supporting point-of-care manufacturing.

Our AI program aims to create evidence, develop new regulatory pathways in life sciences, address gaps and challenges, and ensure long-term sustainability—all while co-creating tools and systems with others. The above examples show how we started using AI, machine learning, and related technologies.

One exciting example is our involvement in the creation of the Centre of Excellence for Regulatory Science Innovation. Within this, we (Clinical Investigations and Trials Unit at the MHRA) support the CERSI on in-silico trials, virtual simulations of how medical products and devices might behave. In-silico trials could help us move faster from preclinical to clinical testing and address issues such as recruitment delays. This CERSI initiative involves 85 organizations, including regulators, universities, and pharmaceutical companies. It's amazing how these entities have come together to develop new approaches for clinical investigations and trials testing.

While I can only speak for my division, I believe AI has significant potential within the regulatory environment. This includes leveraging AI to enhance our activities and supporting sponsors using AI for trials, data collection, and device usage. Another specialized team within our group focuses on these aspects.

How do you foster collaboration and communication among team members from different disciplines?

Within our Clinical Investigations and Trials Unit, we have three teams: the Clinical Trials Team; the Clinical Investigations Team; and the Clinical Investigations and Trials Operation Team, which we refer to as CIT OPS. We've created a culture that is very flat, with no hierarchy, allowing everyone to express their ideas and concerns easily. Information flows quickly, which is essential since we are legally required to complete (for example) the initial clinical trial review within 30 days. This short timeframe necessitates agility and rapid information exchange.

We share information through various methods, including face-to-face meetings and data exchanges. For instance, the CIT OPS team developed new tools last year that provide real-time data analysis, which we didn't have before. This advancement allows the heads of disciplines such as clinical nonclinical and pharmaceutical to view workflows immediately and plan work allocation more efficiently.

Although we are still under pressure, these tools give us a better overview of the situation and help us identify triggers for action more quickly.

Outside of our internal collaborations, we are involved in the Access Consortium. It's a collaboration of five regulators from Australia, Singapore, Canada, Switzerland, and UK (us) that represents around 150 million people. The diverse population helps achieve generalizable data. Since the summer of 2024, we have worked with colleagues across these jurisdictions, aiming to safely enhance clinical trial delivery. We aim to start this program in the fall of 2025, benefiting both us and patients.

The first challenge was the time zone differences, but we've adapted. Working in a consortium requires a lot of open communication and collaboration to achieve our goals and address various country-specific regulations.

What advice would you give to someone aspiring to lead interdisciplinary teams in AI and machine learning?

Leading in AI and machine learning doesn't necessarily require a completely different skill set than leading in other areas. Leadership isn't solely about technical knowledge; it's a more holistic approach. I'd like to provide three examples of leadership.

First, anyone leading AI and machine learning programs needs to have an open mind and shouldn't be intimidated by technology. They should work with people who can explain the technology simply, which has been invaluable to me. My colleagues have helped me understand complex concepts in a digestible way.

In terms of leadership overall, even when focusing on AI and machine learning, I believe leadership can be summarized through three individuals. The first is Simon Sinek, a cultural anthropologist and TED speaker, who famously said, "Managers eat first, leaders eat last." To be a good leader, you need to listen more and talk less, paying close attention to your team. You don't have to know everything—and pretending you do won't get you far.

Second, I'm inspired by Harvard Business School professor Linda Hill, who suggests moving from a vision-based leadership to shaping the culture. This modern approach is necessary because achieving complex goals requires collaboration with diverse teams, and the key element is co-creation. Hill outlines three functions of leadership called the ABC of leadership:

- A, the architect, builds the company's culture and capabilities for innovations, leveraging different people's skills and capabilities ("collective genius"). For example, we created something that did not exist before, the AI/LLM tools.
- B, the bridge, knows its company lacks all the talent and tools it needs to innovate quickly and efficiently. This is why we wanted to work with an external company that has a talented team of people with a completely different skillset.
- C, the catalyst, accelerates the co-creation across the entire ecosystem. A good example is the collaboration with the CERSI for in-silico trials, which could improve patient safety, reduce the time and costs for device and drug development, and bring new devices and medications to patients faster. This activity could reshape the entire clinical trials ecosystem.

Creating something new is often a bumpy ride, requiring multiple iterations, but maintaining momentum and positivity is key to eventually achieving results.

Finally, Steve Jobs famously once said it's pointless to hire smart people and then tell them what to do. Instead, it's better to hire them so they can tell us what to do. This means listening to a range of views but ultimately making the decision and taking responsibility for it. A good leader takes responsibility for the outcomes: If the decision is right, the credit goes to the team; if it's wrong, the leader takes the blame. That's what leadership is.

In essence, this captures my view of what makes a good leader. I don't claim to be a perfect leader, myself, but these are the qualities I believe are essential.

I believe AI and machine learning should be integrated into everyone's training, because our future work will increasingly involve these tools.

Where do you see the role of statistician within AI/ML-related initiatives?

My PhD focused on developing randomized control trials and the applications of advanced statistics. However, the statistics I've encountered in the past year have gone far beyond that. Interestingly, until a few years ago, statistics was often seen as a supporting discipline. Now, data science, machine learning, and AI have become the new currency and vocabulary, with other disciplines supporting AI and machine learning as the new cornerstone.

I believe AI and machine learning should be integrated into everyone's training, because our future work will increasingly involve these tools. That said, we'll always need true experts in AI, as it will become crucial for exchanging information and analytics.

You will be publishing one of your articles this summer. Could you tell us more about it?

Thank you so much for this opportunity to share our work. The paper has several goals: sharing what we've learned, including our challenges, and showing we brought together many skillsets, including software engineers, data scientists, and assessors. We will also describe our methodology and process, making AI and machine learning work more accessible and applicable to other regulators.

The paper will have a simple structure: an introduction; a straightforward method section; a narrative description with pictures of our journey; and a discussion of our experiences and plans. We aim to demystify AI and machine learning and make them easier to understand and apply.

Our goal is to introduce applied evidence-based regulatory science, creating evidence that informs regulations and helps sponsors avoid potential harm. Ultimately, the agency's role is to support good research that benefits patients and the community. ■

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 Li-An Xu
 Shu Xu
 Shen Yan Yiqun
 Yuan Katherine Zavez
 Jason Zhang
 Jun Zhang
 Shanshan Zhang
 Xiaolei Zhang
 Xiaohan Zhang
 Xiaomai Zhang
 Xinyu Zhang
 Yizhi Zhang
 Jiayi Zheng
 Yu Zhiang
 Cindy Zhou
 Haiwei Zhou
 Emmanuel Zuber ■

New Member Spotlight:

SITHIJA MANAGE



Sithija Manage

This month, we spotlight new member Sithija Manage, who answered the following questions so we could get to know him better:

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

I have always been inspired by my father, who is a statistics professor at Sam Houston State University. He never pushed me to study statistics, but with a natural interest in math and my father to look up to, I found statistics a natural choice.

What do you consider your dream job?

At the age of 10, I decided I wanted to become a statistics professor. That dream has never wavered.

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

I hope my understanding of statistics helps make my future students' lives a little bit easier in some capacity. I would like to help my future students learn statistics rigorously but also support them throughout that process.

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

I am always very interested in meeting fellow gut microbiome–interested statisticians! I have had the opportunity to conduct research as a visiting graduate student with the Huttenhower lab at Harvard's T. H. Chan School of Public Health, and I would say meeting people who are interested in the same line of work is very motivating and fun.

What is your favorite hobby?

Practicing tennis. My partner, Livia (who is also a PhD student in statistics at Cornell), is very good at the sport. I have never come close to beating her, but my favorite hobby is practicing in hopes of accomplishing this eventually.

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

I have a YouTube channel about grad school! You can find it under "Sithija Manage." Also, I want to shout out to the department of statistics and data science at Cornell for fostering a welcoming and supportive environment for us students.

If you are a new member interested in being featured, email ASA Communications Manager Megan Murphy at megan@amstat.org.

Penny S. Reynolds

BIRTHDAYS

1731 Francis Maseres, a lawyer, was one of the earliest statistical popularizers. He edited, reprinted, and provided commentary for major essays on probability by John Napier and Christiaan Huygens, among others. His larger mission to introduce mathematics to the public was a failure, as he rejected all advanced methods he could not understand.

1780 Mary Somerville was tutor to Ada Lovelace and introduced her to Charles Babbage. Her 1831 translation of Laplace's *Mécanique Céleste* was a thorough mathematical exposition and expansion of Laplace's methods, at the time almost unknown in England.

1791 Charles Babbage was co-founder of the Statistical Society of London (now the Royal Statistical Society) in 1834. Although considered father of the computer by some, his difference engine was impractical and never really worked, provoking a long feud with Sir George Airy.



Charles Neill

1865 Charles P. Neill (ASA Fellow, 1916; ASA President, 1916) Commissioner of the Bureau of Labor Statistics, he was instrumental in exposing

unsanitary and unsafe practices in the meat packing industry and for women and children millworkers. He was instrumental in legislating the eight-hour workday.

1878 Ethel Mary Elderton was one of the first women to be formally trained for a science career in Britain. She worked closely with Francis Galton and Karl Pearson and was a eugenicist. With her brother, she wrote *Primer of Statistics* (1909), which ran to five editions.

1880 William Cope Brinton (ASA Fellow, 1922) A pioneer of modern data visualization methods, author of the first American book on graphic techniques, and chair of the first meeting of the ASA Joint Committee on Standards for Graphic Presentation in December of 1914. Although William Playfair is credited with inventing the bar chart, Brinton coined the name.

1883 Edmund Ezra Day (ASA Fellow, 1921; ASA President, 1927) Educator, economist, first director of the division of the social sciences of the Rockefeller Foundation, and president of Cornell University. During WWI, he worked as a statistician for the War Industries Board and United States Shipping Board.

1883 Frances (Chick) Wood (RSS Fellow, 1913; Most Excellent Order of the British Empire, Member) made pioneering research contributions to theoretical statistics, education, cancer, and labor statistics. First female member of the Royal



Frances Wood

Statistical Society Council (1915) and RSS Executive Committee (1917). The RSS Frances Wood Medal is awarded for outstanding contributions to economic or social statistics.

1889 Sewall Wright (ASA Fellow, 1944) was a pioneer of population genetics and cofounder with Ronald Fisher and JBS Haldane of the evolutionary biology modern synthesis. Credited with developing the coefficient of determination R^2 , the inbreeding coefficient, and path analysis.

1894 Enid Charles was a pioneer in modern demography and population statistics applications. A regional adviser and statistical consultant for the World Health Organization, her most important work on fertility and marriage rates was done at the Dominion Bureau of Statistics (now Statistics Canada) 1940–1946.

1895 Lancelot Hogben was a medical statistician and experimental biologist. Developed the N-of 1 clinical trial, argued against 'the tyranny of averages,' opposed eugenics, and promoted the African-clawed frog *Xenopus* as a model organism for reproductive studies.

1900 Margaret Merrell (ASA Fellow, 1951; AAAS Fellow). Chief statistician and consultant to the surgeon general of the United States Army. As the first female full professor at Johns Hopkins School of Public Health, she was internationally recognized as one of the finest teachers of biostatistics for health professionals.

1906 Irene Barnes Taeuber (ASA Fellow, 1960) Demographer and ‘practical statistician,’ she significantly influenced the development of demography as a science. Directed the Census Library Project and was first female president of the Population Association of America in 1953.

1910 Jane Worcester (ASA Fellow, 1960) Medical statistician, epidemiologist, and first female chair of biostatistics at Harvard School of Public Health. She emphasized the need for statistical planning before the study began, testing assumptions before analysis, and avoiding data-dredging after data was collected.

1915 Wilfred J. Dixon (ASA Fellow, 1955; ASA Wilks Medal, 1992). Biostatistics professor at the University of California at Los Angeles. Pioneer in health statistics and health informatics, his commitment to excellence in statistical consulting led to the development of BMDP Statistical Software in 1961, one of the first general statistical software packages.

1916 Frederick Mosteller (ASA Fellow, 1949; ASA President, 1967) Founder of the Harvard Department of Statistics. Eminent statistician and influential statistics educator, he taught

EVENTS

1763 On December 23, Richard Price (1723–1791) reads “An Essay Towards Solving a Problem in the Doctrine of Chances” to the Royal Society. It was written by his friend Thomas Bayes, who died two years before, and forms the basis of what is now called Bayes’ Theorem.

1887 John Venn completes the preface to the third edition of his book *The Logic of Chance* (published 1888). This edition introduces the first graphical representation of a random walk process.

1894 On December 19, Karl Pearson submits the first of a series of papers about a family of continuous probability distributions for skewed observations. He identified five major types characterized by their third and fourth standardized moments.

1931 On December 17, the Indian Statistical Institute is officially founded. It began with the Statistical Laboratory set up by P.C. Mahalanobis in the early 1920s. In 1959, ISI was declared an institution of national importance by an act of parliament.

1943 On December 7, the ASA Detroit Chapter adopts a (presumably) tongue-in-cheek resolution to protest the omission of statisticians from the Michigan War Manpower Commission list of critical wartime occupations. The resolution makes the front page of the *Detroit News* two days later.



Frederick Mosteller

the first statistics massive open online courses (MOOC) on educational TV in 1960—one with more than 1 million viewers.

1917 Thomas C. Chalmers was the founder of the Mount Sinai Department of Biostatistics and pioneer in the application of randomized controlled trials and meta-analysis to the evaluation of medical therapeutics.

1921 Otis Dudley Duncan (ASA Fellow, 1961) introduced advanced statistical tools (path

analysis, log-linear and Rasch models, spatial analysis) to sociology for identifying empirical patterns of between-group differences, rather than trying to find universal laws of society.

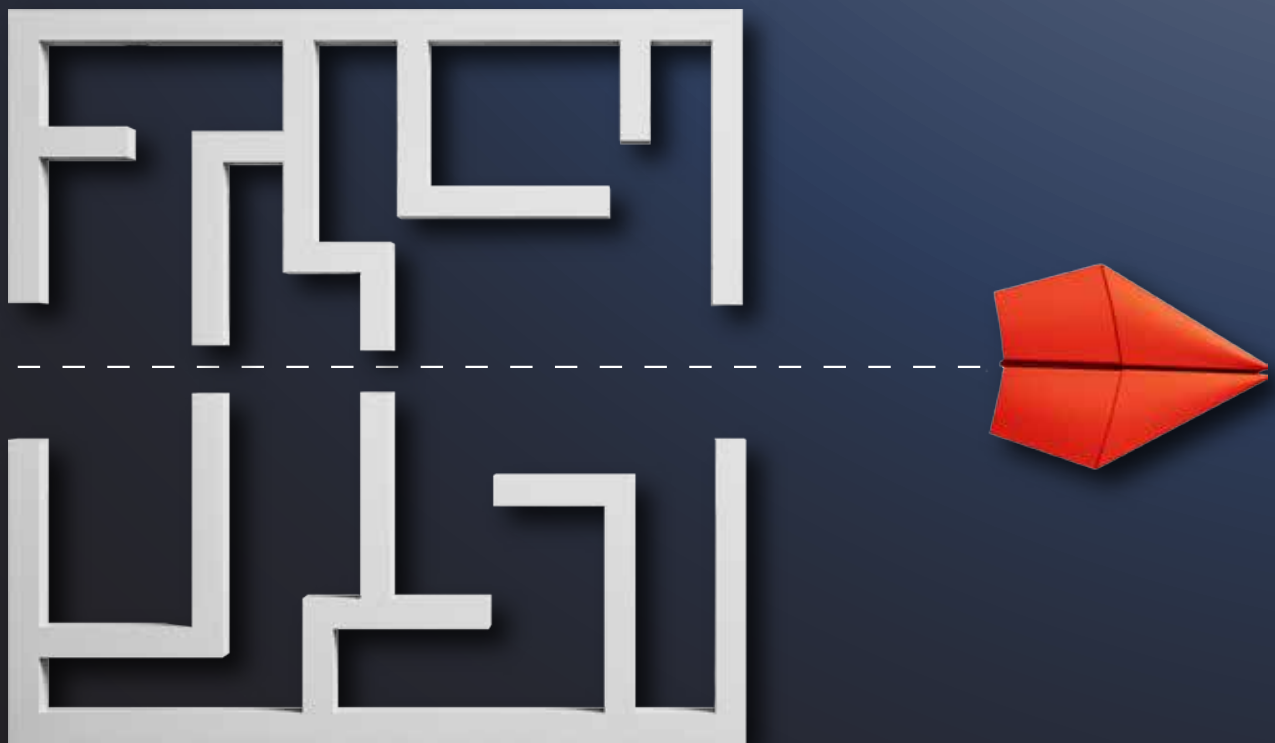
1921 Irene Curran Montie (President, Caucus for Women in Statistics, 1979) US Census Bureau statistician and director of the Survey and Statistical Design Division, US Department of Energy.

1922 Martin B. Wilk (ASA Fellow, 1962; ASA Vice President, 1980–1982; President, Statistical Society of Canada; Chief Statistician of Canada, 1980–1985) Best known as developer (with Samuel Shapiro) of the Shapiro-Wilk test in 1965 and Q-Q & P-P plots for graphical comparison of probability distributions (with Ram Gnanadesikan). ■

Download the references for more information. <https://tinyurl.com/mr32nhb8>

Tips and Hints *for* Successful ASA Fellows Applications

Claire McKay Bowen, Emily Griffith, Fred Hulting, and Kristen Olson



Each year, the American Statistical Association awards the distinction of Fellow to members who have made a positive impact through service to the association and exceptional professional contributions to consulting, applications, teaching, research, or leadership.

For the 2026 class of Fellows, nominations are due by March 1, 2026.

Are You Ready to Be Nominated?

The only strict eligibility requirement for ASA Fellow is that the nominee is an ASA member for three consecutive years prior to nomination. However, the recognition is competitive, and the committee is permitted to only choose up to one-third of one percent of the ASA membership each year. For example, 45 Fellows were chosen from among the 118 nominees in 2025.

Because of the variety of professional roles among ASA members, there is no one profile or specific list of qualifications that makes someone a Fellow. The committee looks for evidence of leadership and impact in the nominees' roles, no matter what those roles might be. Leadership and impact can take many forms; selected Fellows come from many sectors and backgrounds.

Although many nominees are in academic positions with a traditional portfolio of research, teaching, and service, being in a tenured academic position is not necessary for being selected as a Fellow. For instance, Fellow Emily Griffith serves as the co-associate department head and a professor of practice at North Carolina State University, where she is active in her local ASA chapter. Meanwhile, Fellow Claire McKay Bowen is a senior fellow at the Urban Institute, where peer-reviewed publications are not a requirement for career advancement.

While there are no quotas by sector or other demographic, each Fellows class will generally represent the makeup of the nominees. For example, the following table compares the 2025 percentages for ASA membership, Fellow nominations, and selected Fellows for the three sectors:

	ASA Membership	Nominations	Fellows
Academia	39.7%	80%	73.3%
Industry	23.9%	9.6%	13.3%
Government	6.7%	10.4%	15.5%
Other	29.7%	NA	NA

How Is a Candidate Nominated?

Nominations come from multiple sources. Some members are nominated because ASA section or chapter officers identify who they think are good candidates. Other nominations arise because the nominee themselves wants to be nominated. Others are generated because a colleague, mentor, or organizational awards coordinator identifies them as someone to be nominated.

No matter how a nomination is started, the committee members don't know where the nominations come from; all the applications look the same to the committee. The best nominations make a strong case for the importance of the impact the nominee has had in their statistical work.

It is okay for a nominee to ask to be nominated. Nominees should ask friends, colleagues, or mentors who are Fellows to evaluate their portfolio and write a letter of support for the nomination. If an eligible ASA member should be nominated, tell them. Some eligible ASA members might not think they are ready to be nominated when they are.

There is not a single career point at which a person can be nominated. In fact, many ASA Fellows are in their early- to mid-career stages. Nominees who are early in their career or whose portfolio might need to be strengthened should consider asking their professional network to nominate them for other awards. These nominations provide useful experiences in putting nomination packets together and build a stronger record of accomplishment for the Fellow nomination.

Nominees who are not selected can be renominated in a future year. Each year, only about 35% of nominees are selected as Fellows, so not being selected doesn't mean the nominee is unqualified. The cap of one-third of one percent limits the number of Fellows selected, and some years are more competitive than others. When considering resubmission, the nominator and nominee should seek advice about improving the nomination packet before resubmitting.

The Nomination and Selection Process

Nominators and nominees should start by thoroughly reviewing the ASA Fellows webpage at www.amstat.org/your-career/awards/asa-fellows. It has a list of all requirements and a variety of resources to help the nominator put together the packet. All nomination packets include the online nomination form, a PDF with three letters of support, and a PDF of the nominee's CV.

Before submitting the nomination, it is important to ask colleagues to review the nomination and suggest improvements. Reviewers who are not familiar with the nominee can comment on how the nomination communicates impact to statisticians from other fields, and including statements from colleagues and coworkers can speak to the nominee's impact within the field.

Once the nominations are submitted, the members of the Committee on Fellows are responsible for evaluating them and selecting the Fellows. The

MORE ONLINE

To start the nomination process, review the ASA Fellows webpage at <https://tinyurl.com/yuybhksr>.



committee is composed of nine members, with three each from academia, government, and industry. The committee receives the nominations a few days after the March 1 deadline and makes final decisions by early April. The committee members read and evaluate the nominations and meet multiple times to discuss what makes a nomination exceptional.

During these evaluations, the committee is looking for evidence of impact, leadership, and service to the ASA. There is no one-size-fits-all nomination, as excellence will look different depending on sector, job role, and career path. Successful nominees communicate continued impact and leadership in their statistical positions and service to the ASA. Service to the ASA can look like serving in elected positions or on national committees, being active in sections or chapters, and taking on editorial roles. Successful nominees typically discuss what their role and contributions were in each service positions.

Most committee members will know nothing about the nominee aside from what is presented in the nomination and might not be deeply familiar with the nominee's specialization. Thus, it is critical that the nomination form and letters clearly communicate the nominee's role and contributions to statistical knowledge, teaching and mentoring, consulting, administration, and leadership more broadly; how they stand out in that role; and how their work is impactful.

Creating a High-Quality Nomination Packet

High-quality nominations tell a story about a nominee's excellence, impact, and leadership in multiple areas. Rather than summarizing a nominee's CV, nominations and letters of support should fill in the details about a nominee's contributions, detailing what was important or unique about the nominee's role in papers published, classes taught, or industry products developed.

Nominators and letter writers should help contextualize the nomination within the area of statistics, sector, and/or department. As statisticians, some quantifying is helpful. Strong nominations help the committee members understand how the nominee's portfolio compares to others in similar roles or at similar career stages. Communicating what makes this nominee particularly strong relative to their peers, with evidence from the file, is critical.

For instance, successful Fellow candidates often publish peer-reviewed books and papers. Providing information about the number and quality of the publications is useful. Beyond these initial

metrics, the committee wants to know what makes these publications important, including how the publications have contributed to statistical theory, practice, or substantive areas in ways that were not previously understood.

Impact can be demonstrated through measures of journal quality and citations, but also how the work has been translated by others into practice. Describing how others have used the information from the publications—including, for example, their translation into software development, industrial product development, data collection improvement, or policy development or implementation—is useful. Additionally, some candidates have successfully gained external funding support for their work. Providing context about the type of funding and its impact helps the committee understand the nomination more completely.

For those in the industry and government sectors, organizations and roles can vary widely. Successful nominations will provide context by clearly describing the candidate's role and organization, as well as demonstrating how their contributions made a significant and positive impact on the organization, customers, clients, or communities.

Teaching and mentoring have many manifestations. In an academic setting, when describing teaching and mentoring, contextualizing the type of classes—including how many classes, whether they are required at the undergraduate and graduate level, the size of the classes, and the importance of the classes in the curriculum—helps the committee understand the role the candidate plays. Explaining the candidate's contributions to the scholarship of teaching and learning are also seen as valuable. Teaching and mentoring don't have to take place in a formal classroom, however. When a nominee has mentored junior staff or students, both the number of staff and students mentored and the impact of the mentoring through student placement, staff or student career trajectories, and collaboration on publications can be helpful for the committee to understand a nominee's contributions.

Finally, professional service, particularly ASA service, is an important piece of the nomination. Successful nominees describe their service roles and contributions, as well as show a consistent record of participation in ASA activities.

It's Time to Get Started

Nominations must be submitted by March 1, 2026. It takes time to prepare a high-quality nomination, so now is the time to start. Questions can be emailed to Emily Fekete, ASA manager of volunteer engagement and chapter relations, at emily@amstat.org. ■

Kelly H. Zou Talks Real-World Evidence

Kelly Zou, president of the ASA's New York City Chapter, was a speaker at the 13th Annual IMPACCT Real-World Evidence Summit, October 27–29 in Boston, Massachusetts. Zou is chief executive officer and founder of A14Purpose. Her research interests include health care policy, big data, and outcomes research, and she has authored more than 160 professional articles and five books. This interview was conducted by members of the summit committee prior to the event.

Looking back over the last decade, what do you see as the most significant shift in how real-world evidence is generated, interpreted, or applied across the product lifecycle?

The 21st Century Cures Act, in which real-world evidence was defined, was introduced exactly a decade ago, in 2015, and became law on December 13, 2016. Subsequently, the US Food and Drug Administration defined both real-world data and RWE. Thus, it is the right time to reflect upon these 10 years on the progression of RWE.

RWE has undergone a transformative shift in its generation, interpretation, and application across the product lifecycle, driven by technological advancements, regulatory evolution, and growing demand for patient-centric data.

For example, in the context of health economics and outcomes research, RWE relies on retrospective claims and registry data. These days, since RWD is considered data relating to patient health status and/or

the delivery of health care routinely collected from a variety of sources, the types of data sources have become increasingly more diverse—high-volume sources such as electronic health records, wearable devices, mobile apps, and social media. This expansion enables near real-time data capture and longitudinal tracking of patient outcomes.

The interpretation of RWE has become more rigorous and standardized. Methodological frameworks such as propensity score matching and synthetic control arms help mitigate bias and confounding, improving the credibility of nonrandomized data. Regulatory bodies, including the FDA and European Medicines Agency, have issued guidance to ensure transparency and reproducibility in RWE studies, fostering greater trust in their findings.

The data lifecycle coincides with the biopharmaceutical product lifecycle from early development to post-market surveillance. In early phases, it informs trial design and feasibility. During regulatory review, it supplements clinical trial data, especially in rare diseases or underrepresented populations. Post-approval, RWE supports repurposing, label expansions, safety monitoring, and value-based reimbursement decisions. Payers and providers increasingly rely on RWE to assess effectiveness and safety to guide formulary inclusion. Finally, advanced data science and analytic capabilities—including artificial intelligence, machine learning, deep learning, natural language processing, and large language models—help extract meaningful insights from



Kelly Zou

complex data sets in a timely and comprehensive fashion.

Over time, RWE has evolved from being a valuable tool to being a strategic imperative to shape and reshape how stakeholders evaluate and optimize both novel and existing products.

Despite progress in data availability and analytical tools, what challenges in RWE generation or application persist, and why do you think they remain difficult to solve?

RWE is critical for decision-making, but there are several persistent challenges that hinder its optimal evidence generation to gain actionable insights.

The first challenge is data quality. RWE relies heavily on RWD from electronic medical records, claims, registries, and wearables. These sources often lack standardization, contain missing or inconsistent entries, and vary in granularity. Unlike randomized control trials, RWD isn't collected with research in mind, making it difficult to ensure validity and reproducibility. Recently, the EMA developed the data quality framework, along with several other frameworks like the ATRAcTR (Authentic Transparent Relevant Accurate

Track-Record) screening tool that my coauthor and I constructed to assess the potential for RWD and RWE for regulatory purposes.

The next bottleneck is bias and confounding. RWD is inherently prone to selection bias, confounding variables, and reverse causality. While statistical methods such as propensity score matching help, they can't fully replicate the rigor of randomized controlled trials. This limits the causal inferences that can be drawn from RWE.

The last obstacle is system interoperability and data privacy. Accessing comprehensive data from a variety of sources for patient journey mapping is technologically complicated, compounded by data privacy regulations—including the General Data Protection Regulation in the European Union and the Health Insurance Portability and Accountability Act in the US—fragmented health systems, data capture silos, and technologies for linkage. Integrating RWD across different platforms while maintaining patient confidentiality remains a hurdle.

Can you share an example in which real-world data meaningfully influenced a decision—whether clinical, commercial, or regulatory—in a project you've worked on?

When I was at Pfizer, I presented on behalf of the RWE collaborative team that used RWD to generate RWE to provide reference information to the Pharmaceuticals and Medical Devices Agency, the regulatory agency in Japan, for lorazepam IV in status epilepticus among infants aged 3+ months.

A small clinical trial was conducted with lorazepam IV in Japan for the indication of status

epilepticus, and the new drug application was approved in 2018. Unfortunately, the primary endpoint did not meet the prespecified target efficacy criteria, while the key secondary endpoint supported efficacy. The target number of nursing infants (3 months to < 1 year) was 3+ subjects, and only one patient was enrolled. The PMDA inquired about the use of lorazepam IV and diazepam IV outside of Japan to treat pediatric patients aged 3+ months using RWD. The RWE collaborative team demonstrated use of lorazepam IV for pediatric patients compared to diazepam IV among nursing infants outside Japan. This was a successful example of the use of RWE to support regulatory decision-making, and various assets may leverage this experience in future regulatory interactions.

Besides the above example in Japan, my recent co-edited and co-authored book, *Real-World Evidence in a Patient-Centric Digital Era*, reviewed key analytical practices and data science methods for generating RWE, with an emphasis on pharma. It covers bioethics, regulations, and compliance; highlights emerging trends; and offers best practice guidelines. There were several examples and software recommendations to support evidence-based decision-making and health care innovation around the world.

What developments in the RWE space are you most excited about, whether it's an emerging methodology, data source, or cross-functional mindset shift?

Complex data sources and holistic evidence generation continuously evolve, partly driven by technological advances and shifting regulatory

expectations. Three key trends I am excited about are as follows: AI-powered analytics; integrated evidence planning; and the use of unstructured data. These are reshaping how biopharmaceutical companies develop and evaluate therapies.

AI is revolutionizing RWE by enabling deeper, faster insights from complex data sets. AI/ML algorithms can identify patterns in patient outcomes, predict disease trajectories, and optimize designs and outcomes. AI also enhances pharmacovigilance by detecting safety signals.

Integrated evidence planning has become a cornerstone of modern drug development. Companies are increasingly combining data from randomized controlled trials, patient-reported outcomes, electronic health records, and claims databases to build a comprehensive evidence base. This approach supports regulatory submissions, informs payer negotiations, and accelerates market access. RWE can supplement traditional clinical trial data.

Unstructured data unlocks new and rich dimensions of patient insights and journeys. LLM and NLP tools extract valuable information from clinical notes, radiology reports, and patient-reported outcomes. Moreover, data from wearables, mobile apps, and social media provide real-time perspectives on treatment adherence and quality of life. By integrating structured and unstructured data, companies gain a richer understanding of therapeutic impact across diverse populations.

Alongside regulatory and payer advancements in big data and AI, these three trends are transforming RWE from a retrospective tool into a proactive driver of innovation, precision medicine, and regulatory success.

What are you most looking forward to at the 13th IMPACCT Real World Evidence Summit?

This will be the 13th IMPACCT RWE Summit and, as the co-chair once again, I welcome many returning and new speakers, panelists, discussants, and attendees. IMPACCT RWE, held in Boston annually, feels like stepping into the epicenter of innovation in end-to-end lifecycles of innovative products and solutions.

As someone deeply invested in advancing how we use data to improve patient outcomes, it will be a convergence of experts from leading biopharmaceutical and health tech companies who share cutting-edge strategies and use-case examples.

What excites me is the focus on integrating AI/ML, predictive modeling, and unstructured data into the product lifecycles and workflows. Studies and tools will be shared that allow the biopharmaceutical and health care industries to collaborate and generate insights, evaluate outcomes, and maximize values. These learning sessions can be both hands-on and forward-looking to help participants assess and refine their end-to-end evidence-generation strategies.

Furthermore, professional networking via speed networking is a wonderful feature. Connecting the dots to tackle challenges such as data quality, payer alignment, or cross-functional collaboration, just to emphasize a few, can spark new ideas for patient care. Last year, there was also an innovative hackathon to design RWE and digital health solutions for specific health care challenges globally.

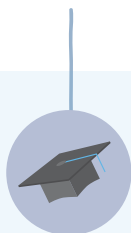
Overall, IMPACCT RWE 2025 can be essential for those of us who harness RWD and generate RWE to drive timely and impactful decisions through patient-centricity. ■



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How a Statistician Can Get a Job at a Tech Company



Mariana Borges is a content specialist with two MBAs, one in business intelligence and another in marketing and branding. She also holds a master's degree in language studies. Borges serves as head of international marketing at BIX Tech. Her passion for content is driven by the belief that the best marketing results come from questioning and reshaping established patterns.

The digital economy is built on data. Every recommendation engine, fraud detection system, and predictive model depends on statistical thinking. As businesses adopt AI and automation to guide strategy, statisticians are finding themselves at the center of a transformation that connects analytics, engineering, and artificial intelligence.

The Rise in Demand

The Bureau of Labor Statistics projects employment for statisticians will grow by more than 30% this decade, driven largely by the expansion of data science and big data analytics. Companies are no longer hiring statisticians solely to design experiments or test hypotheses. They need professionals who can interpret massive data sets, design robust models, and turn mathematical reasoning into scalable systems.

A United States Data Science Institute report estimates the US faces a shortfall of more than 250,000 data professionals capable of bridging statistical knowledge with engineering and AI implementation. That skills gap has turned statisticians into one of the most sought-after talent pools in the tech sector.

Understanding the Bridge

In the past, statistical work often centered on analysis and reporting. Today, those same skills power the infrastructure of machine learning and AI. The transition from traditional statistics to roles in data science, data engineering, or AI research is less about changing professions and more about expanding scope.

Data engineering focuses on building pipelines and ensuring data is reliable, structured, and available for analysis. Statisticians who understand data quality, ETL (extract, transform, load) workflows, and database architecture can contribute directly to these systems. A discussion among practitioners on Reddit's data engineering forum notes that companies increasingly prefer candidates with both mathematical literacy and pipeline experience.

Data science is where statistical modeling meets software. Statisticians trained in hypothesis testing, regression, and time series analysis already have the

foundation for machine learning. By adding proficiency in Python, SQL, and cloud tools, they can build models that move beyond experimentation into deployment. Guides on Indeed list data visualization, model validation, and deployment as essential technical competencies for this crossover.

Artificial intelligence represents the next layer. Every AI model, from neural networks to recommender systems, depends on statistical inference and probability theory. Statisticians who can translate those principles into algorithms gain immediate relevance in AI research and product development.

A Roadmap for Transition

The following steps outline how statisticians can position themselves for roles in tech companies.

1. **Strengthen your technical toolkit.** Programming fluency is non-negotiable. Python, R, and SQL remain the core languages, but familiarity with distributed frameworks such as Spark or cloud platforms like AWS and GCP adds significant value. Visualization tools such as Tableau or Plotly help communicate insights effectively. Mastering libraries like pandas, SciPy, and scikit-learn is essential for hands-on data work, according to Indeed.

2. **Develop an engineering mindset.** Even if you do not become a data engineer, understanding how data moves through systems is critical. Learn how data is ingested, transformed, and stored. Explore concepts such as data modeling, data warehousing, and API integration. Tech teams value statisticians who understand how their models will be consumed in production environments.

3. **Work on end-to-end projects.** Employers seek evidence that candidates can manage the full analytical lifecycle, from problem definition to deployment. Build projects that demonstrate this: predicting customer churn; analyzing retention; forecasting demand; or running A/B experiments. Open-source repositories and collaborative projects on GitHub showcase these abilities to potential employers.

4. Connect analysis to impact. Tech companies are results oriented. When describing your experience, emphasize measurable outcomes: improved model accuracy; cost reductions; or conversion increases. A statement such as “built a predictive model that improved forecast accuracy by 17%” is more persuasive than “performed predictive modeling.”

5. Communicate with business teams. Being able to explain complex results to non-technical stakeholders is often the deciding factor in hiring. According to Prospects, communication and visualization skills are among the top qualities sought in statisticians entering corporate environments.

How Companies Use Statisticians

Statistical expertise is essential for data productization, where predictive and prescriptive models are integrated into SaaS and enterprise platforms that drive automation and personalization. It also underpins strategic analytics, turning complex data sets into insights that inform executive decisions and growth strategies. Another key area is AI calibration, ensuring machine learning systems remain accurate, fair, and explainable as they evolve.

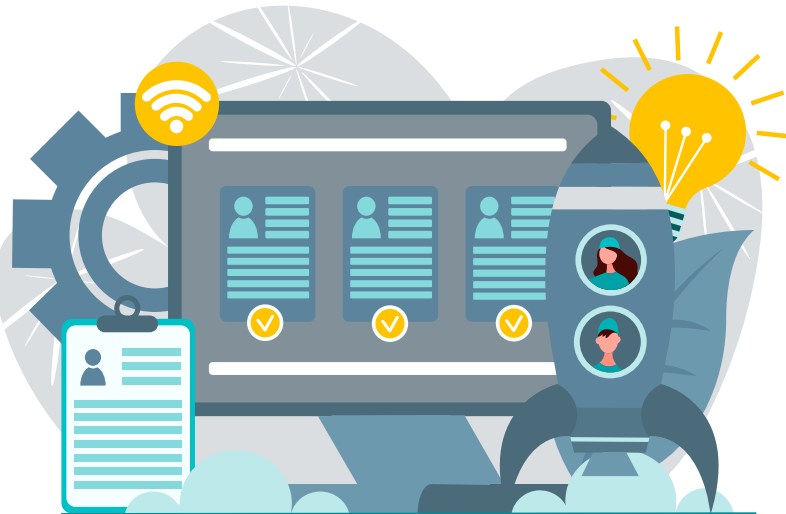
Their ability to combine quantitative precision with business context helps organizations optimize operations, identify market opportunities, and accelerate innovation.

These roles require more than technical proficiency. The capacity to code, document methodologies, and communicate insights across multidisciplinary teams often determines success more than title or degree.

Why Now Is the Right Time

The global demand for data expertise continues to rise as organizations move toward evidence-based decision-making. The BLS projects sustained growth in statistics-related roles, while industry surveys highlight that many AI initiatives fail because of weak data foundations. Statisticians can fill that gap.

The hybrid profile—someone who understands sampling error and neural networks, hypothesis testing, and data pipelines—is rare and increasingly valuable. As the line between analytics and engineering continues to blur, statisticians who expand their scope can move into leadership positions in data strategy, AI governance, or product analytics.



How Companies Like BIX Tech Use Statistical Talent

At BIX Tech, data is not a support function; it is the foundation of every strategic decision.

Data teams operate at the intersection of analytics, software development, and strategic innovation. Statisticians can play a central role in transforming data into scalable products and measurable business results. They collaborate with data engineers to ensure pipeline accuracy and efficiency, with AI specialists to fine-tune algorithms, and with software developers to embed intelligence directly into digital products.

Within BIX's ecosystem—spanning big data, AI, data engineering, analytics, business intelligence, and nearshore software development—statisticians contribute to every layer of value creation.

Key Takeaways

- Leverage your statistical depth as your differentiator.
- Acquire fluency in modern tools: Python; SQL; cloud; and machine learning frameworks.
- Understand the architecture of data systems, even if you do not build them.
- Demonstrate end-to-end project experience with measurable results.
- Communicate findings in a way that aligns with business goals.
- Keep learning. The field evolves as fast as the data it analyzes.

Statistical reasoning remains one of the most powerful tools in the modern tech ecosystem. For professionals ready to evolve their skill set, opportunities abound, from developing robust AI systems to shaping the analytics strategies that define the next generation of digital products. ■

STATS4GOOD

Data for Good: The Year in Review and



Challenge Winners



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 and director of Peace-Work, a data for good nongovernmental organization.

The year 2025 saw many changes and challenges for the scientific community in the United States—with wider effects around the world—resulting from the loss of federal funding, staffing reductions, and the elimination or reduction of critical data resources in all areas. Statisticians and data scientists have been at the eye of the storm, affected in multiple ways in all sectors. However, the analytic community has risen to the challenge and carried on our work of using statistical science for the benefit of all.

At the start of each year, I set out a challenge list of important areas for research and exploration in Data for Good. In the 11 months since writing the list for 2025, so much has changed, yet the challenges remain valid: preserving and protecting data sources and developing new ones; defending statisticians and data scientists and our work; and managing the explosive growth of AI in ways that do the most to help people, communities, and the world.

While the future remains uncertain, we can be confident that Data for Good advocates will continue to make science a powerful source of innovation and support for the benefit of all.

I am proud to honor the following people and programs meeting the challenges of today to lead us toward a brighter tomorrow.

Biostatistics Challenge: AI and Intelligent Systems in Biostatistics.

This year's award recognizes the AI4Casting Hub at the University of Guelph, led by

Monica Cojocar. The hub brings together an interdisciplinary team of collaborators developing AI applications in public health (e.g., a tool for tracking measles outbreaks). It's also noteworthy that the hub partners with industry, government agencies in Canada and the US, and independent research consortiums such as the Hubverse.

Environmental Advocacy: Analytics for Healthier Oceans.

I am pleased to recognize Healthy Rivers – Healthy Oceans, a program of the United Nations Department of Environmental Affairs. Part of the UN Global Water Partnership, HRHO supports many of the UN's sustainable development goals by taking a “source-to-sea” approach, focusing on the vital connection between the health of rivers to the oceans into which they flow. The program supports monitoring of fresh and marine ecosystems and the development of machine learning and AI tools to guide policy.

Human Rights Challenge: Statisticians at Risk.

When I wrote the 2025 Challenge List, I was thinking about problems we have seen in other countries. This year, however, has proven different, with statisticians throughout the United States federal data system facing mass firings and loss of funding. One outstanding defender of both science and scientists has been Friends of the Bureau of Labor Statistics, which has led the way with advocacy, information, and action to support statisticians at risk.



Getting Involved

Opportunities for this month include getting ready for 2026 ASA conferences. Joint Statistical Meetings topic-contributed session proposals are due by December 10 and contributed abstract submissions by February 2. Also, the Symposium on Data Science and Statistics, taking place April 28 – May 1, is accepting panel proposals through December 10 and lightning submissions through February 5. Both are great opportunities to share your work in Data for Good with a wider audience.

Organization and Infrastructure Challenge.

In the ASA President's Address at JSM, Ji-Hyun Lee raised concerns about the growing digital divide that threatens to create a world of haves and have nots in data, analytics, and AI. The Organization and Infrastructure Challenge called for the development of open-source tools to address this concern. From among many outstanding efforts, the Swiss AI Initiative with its open AI platform Apertus is the honoree this year.

Data Challenge.

This challenge focused on perhaps the most important issue in analytics today: the resiliency and hardening of critically important data sets. Responding to unprecedented attacks on all aspects of data infrastructure and usage, statisticians and data scientists have risen to the challenge

in many ways. Through it all, the Data Rescue Project has been at the center of the storm, working across disciplines and organizations to preserve the endangered federal data ecosystem. Launched in February of 2025, led by Lynda Kellam and Sebastian Majstorovic, and empowered by more than 500 volunteers, the Data Rescue Project is one of the most powerful and inspiring stories we have ever seen. It is an honor to recognize them as the 2025 Data for Good Challenge honoree for data.

This year has been a year of inflection, changing directions in the support, use, and future of science in all areas. The outstanding response of the analytic community has been a counter-inflection, changing the course of events toward a brighter future. Now, at the end of the year, I would like to thank the many people who make this monthly column possible and the readers for your support in our efforts. ■

Submit Proposal, Abstract to Be on JSM 2026 Program

Daniell Toth, Bureau of Labor Statistics



Visit the JSM 2026 website and submit your abstract today.
<https://tinyurl.com/y7msxbr5>



JSM 2026 will take place August 1–6 in Boston, Massachusetts. The theme for JSM 2026, selected by ASA President-Elect Jeri Mulrow, is “Communities in Action: Advancing Society.” Recently, the program committee finalized the invited program, choosing 181 of the top proposals out of more than 350 submitted. The selected sessions cover topics including the following:

- Innovations in Functional Data Methods for Large-Scale Biomedical and Wearable Data
- Statistical Modeling for Sports Performance and Injury Analytics
- Synthetic Data: Applications Across the Federal Statistical System
- Advancing Statistics Education Through AI: Research-Based Insights and Pedagogical Innovation
- Adaptive Borrowing as an Alternative to Randomized Clinical Trials
- Bridging Statistics and Modern AI: Foundations for Deep Learning and Generative Models
- Statistical and AI Innovations for Modeling Spatial and Perturbation Complexity in Human Cells
- Deep Learning for Statistical Inference on Spatial Data

There is still room on the program and opportunities to be actively involved in the meetings, including the following:

Topic-Contributed Sessions

These sessions are 110 minutes in length and consist of a collection of contributed talks and/or discussions that share a common topic. There must be five presentations of 20 minutes each, with five minutes at the end for questions, floor discussion, and any concluding remarks by the session chair. The deadline for submitting proposals is December 10.

Speed Sessions

Speed sessions allow for an electronic poster presentation that can include video, animation, interactive statistical graphics, and dashboards. A speed session consists of 20 oral presentations of approximately four minutes, with a five-minute break after the first set of 10 talks. These short oral presentations are followed by an e-poster session, which lasts 45 minutes.

Only for speed sessions will the regular 110-minute contributed poster sessions be divided into two sessions. There will be 45 minutes for a first group of 20 presenters, a 20-minute transition period, and then 45 minutes for the second group of 20 presenters. The program committee tries to cluster speed session posters by topic to attract a large and focused audience.

The following incentives are offered to presenters who participate in speed sessions:

- Electronic poster boards, so there are no additional costs associated with printing or transporting a poster
- The ability to present orally and through an electronic poster

When submitting a contributed abstract, simply select “Speed” as the subtype.

Poster Sessions

Poster sessions allow for face-to-face extended discussions with individuals or small groups. Advantages include direct feedback and the ability to display extensive graphical or tabular materials, possibly in addition to a handout. No audiovisual equipment or electricity is provided; therefore, laptops are discouraged at poster sessions.

Contributed Sessions

Nearly half of JSM sessions are contributed. Contributed paper sessions consist of seven papers with 15 minutes of presentation time for each, including the introduction of the speaker and questions. Contributed abstract submission closes February 2, 2026, and notifications about acceptance will be sent by early April 2026.

Session Chairs

Each JSM session requires a chair, who is responsible for contacting speakers with session information before JSM and introducing speakers and managing presentation time during the session. Chairing a session is a way for researchers who are new to the profession to build a professional network and get involved with JSM. To be a chair, volunteer to the program committee member of a section or society of interest.

Questions can be emailed to Daniell Toth at danielltoth@yahoo.com. ■



2026 Internships

The following companies are looking for interns in 2026. If you are interested in having new experiences, improving your programming skills, or learning from senior-level statisticians, apply for one of these opportunities.

To include an internship on our website, organizations should complete the form at <https://tinyurl.com/5hy3z483>. Interested students will send a letter or inquiry and résumé directly to the contact and location listed.

Astellas Pharma

Northbrook, Illinois; Remote

Positions: 3

Type of Student: PhD candidate in statistics or a related discipline

Deadline: January 31, 2026

Full-time internships are available in the summer for 10–12 weeks. To be considered, applicants must have completed at least two years of graduate-level coursework and be working on a dissertation toward a PhD in statistics, biostatistics, mathematics, epidemiology, or related discipline. The applicant must be legally authorized to work in the United States.

Contact: Send a CV, personal statement of interest, and letter of recommendation to *Biostat.Intern@Astellas.com*.

AstraZeneca

*Gaithersburg, MD
Waltham, MA*

Positions: 8-10

Type of Student: Graduate (PhD Preferred)

Deadline: January 2, 2026

As a statistics intern, you will work closely with an experienced statistician on one statistical topic from clinical trials, as well as have the opportunity to contribute to daily

tasks of active clinical trials.

Topics involve statistical work in early- and late-phase drug development with applications to oncology, cardiovascular, and respiratory areas. Interns will also work to develop a project based in literature that is practical and valuable to AstraZeneca

Candidates must have a good working knowledge of R and/or SAS. PhD preferred. Time- and self-management skills are valuable.

Contact: Sydney Grenier, sydney.grenier@astrazeneca.com

Biogen

Remote

Positions: Multiple

Type of Student: Graduate school pursuing PhD in statistics, biostatistics, or similar

Deadline: February 27, 2026

This application is for a 12-week internship role from June to August 2026. Summer interns will be required to read and synthesize key methodology papers, efficiently develop simulation code in R or another statistical package, and explore results in a systematic way.

Website: <https://tinyurl.com/38s59kw2>

Daiichi Sankyo

*Basking Ridge, New Jersey
(remote possible, but onsite recommended)*

Positions: Multiple

Type of Student: PhD (preferred) or MS candidates in statistics or biostatistics

Deadline: February 15, 2026

We are looking for multiple full-time statistics summer interns to join our organization for approximately 12 weeks. The ideal candidate will have a good knowledge of R/Python and have completed at least two years of graduate-level courses. There will be rolling interviews, so apply early.

Website: <https://forms.office.com/r/aZ3M4Bj61z>

Contact: Haiming Zhou, haiming.zhou@daiichisankyo.com

Eli Lilly and Company

Indianapolis, Indiana

Positions: Multiple

Type of Student: Master's degree in statistics/biostatistics or MSPH with concentration in statistics/biostatistics

Deadline: January 4, 2026

Lilly internships last for 12 continuous weeks beginning in May or June.

Desired Experience

- Proficient in statistical programming languages/software such as SAS, R, Spotfire, and WinBUG

MORE ONLINE

View the complete listing at <https://stattrak.amstat.org/2025/12/01/2026-internships>.



2026 Internships

- Interpersonal communication skills for effective customer consultation
- Teamwork and leadership skills
- Technical expertise and application with working knowledge of experimental design and statistical analysis
- Self-management skills with a focus on results for timely and accurate completion of competing deliverables
- Resource management skills
- Creativity and innovation
- Demonstrated problem-solving ability and critical thinking
- Business process expertise associated with critical activities (e.g., regulatory submissions)

Website: <https://tinyurl.com/yjhr4d2a>

Eli Lilly and Company

Indianapolis, Indiana

Positions: Multiple

Type of Student: PhD in statistics or biostatistics

Deadline: January 4, 2026

Internships start in either May or June and last 12 weeks. Applicants must be enrolled in a PhD program in statistics or biostatistics and have completed the third year of a PhD program by May 2026.

Desired Experience

- Proficient in statistical programming languages/software such as SAS, R, and Python
 - Interpersonal communication skills for effective customer consultation
 - Technical expertise and application with working knowledge of experimental design and statistical analysis
 - Creativity and innovation
 - Demonstrated problem-solving ability and strategic thinking
- Lilly is dedicated to helping individuals with disabilities to actively engage in the workforce, ensuring equal opportunities when vying for positions. If you require an accommodation to submit a résumé for a position at Lilly, please complete the accommodation request form.

Website: <https://tinyurl.com/mr2tjc6u>

Johnson & Johnson

Spring House, Pennsylvania; Titusville, New Jersey; Raritan, New Jersey; La Jolla, California

Positions: 8

Type of Student: PhD, master's, bachelor's

Deadline: February 16, 2026

Johnson & Johnson innovative medicine is recruiting for summer interns in its statistics and decision sciences organization.

Qualifications

- Candidates must be enrolled in an accredited college (not necessarily taking classes) and pursuing a degree in biostatistics, statistics, data science, or a related discipline.
- Students must be available for 10–12 weeks within May to August and have the ability to work full time.
- A minimum 3.0 GPA is preferred.

Website: www.careers.jnj.com/en/student-opportunities/internships

Memorial Sloan Kettering Cancer Center

New York, New York

Positions: 10

Type of Student: Undergraduate

Deadline: January 19, 2026

The QSURE internship program is designed for motivated undergraduate students with a passion for quantitative science. Applications for QSURE 2026 will close on January 19. Applications submitted by January 4 will be reviewed first. Applications submitted after that date will be reviewed starting January 19. Note: Applications are considered complete and will only be reviewed when we receive all accompanying letters.

Applicants must be authorized to work in the US.

Website: <https://tinyurl.com/4d3ef7ed>

Memorial Sloan Kettering Cancer Center

New York, New York

Positions: 6

Type of Student: Masters/PhD

Deadline: January 19, 2026

The summer 2026 program will run from May 18 to August 9. Eligible applicants must be the following:

- Currently matriculated in a master-level program (biostatistics, statistics, or related field)
- Trained in statistical theory, methods and programming, and related fields

Website: <https://tinyurl.com/49u72wxr>

Neurocrine Biosciences

San Diego, California

Positions: 2

Type of Student: PhD

Deadline: March 31, 2026

Be part of a dynamic statistics team at Neurocrine Biosciences, working at the intersection of clinical development and advanced quantitative methods. During this internship, you will do the following:

- Analyze clinical trial data and real-world evidence, helping to drive decisions in drug development
- Explore and evaluate statistical methodological topics
- Build analytical workflows for simulation, model fitting, data visualization, and reporting
- Present your work at the end of the internship

Contact: Xiaopeng Miao, xmiao@neurocrine.com

Novartis Pharmaceutical Corporation

*East Hanover, New Jersey;
Cambridge, Massachusetts*

Positions: Multiple

Type of Student: PhD candidates who will have completed at least 1.5 years of course work by June 2026

Deadline: January 25, 2026

The Novartis Analytics department has multiple internship positions available for approximately 12 weeks in 2026 (May/June to August; exact dates TBD).

Candidates must be enrolled in a graduate-level program working toward a PhD in biostatistics, statistics, pharmacometrics, data science, computer science,

or a related discipline and have completed at least 1.5 years of course work. Competitive candidates will have excellent oral and written communication skills and strong problem-solving skills. Working knowledge of R or SAS, as well as a strong background in NONMEM, Python, and/or other software/languages, is preferred.

To apply: Complete the application form at <https://forms.office.com/e/cjBRuVye9V> and email your CV to internships.analytics@novartis.com.

Website: View the impact the analytics team has on drug development at Novartis: <https://bit.ly/3UcEmbl>

Contact: internships.analytics@novartis.com

Pfizer

La Jolla, California; San Francisco, California; Boulder, Colorado; Groton, Connecticut; Collegeville, Pennsylvania; Cambridge, Massachusetts; New York, New York; Andover, Massachusetts; Pearl River, New York; Bothell, Washington

Positions: Multiple

Type of Student: Graduate students in statistics, biostatistics, or related fields

Deadline: January 30, 2026

The internship will consist of 12 weeks of full-time work at one of the Pfizer sites as early as May and ending as late as September. The intern's project will be biomedically oriented, with one-on-one supervision by one or multiple senior staff statisticians. There are also internship opportunities within the AI/ML track at Pfizer that statistics students are welcome to apply to.

Applicants must have completed at least one year of graduate study by June 2026 and must be legally allowed to work during the summer in the US.

Pfizer is an equal opportunity employer and will consider all qualified applicants with a commitment to diversity.

Apply: Submit your application via the online portal at <https://tinyurl.com/55489dp5>.

Regeneron Pharmaceuticals

Tarrytown, New York

Positions: 15

Type of Student:

Undergraduate, Graduate, PhD

Deadline: December 22, 2025

If you're a student pursuing a undergraduate or graduate degree in statistics, data/computer science, mathematics, life sciences, or a related field, you may be a fit for an internship in our biostatistics, data management, and statistical programming organizations.

To be considered for this opportunity, you must be enrolled in, or accepted to, an academic program pursuing an undergraduate or graduate degree and be returning to school the semester following the internship. A cumulative GPA of 3.0 is preferred. We want someone who is able to commit to 40 hours per week for a minimum of 10 weeks from the end of May/early June through August. Demonstrated leadership in areas such as campus activities, clubs, sports, current or previous work, or within the community is also preferred.

Contact: Chenguang Wang, chenguang.wang@regeneron.com

St. Jude Children's Research Hospital

Memphis, Tennessee

Positions: Multiple

Type of Student: Graduate

Deadline: January 9, 2026

Selected students will typically contribute to at least one of the following during their project: (1) real-world data analysis; (2) software development; and/or (3) methodology development.

Interested candidates must be enrolled in an accredited college/university graduate program. Students pursuing an undergraduate degree are not eligible for this year's program. Candidates are accepted from all majors; an interest in math, statistics, data science, or computer science is preferred. 3.0 GPA or above. GPA will be validated by transcripts and communication with the adviser.

Website: <https://tinyurl.com/2d7nxbkk>

Contact: Please send questions to BiostatIntern@STJUDE.ORG and follow procedures on the website for the application process.

StataCorp

College Station, Texas

Positions: 1–3

Type of Student: Graduate

Deadline: January 30, 2026

Job duties may include learning how to use and program in Stata, collaborating on projects suitable for publication in Stata Journal, creating support materials, and assisting in adding new statistical features to Stata, along with testing and documenting those features.

Website: www.stata.com/internships

Takeda Pharmaceuticals

Cambridge, Massachusetts;

Virtual; Hybrid

Positions: Multiple

Type of Student: PhD or master's candidates in biostatistics, statistics, or related disciplines

Deadline: February 28, 2026

During the 12-week summer internship program in the statistical and quantitative science department, interns will work closely with experienced industry statisticians/data scientists/programmers on a variety of topics related to design and analysis of clinical trials, pre-clinical research, and/or programming-related projects. Candidates must be enrolled in a PhD/MS biostatistics, statistics, or related program. For PhD-level projects, PhD candidates must have passed qualification exams, and three or more years of graduate study or post-baccalaureate training is preferred.

Apply: Email your résumé and cover letter to biostatistics.intern@takeda.com.

The Lubrizol Corporation

Wickliffe, Ohio

Positions: 4

Type of Student: MS/PhD

Deadline: January 31, 2026

Join our thriving team at Lubrizol as a data scientist/statistician intern (MS/PhD).

Skills That Make a Difference

- Enrolled in a master's or PhD program such as statistics, data science, machine learning, or chemical engineering
- Dual degree students (e.g., statistics/data science and chemistry, chemical engineering, computational chemistry) are encouraged to apply

- Significant coursework in predictive modeling, Bayesian approaches, and optimization; deep learning; forecasting; multivariate data analysis; and/or generative AI
- Able to efficiently manipulate, process, and analyze data of various modalities, including numerical, image, text, and beyond
- Advanced programming skills and exposure to data query languages
- Interest and experience in advanced statistical and machine learning methodology (PhD level)
- Curiosity, creativity, initiative, and autonomy

Website: <https://jobs.lubrizol.com/job-invite/99970>

Thomas Jefferson University Division of Biostatistics and Bioinformatics

Philadelphia, Pennsylvania

Positions: 3

Type of Student: undergraduate, master's

Deadline: February 28, 2026

Biostatistics interns will review statistical topics relevant to biomedical research; analyze real-world biomedical data and interpret the statistical results using SAS, R, and other languages; and communicate their work through written reports and oral presentations.

For undergraduate students (or those with an undergraduate degree), all degree programs are acceptable. Applicants should have strong mathematical and analytical skills and at least one course in computer/statistical programming.

For graduate students (or those holding a graduate degree), their degree should be in (bio)statistics, bioinformatics/computational biology, computer science, or a similar quantitative field.

Website: <https://tinyurl.com/59c2y629>

Contact: Tingting Zhan, tingting.zhan@jefferson.edu

Travelers Insurance Company

Hartford, Connecticut

Positions: 30

Type of Student: Master's or PhD

Deadline: January 30, 2026

The goal of the Data Science Leadership Development Program internship is to attract and develop self-motivated individuals who are highly skilled and passionate about a career in data science while providing a foundation for future success within the organization.

You will assist in designing and developing program methods, processes, and systems to consolidate and analyze unstructured and structured, diverse data sources to generate actionable insights and solutions for client services and product enhancement.

Website: <https://tinyurl.com/686xtz3f>

University of Texas Medical Branch Summer Institute in Biostatistics and Data Science

Galveston, Texas

Positions: 20

Type of Student:

Undergraduate student majoring in mathematics, statistics, computer science, biology, or other health science

Deadline: April 15, 2026

The Summer Institute in Biostatistics and Data Science is an intensive seven-week program (June 6 – July 25, 2026).

Students will earn college credit for a course in biostatistics, learn statistical software packages, attend seminars on biostatistical topics and research, participate in professional development workshops, and take part in a collaborative research project with other students mentored by faculty members in both basic science/clinical research and biostatistics. At the annual symposium, students will prepare and deliver a polished poster presentation that reports on their research.

Applicants must be US citizens or permanent residents.

Website: <https://tinyurl.com/5dtkdkb6>

Contact: Heidi Spratt, hespratt@utmb.edu; Monica Cline, mjcline@utmb.edu

Vertex Pharmaceuticals

Boston, Massachusetts

Positions: 3

Type of Student: PhD

Deadline: December 8

We expect to have two positions for biostatistics and one position for real-world statistics (RWS). Qualifications are the

same. RWS only differs in that they work with real-world data, while biostatistics works on clinical trials. Apply by date indicated to be guaranteed consideration. If positions are not yet filled, applications will be accepted until they are.

Website: www.vrtx.com/careers/career-growth-and-opportunities/internships

Contact: glen_laird@vrtx.com

WashU Medicine Institute for Informatics, Data Science, and Biostatistics

St. Louis, Missouri

Positions: 15

Type of Student:

Undergraduate and graduate students

Deadline: January 15, 2026

The program trains students in biomedical informatics and data science core competencies. Under the guidance of faculty mentors and research scientists, interns focus on supporting and elevating biomedical informatics through research translation and practice. I2DB selects students based on background, experience, skills, and interest in learning more about informatics.

The internship in biomedical informatics and data Science, better known as “BIDS@I2DB,” is a funded, 11-week internship opportunity that allows undergraduate and master's students from a wide variety of backgrounds to explore biomedical informatics.

Website: <https://tinyurl.com/bd42pb8t>

Contact: Giulina Sertl, gsertl@wustl.edu ■

MORE ONLINE
View the complete listing at <https://stattrak.amstat.org/2025/12/01/2026-internships>.



Nominations Sought for Rousseeuw Prize for Statistics

Mia Hubert and Stefan Van Aelst, Rousseeuw Prize Organizers

The Rousseeuw Prize for Statistics awards pioneering work in statistical methodology. The prize recognizes a statistical innovation—an outstanding contribution or tool that has had significant impact and found wide application in statistical practice.

The biennial Rousseeuw Prize for Statistics is awarded by the King Baudouin Foundation, a large public utility foundation in Belgium. The prize is named after its sponsor, the statistician Peter J. Rousseeuw, and focuses on the innovation, rather than on a single individual. One goal of awarding the people who created such an innovation is to promote awareness of the important role and intellectual content of statistics and its impact on human endeavors.

The first two prizes were awarded in 2022 and 2024, and the next will be awarded in 2026. The award amount is \$1 million, to be split between awardees if there are several. The award ceremony will be scheduled for the fall of 2026.

For the purpose of the prize, statistics is defined as “the science and technology of obtaining useful information from data, taking its variability into account.” Statistical work in this sense can be found under such flags as artificial intelligence, big data, biometrics, chemometrics, classification, data analysis, data mining,

data science, data visualization, design of experiments, econometrics, environmetrics, machine learning, multivariate analysis, pattern recognition, psychometrics, quality assurance, quantitative finance, sociometrics, statistical computing, statistical learning, technometrics, and time series analysis.

There is no time window for the work. Likewise, there is no age limit for awardees. The awardees must be living individuals, not organizations. If one of the main contributors is no longer alive, the surviving author(s) of the joint work can still be awarded. The deceased contributor(s) will, of course, be named explicitly.

The King Baudouin Foundation appoints an international jury consisting of 10 reputed statisticians. The jury will make a ranked shortlist of three innovations, in case some awardees do not accept the prize or are unwilling to be present at the award ceremony. To avoid undue pressure on the jury, its members are anonymous while they do their work.

The selection of the award aims for impartiality and balance. Members of the jury may not be related to the people on the shortlist by family ties, past or present life partnership, PhD adviser–student pairs, or being coauthors in the last 15 years. When selecting the award topic and awardees, the jury considers important

contributions and contributors irrespective of gender, race, sexual orientation, ideology, or religion.

The 2022 prize went to James Robins, Andrea Rotnitzky, Miguel Hernan, Thomas Richardson, and Eric Tchetgen Tchetgen for causal inference with applications in medicine and public health, a topic in biostatistics. The 2024 prize was awarded to Yoav Benjamini, Daniel Yekutieli, and Ruth Heller for pioneering work on the false discovery rate and methods that control it, a topic of general statistical methodology.

In 2026, the prize can be awarded in any of the other three subfields of statistics: (1) computational statistics and data science; (2) statistics in the physical sciences and industry; and (3) statistics in economics and humanities. There are no geographical restrictions on where the work was carried out.

Nominations will propose a particular innovation and a list of awardees. When making this list, consider gender diversity when applicable. Self-nomination is not permitted. The nominations, including letters of recommendation, are to be submitted by February 28, 2026, at www.rousseeuwprize.org, which contains all information about the prize and nomination procedures. ■

Submit a Nomination for 2027 Waksberg Award

The journal *Survey Methodology* has established an annual invited paper series in honor of the late Joseph Waksberg to recognize his outstanding contributions to survey statistics and methodology. Each year, a prominent survey statistician is chosen to write a paper that reviews the development and current state of an important topic in survey statistics and methodology. The paper reflects the mixture of theory and practice that characterized Waksberg's work.

The recipient of the Waksberg Award will receive an honorarium and give the 2027 Waksberg Invited Address at the Statistics Canada Symposium, expected to be held in the autumn of 2027, or at a webinar of the International Association of Survey Statisticians, should there be no symposium in 2027. The paper will be published in an upcoming issue of *Survey Methodology* (targeted for December 2027).

The author of the 2027 Waksberg paper will be selected by a four-person committee

appointed by *Survey Methodology* and the American Statistical Association. Nomination of individuals to be considered should be sent by email before February 15, 2026, to the chair of the committee, Paul Smith, at P.A.Smith@soton.ac.uk. Nominations should include a CV and nomination letter. Nominations will remain active for five years.

Previous Waksberg Award honorees and their invited papers can be found at www150.statcan.gc.ca/n1/pub/12-001-x/award-prix-eng.htm. ■

Share **YOUR** Views

Do you have an opinion you would like to share with colleagues? Send us a letter. Letters should be 1,200 or fewer words and must include your name.

Send your letter to the editor or any other news you would like to share to Megan Murphy at megan@amstat.org.



Deadlines for Select ASA National Awards and Special Lectureships

The ASA's extensive awards program recognizes statisticians who have made outstanding contributions to the association and statistical profession through research, teaching, consulting, and service.

ASA Awards

Student and Early Career Travel Fund

Deadline: At least three months prior to the start of the ASA conference for which the applicant is applying for support.
<https://tinyurl.com/5bjk99x9>

Deadline: March 1

ASA Pride Scholarship
<https://tinyurl.com/y76zz3re>

Bob Riffenburgh Award
<https://tinyurl.com/bdzfdxxf>

Dorothy Marie Lamb and Annette Lila Ryne Memorial Scholarship
<https://tinyurl.com/mu2swsvd>

Douglas A. Zahn Grant for Advancing Interpersonal Excellence
<https://tinyurl.com/4pj7muhs>

Edward C. Bryant Scholarship
<https://tinyurl.com/25ry52c7>

Excellence in Statistical Reporting Award
<https://tinyurl.com/29bwhhsm>

Fellows of the ASA
<https://tinyurl.com/t7dxvdxk>

Founders Award
<https://tinyurl.com/2cjhatcu>

Gertrude M. Cox Scholarship
<https://tinyurl.com/yc78b89y>

Harry V. Roberts Statistical Advocate of the Year Award
<https://tinyurl.com/4auejv8p>

John J. Bartko Scholarship Award
<https://tinyurl.com/46pzjkm7>

Karl E. Peace Award
<https://tinyurl.com/347596pd>

Katherine K. Wallman Award for Transformative Impact on Federal, State, or Local Statistics
<https://tinyurl.com/a4f5sm98>

Lester R. Curtin Award
<https://tinyurl.com/2ss8trhp>

Lingzi Lu Memorial Award
<https://tinyurl.com/d8wfsbbc>

Links Lecture Award
<https://tinyurl.com/2yb9nrdf>

Mentoring Award
<https://tinyurl.com/43djuk2j>

Norman Beery Memorial Scholarship
<https://tinyurl.com/mwfcemnh>

Outstanding Statistical Application Award
<https://tinyurl.com/52ct8wuu>

Samuel S. Wilks Memorial Award
<https://tinyurl.com/5n7emksy>

Statistical Partnerships Among Academe, Industry, and Government (SPAIG) Award
<https://tinyurl.com/y4ejwape>

Waller Awards
<https://tinyurl.com/4rjffzj2>

W. J. Dixon Award for Excellence in Statistical Consulting
<https://tinyurl.com/4mr5tpbn>

W. J. Youden Award in Interlaboratory Testing
<https://tinyurl.com/46vf3br9>

ASA Section Awards

Deadline: February 20

Statistics in Physical Engineering Sciences Award
<https://tinyurl.com/lyswszav3>

Deadline: March 15

Annie T. Randall Innovator Award
<https://tinyurl.com/2uy7askp>

Biopharmaceutical Section Scholarship Award
<https://tinyurl.com/53dnw4zj>

Deadline: April 15

Social Statistics Section Mid-Career Award
<https://tinyurl.com/5avjm48x>

Deadline: May 1

Government Statistics Section Wray Jackson Smith Scholarship
<https://tinyurl.com/pf9v47vv>

Deadline: September 15

Health Policy Statistics Section Achievement Awards
<https://tinyurl.com/3v94nrf9>



Visit the ASA website to view a comprehensive list of awards and scholarships.
<https://bit.ly/46X9sLm>



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ASA

Member News National Academy of Medicine

Stuart, Schisterman Elected to National Academy of Medicine

Members Elizabeth Stuart and Enrique Schisterman are among the 100 members elected to the National Academy of Medicine this year. Election to the Academy is considered one of the highest honors in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

Stuart was elected for being one of the nation's leading causal inference scholars, developing, communicating, and applying methods affecting health in a wide range of areas: mental health; substance abuse; gun violence; education; and environment. She has held numerous national leadership roles at the American Statistical Association, Patient-Centered Outcomes Research Institute, National Institutes of Health, and National Academies of Sciences, Engineering, and Medicine. Stuart is the Bloomberg Professor of American Health and Hurley-Dorrier Chair of the department of biostatistics in the Bloomberg School of Public Health at Johns Hopkins University in Baltimore.

Schisterman was elected for his work revolutionizing maternal and infant health by pioneering low-cost interventions—such as preconception aspirin and nutritional supplements—and developing novel epidemiology research methods. His work has significantly reduced maternal morbidity and mortality, shaped global guidelines, addressed health disparities, and uncovered long-term impacts, driving equitable reproductive health care worldwide. Schisterman is chair and Perelman Professor in Biostatistics, Epidemiology, and Informatics in the department of biostatistics, epidemiology, and informatics in the Perelman School of Medicine at the University of Pennsylvania, Philadelphia.

New members are elected by current members through a process that recognizes individuals who have made major contributions to the advancement of the medical sciences, health care, and public health.

Read the full list of newly elected members on the NAM website at <https://tinyurl.com/3ysddd2j>. ■

Obituary

Richard L. Dykstra

Kung-Sik Chan



Richard Dykstra

Professor emeritus Richard (Dick) Lynn Dykstra passed away peacefully on September 19, 2025. Dykstra was born on October 19, 1942, and grew up on a farm in Runnels, Iowa. As an athlete, he played football at Central College during his undergraduate studies, where he was inducted into Central College's Athletics Hall of Honor in 2003. He was selected as an All-State running back/defensive back three times and was a co-captain of the football team (that went on to capture the league title) in his senior year. He was also an all-league selection in baseball.

In 1964, Dykstra married his high school sweetheart Patricia. They raised four children and fostered many others, creating a home filled with love and laughter.

Dykstra earned his PhD in 1968 from the University of Iowa, where his doctoral work on characterizing a conditional expectation with respect to a sigma-lattice was advised by Tim Robertson and Jon Cryer. He then worked at the University of Missouri, Columbia, first as an assistant professor and then as a full professor in 1981. In 1982, he returned to the University of Iowa as a full professor in the

department of statistics and actuarial science and worked there until his retirement in 2012.

Dykstra made significant contributions to probability, mathematical statistics, non-parametric inference, multivariate theory, and constrained optimization. Of note are his deep and fundamental contributions to order-restricted inference. Many interesting problems in order-restricted inference can be posed as constrained optimization problems subject to convex cone constraints, and these problems often do not have closed-form solutions. Dykstra developed several useful and efficient algorithms for solving such constrained optimization problems.

Dykstra's algorithm, with variants for other settings including Hilbert space, is now a classic optimization technique. Dykstra invented the algorithm for solving the general problem of least squares regression subject to finitely many closed convex-cone constraints. His algorithm assumes the problem has a tractable solution if it were subject to only one (any one) of the convex-cone constraints. The solution is then simply obtained by projecting the response vector into the convex cone under consideration. The solution to the easier problem subject to one constraint can be expressed as the sum of the response plus an increment vector specific to that convex cone. Dykstra's algorithm alternately updates the increment vectors one constraint at a time until convergence.

He co-wrote a monograph on order-restricted inference and co-edited conference proceedings with Tim Robertson and Farroll T. Wright.

He and Robertson ran a well-attended seminar on order-restricted inference

almost every semester, which covered hot research topics at the time, until their retirement. They also organized at least three conferences on order-restricted inference. Because of Dykstra and Robertson and the strong faculty interest in order-restricted inference, the department enjoyed the presence of many visiting scholars as they came to Iowa City to collaborate with them.

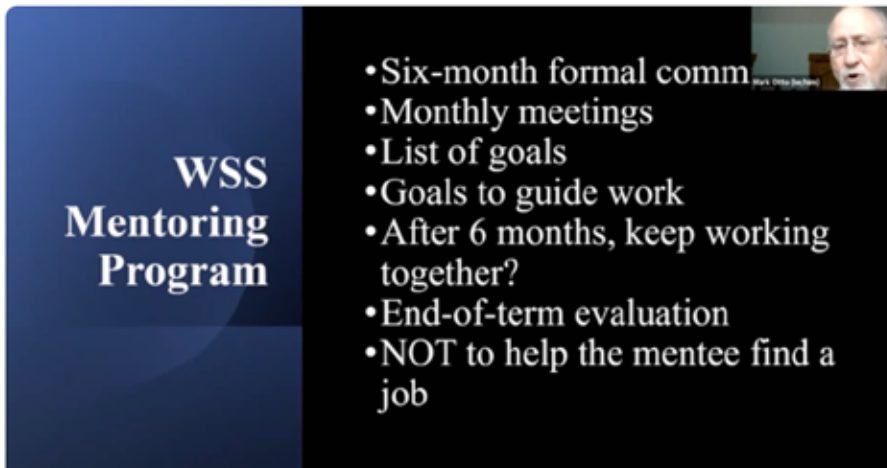
Dykstra was the department chair from 1989–1992. As department chair, he hired several faculty members (including Martin Appel, Kung-Sik Chan, Elias Shiu, Bruce Jones, Joseph Lang, and Jens Praestgaard), some of whom have played leadership roles in the department. His steady leadership and vision during those years cemented the strength of the department.

Dykstra was an outstanding teacher. Besides regular class meeting times, he held a weekly problem session for many of his classes in which he worked lots of problems for the students "and sometimes digress[ed] to statistical topics not covered in class," as he characterized them in his understated mannerism. The extra problem sessions were not required, but almost the entire class would show up. He undertook the extra work willingly because he loved teaching and wanted to help students realize "that knowledge and understanding usually only come with lots of hard work and perseverance."

Dykstra will be remembered as a kind person, generous with his time and freely sharing his insights with students and colleagues, and a penetrating yet humble thinker. His legacy will continue through the many lives he touched.

He is survived by his wife, Patricia Dykstra.

Mentoring Program Leaders Seek Mentors, Mentees



A screenshot from the previous mentoring workshop, which introduced the program and outlined its structure. Mark Otto is pictured in the corner.

The Washington Statistical Society and Government Statistics Section of the American Statistical Association are accepting applications for their joint mentoring program for the 2025–2026 term. The program matches statisticians at different career stages to promote professional growth, knowledge sharing, and stronger connections within the statistical community.

The WSS/GSS mentoring program is open to all section members, and anyone can join at any time. Participants are paired based on their career stage, statistical expertise, and goals. Over a minimum of six months, mentors and mentees meet at least monthly—virtually, by phone, or in person—to discuss topics such as career advancement, networking strategies, and professional development.

Program organizers encourage pairs to continue their mentoring relationships beyond the official program period if mutually beneficial.

Benefits for Mentors and Mentees

According to the ASA Committee on Applied Statisticians' do-it-yourself mentorship guide, mentoring offers valuable advantages for both sides.

For mentors: Opportunities include connecting with emerging professionals, refining

communication and leadership skills, and gaining new perspectives from early-career colleagues. Mentors also benefit from sharing their experiences, helping mentees identify opportunities, and learning about the evolving challenges in the field.

For mentees: Participants gain a sounding board for career questions, guidance in developing professional goals, and a supportive connection to the broader community of applied statisticians. Mentorship helps mentees boost confidence, clarify career paths, and build strong professional networks.

A previous mentoring workshop introduced the program and outlined its structure.

How to Apply

Interested participants can register and select their role as mentor, mentee, or both. After registration, mentors and mentees will receive introduction emails and optional materials to guide their discussions.

The formal mentoring period will run through late spring 2026. Participants will also complete a short evaluation survey to help improve future iterations of the program.

To learn more, visit the mentoring webpage at <https://tinyurl.com/mrx2xvu5>. ■

MORE ONLINE

To learn more, visit the mentoring webpage at <https://tinyurl.com/mrx2xvu5>.



sectionnews

SRMS Business Meeting Reflects on ‘The Way Forward’

Martha McRoy, NORC at the University of Chicago



The Survey Research Methods Section held its 2025 business meeting virtually on August 14, continuing its focus on the theme “The Way Forward.” Chair Eric Rancourt opened the meeting by emphasizing the enduring relevance of survey sampling and SRMS’s commitment to student engagement through webinars, articles, and awards.

Meeting highlights included recognizing ASA awardees and student honorees, recapping SRMS activities at the Joint Statistical Meetings in Nashville, and planning updates for JSM 2026 in Boston.

Despite lower attendance and fewer sessions at JSM this year, SRMS maintained strong student involvement through travel and paper awards, a student lunch, and a mixer.

The meeting also featured updates on upcoming webinars, continuing education proposals, and student-led initiatives such as career panels and LinkedIn outreach. Members were encouraged to get involved and begin thinking about nominations for the 2026 Outstanding Section Service Award.

The full meeting minutes are available on the SRMS website at <https://tinyurl.com/3nex5ey2>. ■

Q&P Executive Committee Reflects, Plans

The Quality and Productivity Section executive committee met on August 25 to review the accomplishments of 2025 and discuss areas of focus for 2026.

Q&P remains financially strong, successfully hosted short courses at the Quality and Productivity Research Conference and Joint Statistical Meetings, and co-organized a mixer with the Section on Physical and Engineering Sciences at JSM.

In 2026, Q&P aims to better create value for its members and continue strong early-career and student support through scholarships and grants, including two student grants for attending the Fall Technical Conference.

The section continues to work on a video series, History of Quality, which will be available for free digital download for educational purposes from the American Society for Quality’s website.

Additionally, Q&P is exploring new opportunities for collaboration with the Caucus of Industry Representatives. ■

HOW CAN WE HELP? We want to help you share your news with colleagues and showcase your latest successes. If you have any news you would like to share, email megan@amstat.org.

SPES Relaunches Marquardt Speakers Program

Jon Stallrich, HaiYing Wang, and Devon Lin

The Section on Physical and Engineering Sciences recently relaunched the Marquardt Memorial Industrial Speakers Program. Established in 1998 through a gift from Margaret Marquardt in memory of Donald W. Marquardt—an ASA Fellow and former ASA president—the program strengthens ties between industrial statisticians and academic training programs by bringing practitioners directly to campus. The program’s mission is to familiarize graduate students and advanced undergraduates with the role of statisticians in industry, create opportunities for students to learn about real-world statistical practice, and facilitate collaborations between industry statisticians and academic researchers.

Revitalized by Devon Lin, SPES chair and professor of statistics at Queen’s University, the first renewed event was hosted by the department of statistics at North Carolina State University on September 27. Jon Stallrich, associate professor and director of PhD programs in statistics at NCSU, organized the visit by Ryan Lekivetz of JMP Statistical Discovery. Lekivetz gave a seminar titled “Navigating the Complexities of Statistical Software Development,” which was attended by more than 50 students and faculty. His talk

addressed practical challenges that arise when building and deploying statistical software, including considerations around reproducibility and testing, working with nonstatistical collaborators, and the software-development lifecycle as it intersects with statistical reasoning.

After the talk, Lekivetz met with students and faculty. He held informal discussions before and after the seminar and joined a student lunch attended by more than 20 statistics graduate students. Students asked career-focused questions and gained insights into the skills and experiences valued in industry roles. Lekivetz also met with faculty over breakfast and held one-on-one meetings, providing opportunities to discuss potential collaborations and research directions with an industry practitioner.

Faculty and students reported that the visit successfully illuminated the day-to-day responsibilities of industrial statisticians, the skills most valued by employers, and practical pathways from graduate training to industry roles. Second-year PhD student Julia Jammalo said, “I really enjoyed hearing about Ryan’s experience as a statistician in industry. He emphasized that strong communication skills are just as important as technical abilities like coding. I also found it insightful

when he described the balance in user-driven R&D of introducing new ideas and features that exceed expectations, while meeting practical needs to make existing tools more usable. His perspective highlighted how industry statisticians blend technical expertise with collaboration and an understanding of user needs to make a meaningful impact.”

Reflecting on the day, Lekivetz said, “I really enjoyed visiting NC State as part of the SPES Marquardt program. It was a great opportunity to connect with students, share my experience working in industry, and show how it’s possible to stay engaged in research while pursuing a career outside of academia.”

Departments interested in hosting a Marquardt Memorial Industrial Speaker should check funding availability and begin planning by contacting Industrial Speakers Program Chair HaiYing Wang at haiying.wang@uconn.edu. Experienced industrial statisticians who would like to join the program’s roster of speakers are encouraged to reach out, as well. Talks that emphasize real-world applications, collaboration with nonstatisticians, and career advice for students are especially valuable. Visit the SPES website at <https://tinyurl.com/3msrdv98> for details. ■

MORE ONLINE
Learn more about the speakers program at <https://tinyurl.com/3msrdv98>.



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>.



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COLUMBIA UNIVERSITY DEPARTMENT OF STATISTICS Founder's Postdoctoral Fellowship in Statistics Starting Fall 2026

The Department of Statistics invites applications for the 2026 Founder's Postdoctoral Fellowship in Statistics at Columbia University. This fellowship seeks to bring exceptional scientists of outstanding potential to Columbia University. This two-year or 2.5 year fellowship is to begin between July and September 2026. There will be an opportunity to teach a course in the first year of the fellowship and candidates who elect this option will be given an additional semester of fellowship for a total of 2.5 years and those who do not elect this option will be given a fellowship for a total of 2 years. Applications in all areas of statistics and probability will be considered: the primary selection criterion will be the candidates' exceptional promise to produce high quality and visible research. Candidates must have a PhD in statistics or related field by the date of appointment.

The Fellows will hold the rank of postdoctoral research scientist in the Department of Statistics. Fellows will be expected to pursue a vigorous research agenda and to participate actively in the intellectual life of the Department. A competitive annual salary will be supplemented with additional funding for research and conference travel.

The Department currently consists of 38 faculty members and 60 PhD students. The department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. For further information about the department and our activities, centers, research areas, and curricular programs, please go to our web page at: <http://www.stat.columbia.edu>

Qualifications: PhD in statistics or related field by the date of appointment

Application Instructions: All applications must be submitted through Columbia's online Academic Search and Recruiting portal (ASR): <https://apply.interfolio.com/176616>. The application must include the following:

- A cover letter that explains your motivation for applying for this position, and indicates one or two potential mentors from the statistics faculty. Applicants should feel free to contact potential mentors at any time during the review process to discuss research interests, and are encouraged to mention such contact in their cover letter.
- A curriculum vitae (including a list of publications)
- A brief research statement that summarizes current research interests, past accomplishments, and future research goals. It should contain a short proposal for the research activities you plan to conduct while at Columbia.
- The names of 3 references—references will be asked to upload letters of recommendation in ASR.

Review of applications begins on January 15, 2026, and will continue until the position is filled.

Inquiries may be made to Dood Kalicharan at dk5@columbia.edu. • Salary Range or Pay Grade: \$90,000 – \$100,000

Pay Transparency Disclosure: The salary of the finalist selected for this role will be set based on a variety of factors, including but not limited to departmental budgets, qualifications, experience, education, licenses, specialty, and training. The above hiring range represents the University's good faith and reasonable estimate of the range of possible compensation at the time of posting.

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COLUMBIA UNIVERSITY DEPARTMENT OF STATISTICS

Assistant Professor (Limited Term) Positions

The Department of Statistics invites applications for a four-year term positions at the rank of Assistant Professor to begin July 1, 2026. The initial term of appointment is one academic year with the possibility of renewal for three years. A PhD in statistics or a related field is required by the date of appointment, as is a commitment to high quality research and teaching in statistics and/or probability. Candidates will be expected to sustain an active research and publication agenda and to teach in the departmental undergraduate and graduate programs. Candidates with expertise in machine learning, big data, mathematical finance and probability theory are particularly encouraged to apply.

The department expects to support successful candidates with a generous research allowance. The expected teaching load is three semester-long courses per year.

The department currently consists of 40 faculty members and 60 PhD students. The department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who, through their research, teaching and/or service will contribute to the excellence of the academic community. For further information about the department and our activities, centers, research areas, and curricular programs, please go to our web page at: <http://www.stat.columbia.edu>

Qualifications: PhD in statistics or a related field by the date of appointment is required, as is a commitment to high quality research and teaching in statistics and/or probability.

Application Instructions: All applications must be submitted through Columbia's online Academic Search and Recruiting portal (ASR) – <https://apply.interfolio.com/176648>.

The application must include a cover letter, curriculum vitae, teaching statement, research statement and the names of 3 references, who will be asked to upload letters of recommendation.

Inquiries may be made to Dood Kalicharan
dk@stat.columbia.edu

Review of applications begins on December 1, 2025, and will continue until the position is filled.

Salary Range or Pay Grade: \$95,000 – \$100,000 for a nine-month salary

Pay Transparency Disclosure: The salary of the finalist selected for this role will be set based on a variety of factors, including but not limited to departmental budgets, qualifications, experience, education, licenses, specialty, and training. The above hiring range represents the University's good faith and reasonable estimate of the range of possible compensation at the time of posting.

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New Jersey

The Department of Statistics of Rutgers University-New Brunswick School of Arts & Sciences seeks outstanding applicants for a tenure-track position of the rank of assistant professor to start in fall 2026. Applicants must have a PhD in statistics or related fields. Responsibilities of this position include: teaching and supervising both undergraduate and graduate students, and conducting original research in statistics, AI and data science broadly defined. Our search will prioritize AI/ML/Data Science with applications in scientific discovery, but we will consider excellent applications in all areas of statistics and data science. Pursuit of external research funding is expected. Interested individuals should apply online through <https://jobs.rutgers.edu/postings/262415> providing curriculum vitae, research statement, teaching statement, and arranging for submission and contact information of at least three confidential letters of reference. Review of applications started on November 25, 2025, and continues until the position is filled. Applicants are encouraged to submit their applications early. In addition to the department chair, our faculty members welcome the opportunities to assist with any inquiries about this position.

INTERNATIONAL Singapore

The Department of Statistics and Data Science at the National University of Singapore invites applications for tenure track and tenured positions in statistics, data science, and related areas, at the assistant professor, associate professor and professor levels. The anticipated start date of these positions is July 2026. Applicants must possess doctorates in their respective fields by the time of appointment. The university offers internationally competitive salaries, generous research funding, travel support, relocation assistance and other benefits. The department has nearly 40 faculty members and provides a stimulating research environment. At the assistant professor position, we are interested in applicants with strong research potential. At the associate and full professor positions, we are interested in applicants with a good track record in research, teaching and leadership. Submit a cover letter, curriculum vitae, research and teaching statements, and at least three letters of recommendation, uploaded by the letter writers, to mathjobs.org. Information about the university and the department can be found at www.nus.edu.sg and www.stat.nus.edu.sg. ■

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Visit the Leader HUB on the ASA Community at <https://community.amstat.org/asaleaderhub/home>.



Top Ten Signs You Are a **Houston Statistician**

Amstat News continues its entertaining offering by ASA Executive Director Ron Wasserstein, who delivers a special top 10—one that aired during a recent edition of *Practical Significance*. Earlier this year, Wasserstein attended the Conference of Texas Statisticians, where he presented the “Top Ten Signs You are a Texas Statistician.” He says, “At a recent Houston-area Chapter meeting, I was offered the opportunity to do a similar list, one that recognizes that Houstonians are a breed of their own.” Here are the “Top Ten Signs You Are a Houston Statistician.”



Wasserstein



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

10 When you talk about a flood of data, you aren't speaking figuratively.



09 You can talk fluently about oil production efficiency, economic indicators of the space program, and analysis of electronic health records, sometimes in the same sentence.

08 No matter what you are analyzing, you throw in humidity as a covariate.

07 You don't know how far away anything is, but you know how long it takes to get there, accounting for day of the week, time of day, and weather forecast.

06 Hurricanes are not considered outliers.



05 You can solve almost any numerical problem but can't figure out why the Katy Freeway still isn't wide enough.

04 Team meetings begin with “Houston, we have a problem” and end with “Houston, the analysis is complete.”

03 You model home run distances while sitting in the Crawford Boxes.

02 And speaking of baseball, as far as you are concerned, the Astros still play in the Juice Box.

#01 You can have a rational, data-based discussion about anything ... except BBQ.





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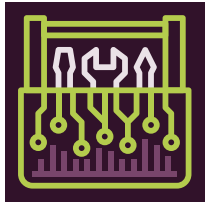
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**SYSTEMS AND
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APPLIED DATA SCIENCE**



**AI AND LLM
APPLICATIONS**



Key Dates for Attendees

Lightning Submissions:

January/February 2026

Registration & Housing Open:

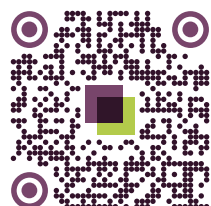
January 7

Early Registration Deadline:

March 25

Housing Deadline:

March 27



Learn more at
ww2.amstat.org/meetings/sdss/2026



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DEPARTMENT OF

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Founded in 2010 with Dr. Peihua Qiu as the founding chair, the Department of Biostatistics at the University of Florida is home to over 20 faculty, including the 120th and current President of ASA.

Our faculty experts are leaders in the areas of artificial intelligence, big data, cancer, genetics, infectious diseases, survival analysis, causal inference, statistical methods of health surveys, high-dimensional inference, longitudinal data analysis, clinical trials, disease screening and disease surveillance.

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