

## Greetings from our incoming 2025 HPSS Chair

Mousumi Banerjee [mousumib@umich.edu](mailto:mousumib@umich.edu)



Greetings from snowy Michigan as we approach the end of the year! I am delighted and honored to address you as the incoming HPSS Chair for 2025. It is a privilege to serve this vibrant community of statisticians, researchers, and health policy experts dedicated to advancing the role of statistics in shaping health policy and improving public health outcomes.

As I embark on this journey, I want to express my deepest gratitude to our outgoing Chair Layla Parast for her exemplary leadership. As Chair-elect for 2024, it was my privilege to observe and learn from Layla. Special thanks also to the 2024 HPSS Executive Committee for their hard work and commitment in navigating us through some rough waters. I look forward to working with the 2025 Executive Committee to support our members and ensure our section continues to thrive.

This is also the time to acknowledge our HPSS community at large for the richness and interconnected tapestry of shared experience you all bring to our initiatives. I hope to connect with many of you in January at ICHPS in San Diego and later in the year at JSM in Nashville. In addition to catching cutting-edge and insightful talks, poster sessions, and keynote presentations, these are excellent forums to network with other members and get involved in section activities.

I am filled with excitement and optimism about the opportunities that lie before us. My vision will center on: (i) enhancing member engagement and collaboration, (ii) amplifying the impact of our research and (iii) investing in the next generation of leaders. To achieve these goals, I welcome your thoughts, ideas, and active participation. This is your section, and your input is vital to our collective success. Together, we can continue to grow and sustain the vibrant intellectual community that defines HPSS. Together, we can push the boundaries of our discipline and make meaningful contributions that benefit society at large.

Warmest wishes for a healthier future in a changing world.  
Mousumi Banerjee

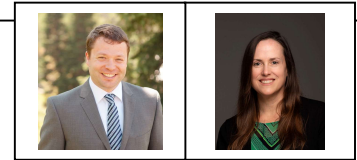
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### 2024 HPSS Executive Committee

**Chair:** Layla Parast  
**Chair-Elect:** Mousumi Banerjee  
**Past-Chair:** Lisa Lix  
**Secretary:** Kuan Liu  
**Treasurer:** Ted Lystig  
**Publications:** Robert Tumasian III & Beth Ann Griffin  
**Council of Sections Rep:** James O'Malley  
**Program Chair:** Jason Brinkley  
**Program Chair-Elect:** Fatema Shafie Khorassani  
**ICHPS Co-Chairs:** Lane Burgette & Beth Ann Griffin

## ICHPS 2025 January 6-8 San Diego, California



Co-Chairs: Lane Burgette ([burgette@rand.org](mailto:burgette@rand.org))  
Beth Ann Griffin ([bethg@rand.org](mailto:bethg@rand.org))

### “Statistical Innovation to Improve Health Equity”

We are very excited to see everyone in San Diego in the new year!!! The International Conference on Health Policy Statistics will take place from January 6-8, 2025 in sunny San Diego, California. ICHPS is a smaller meeting (typically 300-350 attendees) that provides an excellent opportunity to get to know a community of statisticians and other professionals working in health policy and health services research. Highlights to look forward to:

- ◆ **Keynote speaker** [Whitney Robinson](#) (“Lessons that I’ve learned doing research in an Underfunded and Marginalized -- but Crucial and Fascinating – field”) with discussant [Susan Paddock](#)
- ◆ **Keynote speaker** [Sherri Rose](#) (“Ethical Use of AI: Standards, Rigor and Reality”) with discussant [Yingying Fan](#)
- ◆ **Welcome** from [Madhumita \(Bonnie\) Ghosh Dastidar](#)
- ◆ **A “Meet the Editors” breakfast** with editors from applied and methodological journals: Elizabeth Stuart, Statistical Editor, JAMA Health Forum; Layla Parast, Statistical Editor, Medical Care; Nandita Mitra, Editor in Chief, Observational Studies, & Beth Ann Griffin, former Area Editor at Annals of Applied Statistics
- ◆ **A special townhall session, “Health Policy and Health Equity for Local Populations”**, with [Matthew Banegas](#), [Elena Martinez](#), and [Aladdin Shadyab](#) who are performing research at the intersection of health policy and health equity for residents in and around the San Diego community
- ◆ **A “speed networking” student happy hour** connecting students in small groups with leaders from HPSS working across academia, government, and industry lead by [Nick Seewald](#)
- ◆ Pre- and post-conference **workshops** by leading experts and educators
- ◆ An opportunity to honor HPSS **mid- and long-term career awardees**
- ◆ Chance to submit to forthcoming special issue in *Health Services and Outcomes Research Methodology* with co-editors [Donna Coffman](#) and [Recai Yucel](#)
- ◆ In addition to a full program of topical **invited and contributed session** and two **poster sessions** – unmissable opportunities to connect with colleagues and make new friends!

Many thanks to our amazing program committee – Denis Agniel, Donna Coffman, Naomi Friedman, Laura Hatfield, Staci Hepler, Don Jang, Theresa Kim, Sarah Lotspeich, Daniel Nevo, Arman Oganisian, Ronghui (Lily) Xu, Recai Yucel and Jingjing Zou; and their subcommittees. We are so grateful for all your efforts! THANK YOU!

[Book your hotel room](#) now and join us in San Diego in January to share best practices and community at ICHPS 2025! It’s shaping up to be a great event!

## **Congratulations to the 2025 ICHPS Student Paper Awardees!**

A big thank you to all the students who participated in the ICHPS Student Paper Competition this year, and to the many HPSS members who reviewed the submissions. The 2025 winners are listed below (in alphabetical order by last name):

**Martha J. Barnard**, University of Minnesota, “A Unified Framework for Causal Estimand Selection”

**Wenbo Fei**, Columbia University, “Learning Optimal Early Decision Treatment Rules with Multi-domain Intermediate Outcomes”

**Gary Hettinger**, University of Pennsylvania, “A Causal Framework for Evaluating Drivers of Policy Effect Heterogeneity Using Difference-in-Differences”

**Andy A. Shen**, University of California, Berkeley, “A Calibrated Sensitivity Analysis for Weighted Causal Decompositions”

**Peijin Wang**, Duke University, “Integrating Randomized Controlled Trial and External Control Data Using Balancing Weights: A Comparison of Estimands and Estimators”

## **Events! Meetings! Dates! Deadlines!**

**[ICHPS 2025](#)** – International Conference on Health Policy Statistics  
San Diego, CA. January 6-8, 2025.

**[ENAR 2025](#)** – International Biometric Society – Eastern North American Region  
New Orleans, LA. March 23-26, 2025.

**[DISS 2025](#)** – Duke-Industry Statistics Symposium: Durham, NC. April 9-11, 2025

**[SSC 2025](#)** – Statistical Society of Canada Meeting: Saskatoon, Saskatchewan, Canada.  
May 25-28, 2025

**[JSM 2025](#)** – Joint Statistical Meetings: Nashville, TN. August 2-7, 2025

**[RISW 2025](#)** – Regulatory-Industry Statistics Workshop, ASA Biopharmaceutical (BIOP) Section: Rockville, MD. September 24-26, 2025



## JSM 2024 – HPSS and MHS joint mixer





# Perspectives on Artificial Intelligence in Drug Policy

## An Interview with Dr. Satrajit Roychoudhury

By Robert A. Tumasian III ([ratumasian@gmail.com](mailto:ratumasian@gmail.com))



Artificial intelligence (AI) is increasingly influencing drug policy by providing innovative solutions to complex challenges. AI's capabilities in data analysis, predictive modeling, and pattern recognition can enable policymakers to better understand drug use trends, predict potential public health crises, and evaluate the effectiveness of existing regulations. Through AI-driven technologies, such as machine learning algorithms and natural language processing, governments and organizations can gain insights from vast datasets, improving decision-making in harm reduction, treatment strategies, and enforcement. As AI continues to evolve, its integration into drug policy has the potential to drive more effective, evidence-based approaches to addressing drug-related issues. To gain an industry perspective on this topic, we are thrilled to interview Dr. Satrajit Roychoudhury from Pfizer.

**Robert: Could you start off by telling us a little bit about yourself and your day-to-day work at Pfizer? What do you enjoy most about your job?**

**Satrajit:** My name is Satrajit Roychoudhury, and I lead the statistical research and innovation group within Global Biometrics and Data Management at Pfizer. We are a global team with members in North America, Europe, and Asia, and our team provides quantitative consulting and technical support for Pfizer's clinical and nonclinical projects. We work with teams across many therapeutic areas, on both clinical and nonclinical applications, and provide assistance with complex quantitative solutions, including innovative study design and analysis and the development of specialized software to support them. We also work with many external statistical collaborators.

**Robert: Does Pfizer offer any opportunities for students or recent graduates who are interested in the biopharmaceutical sector?**

**Satrajit:** Yes, Pfizer offers several opportunities for students and new graduates, such as summer internship and fellowship programs. We have also hired a number of fresh graduates in the recent past for statistician and data scientist positions.

**Robert: Could you briefly talk about how AI has come up throughout your work and the impacts that it has had?**

**Satrajit:** AI has significantly helped me in different areas including the automation of many repetitive work tasks, such as documentation and standard analyses. It has also helped me to facilitate predictive modeling to more efficiently identify patterns in clinical trial data, better predict drug safety and efficacy profiles, optimize study designs, and identify patient populations most likely to benefit from a new treatment. Overall, this has led to more efficient clinical trials, reduced costs, and accelerated the time to market for new drugs.

**Robert: What do you believe is the potential role of AI in the drug policy landscape?**

**Satrajit:** AI holds transformative potential in the drug policy landscape by enabling data-driven decision-making, improving enforcement, and enhancing public health strategies. Through advanced data analysis and predictive modeling, AI can identify trends in drug use and drug trafficking, and the effectiveness of interventions, helping policymakers to design and evaluate evidence-based strategies. However, these benefits come with a responsibility to address ethical considerations like privacy, bias, and transparency to ensure equitable and effective policy outcomes.

**Robert: In your opinion, what are some of the ethical challenges or obstacles to consider in applying AI to drug policy development?**

**Satrajit:** Applying AI to drug policy development presents several ethical challenges and obstacles that must be addressed to ensure equitable and responsible use. A key concern is privacy, as analyzing sensitive data related to substance use or health risks could expose individuals to stigma or unintended consequences. Ensuring transparency and accountability in AI decision-making is essential, as opaque systems may lead to mistrust or misuse in policy enforcement. Balancing innovation with these ethical considerations is crucial for ensuring that AI contributes positively to drug policy without undermining fairness or human rights.

**Robert: What types of data/metrics do you think are most critical for AI systems to analyze when it comes to shaping drug policy?**

**Satrajit:** When evaluating the performance of AI models in drug development, some crucial metrics include accuracy, sensitivity, and specificity, all of which directly impact the reliability of predictions and decisions throughout the drug discovery and development pipeline.

- **Accuracy:** This measures the overall correctness of an AI model's predictions, ensuring that most predictions, such as identifying viable drug candidates or ruling out ineffective ones, are correct. High accuracy is critical for minimizing wasted resources on false leads while maximizing the identification of promising compounds.
- **Sensitivity:** Also known as the true positive rate, sensitivity is essential in identifying all potential drug candidates that may have therapeutic effects. AI models with high sensitivity ensure comprehensive screening of possibilities, particularly in early-stage discovery.
- **Specificity:** Also known as the true negative rate, specificity is vital for correctly identifying compounds that are unlikely to be effective or could have toxic effects, thereby reducing false positives. This helps to prevent unnecessary investment in testing compounds that would ultimately fail, saving both time and resources.

Balancing these metrics is imperative, as overly high sensitivity might lower specificity, leading to a higher rate of false positives, and vice versa. Optimizing these metrics ensures that AI models can reliably and efficiently prioritize drug candidates, assess safety profiles, and support decision-making throughout the drug development process.

**Robert: What do you feel is the role of the statistician when it comes to integrating AI and drug policy?**

**Satrajit:** Statisticians play a critical role in integrating AI into drug policy by ensuring the reliability, validity, and ethical use of data-driven insights. Statistical expertise is essential in designing robust methodologies for data collection, which form the foundation for AI models. Statisticians guide the selection of appropriate statistical models and ensure that AI algorithms are grounded in sound statistical principles to avoid biases or misleading results. They also help to interpret AI-generated outputs, providing clarity and actionable recommendations for policymakers.

Moreover, statisticians assess the quality and representativeness of datasets, address issues like missing data and outliers, and evaluate model performance using metrics like accuracy, sensitivity, and specificity. They play a key role in ensuring transparency, by validating AI predictions and communicating their limitations and uncertainties to stakeholders. By bridging the gap between AI technology and practical policymaking, statisticians help to ensure that AI applications in drug policy are ethical, equitable, and evidence-based.



Statistics, Data Science, and AI Enriching Society

**JSM 2025**  
**August 2-7, 2025**  
**Nashville, Tennessee**



Program Chair: Fatema Shafie Khorassani ([fshafie@bu.edu](mailto:fshafie@bu.edu))

Program Chair-Elect: Zheyu Wang ([wangzy@jhu.edu](mailto:wangzy@jhu.edu))

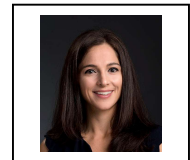
JSM 2025 will be held in Nashville, Tennessee. We are planning a full slate of activities, including invited sessions (see below), our famous HPSS mixer, student paper competition winners, contributed sessions, round tables and our speaker with lunch. Our three **HPSS-Sponsored Invited Sessions** are:

1. *Accessible Causal Inference*
2. *Building a Better Healthcare System from EHR Insights: Reflections on Enhancing Practice and Policy*
3. *AI for AD/ABDRD Care: Essentials to Improve Learning Health Systems Management of Aging People*

In the coming months be on the lookout for announcements and deadlines, and please start thinking about potential round tables which are fantastic opportunities for sharing your expertise and experience in a small group setting. Please email Fatema and Zheyu with your ideas. Thank you!

## Greetings from our outgoing 2024 HPSS Chair

Layla Parast ([parast@austin.utexas.edu](mailto:parast@austin.utexas.edu))



Greetings HPSS Members,

Serving as Chair this past year has been a truly rewarding experience. It has been a pleasure working with my colleagues and friends on the HPSS executive committee, and inspiring to see our section continue to thrive, with membership now exceeding 1,000 members! The HPSS highlight of the year for me was undoubtedly our joint JSM mixer where I had the opportunity to see familiar faces, meet new members, and recognize the accomplishments of our student paper competition winners and new ASA Fellows. It was wonderful to connect with so many of you in person in Portland. I am profoundly grateful to all the section officers for their hard work and dedication, as well as to each of you for your ongoing support of our community. I am particularly grateful to Beth Ann Griffin and Lane Burgette for their persistence and dedication to ICHPS planning; they have an amazing program planned for us. As I transition from this role, I look forward to seeing our momentum continue and hope to connect with many of you at ICHPS in San Diego!

Layla Parast  
2025 Past-Chair, HPSS