Larry Han

Contact Northeastern University

Department of Public Health & Health Sciences

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PRIMARY Assistant Professor of Public Health and Health Sciences

APPOINTMENTS Northeastern University, Aug 2023-Present

Postdoctoral Fellow in Health Care Policy Harvard Medical School, May 2023–Aug 2023

Advisor: Sharon-Lise Normand

SECONDARY Affiliate Investigator

APPOINTMENTS Vaccine and Infectious Disease Division at the Fred Hutch Cancer Center, Jan 2024-Present

EDUCATION Ph.D. in Biostatistics, Harvard University, May 2023

Advisors: Tianxi Cai, Lorenzo Trippa

A.M. in Biostatistics, Harvard University, May 2020

M.Phil. in Healthcare Operations, University of Cambridge, Jul 2018

Distinction

Advisor: Stefan Scholtes

M.A. in Global Affairs, Tsinghua University, Jul 2017

Outstanding Master's Thesis Award

Advisor: Michael Powers

B.S. in Public Health, Biostatistics, University of North Carolina at Chapel Hill, May 2016

Highest Honors, Highest Distinction Advisors: Michael Hudgens, Joseph Tucker

FUNDING NIH NIMH R01MH130213: Robust Learning Approaches for Assessing Effects and Effect Heterogeneity of Real World Antipsychotic Treatment Regimes in Elderly Persons with Schizophrenia

Role: Co-Investigator
Dates: 2024 - 2027
Amount: \$87K per year

NIH NHLBI R01HL162893: Modern Analytics to Improve Quality & Outcome Assessments Following Congenital Heart Surgery

Role: Co-Investigator
Dates: 2023 – 2026

• Amount: \$101K per year

Honors & Awards

2025 Richard E. Clark Memorial Paper, Society of Thoracic Surgeons Annual Meeting

2023 National Committee on U.S.-China Relations, Track II Dialogue on Healthcare, Rapporteur

2023 American Statistical Association Student Paper Award, Health Policy Statistics Section

2023 International Conference on Health Policy Statistics Student Paper Travel Award

2022 Western North American Region of the International Biometric Society Spring Meeting Best Oral Student Paper Presentation Award

2022 American Statistical Association Biopharmaceutical Section Scholarship Award

- 2022 American Statistical Association Young Investigator Award, Statistics in Epidemiology
- 2022 American Causal Inference Conference New Researcher Award
- 2022 Institute of Mathematical Statistics Hannan Graduate Student Travel Award
- 2022 Rose Fellowship, Assistance Publique-Hopitaux de Paris
- 2021 John Van Ryzin Award
- 2021 American Statistical Association Biopharmaceutical Regulatory-Industry Statistics Workshop Student Poster Award
- 2021 New England Statistics Symposium Student Poster Award
- 2021 Best Student Poster, Harvard T.H. Chan Poster Day
- 2019 25 Under 25 Leaders in US-China Relations, China Hands
- 2017 Gates Cambridge Scholarship
- 2016 Schwarzman Scholarship
- 2016 Phillips Ambassadors 10-Year Anniversary Award
- 2016 Order of the Golden Fleece
- 2016 Delta Omega Award of Excellence
- 2015 Goldwater Scholarship
- 2014 Phillips Ambassadorship
- 2012 Morehead-Cain Scholarship
- 2012 National Merit Scholarship

WORKING PAPERS, PRE-PRINTS & PUBLICATIONS

RESEARCH INTERESTS

Methodological: Causal inference; Conformal inference; Data integration; Federated learning; Sensitivity analysis; Surrogate markers; Survival analysis; Transfer learning

<u>Applications</u>: Cardiovascular disease; Hospital quality measurement; Infectious diseases (COVID-19, <u>HIV/STIs</u>, Influenza, Malaria)

WORKING PAPERS

- [4] Gao, C.; Gilbert, P.; **Han, L.** (2025+). "Bridging Fairness and Efficiency in Conformal Inference: A Surrogate-Assisted Group-Clustered Approach." In preparation.
- [3] Lise-Normand, S.; Zelevinsky, K.; **Han, L.** (2025+). "A Modern Approach to Profiling Healthcare Providers." *In preparation*.
- [2] Han, L.; Zhang, Y.; Lise-Normand, S.; Duan, R. (2025+). "Heterogeneous Causal Effect Estimation in Underrepresented Populations: Federated and Transfer Learning Approaches." In preparation.
- [1] Vasan, K.; Shekhtman, L.; Polgar, J.; **Han, L.**; Barabasi, A-L. (2025+). "Gender-based Segregation in Chess Generates Elite Performance." *In preparation*.

Under Review

- [9] Liu, Y; Levis, A.; Zhu, K.; Yang, S.; Gilbert, P.; **Han, L.** (2025+). "Targeted Data Fusion for Causal Survival Analysis Under Distribution Shift." *Arxiv*.
- [8] Liu, Y.; Zhu, K.; **Han, L.**; Yang, S. (2025+). COADVISE: Covariate Adjustment with Variable Selection and Missing Data Imputation in Randomized Controlled Trials. *Arxiv*.
- [7] Lise-Normand, S.; Zelevinsky, K.; **Han, L.**; Nathan, M.; Abing, H.; Mayer, J.; Pasquali, S. (2025+). "Improving Risk Adjustment in the Assessment of Congenital Heart Center Surgical Quality." *Under review*.
- [6] Nathan, M.*; **Han, L.***; Zelevinsky, K.; Abing, H.; Mayer, J.; Normand, S-L.; Pasquali, S. (2025+). "Understanding Mortality Following Congenital Heart Surgery: What Do Procedure-Specific Factors Add?" *Under review*.
 - *Co-first authors
- [5] Gao, C.; Gilbert, P.; **Han, L.** (2024+). "On the Role of Surrogates in Conformal Inference of Individual Causal Effects." *Arxiv*.

- [4] Rubinstein, M.; Agniel, D.; **Han, L.**; Horvitz-Lennon, M.; Normand, S-L. (2024+). "Bounding Causal Effects with an Unknown Mixture of Informative and Non-informative Censoring." *Arxiv*.
- [3] Liu, Y.; Dorantes-Gilardi, R.; **Han**, L.;, Barabasi, A-L. "The Uneven Impact of Venues on Creative Careers." (2024+). *Under review*.
- [2] Gilbert, P.; Peng, J.; **Han, L.**; et al. (2024+). "A Surrogate Endpoint Based Provisional Approval Causal Roadmap." *Arxiv*.
- Han, L.; Zhang, Y.; Nathan, M.; Mayer, J.; Pasquali, S.; Zelevinsky, K.; Duan, R. Lise-Normand, S. (2024+). "A Transfer Learning Causal Approach to Evaluate Racial/Ethnic and Geographic Variation in Outcomes Following Congenital Heart Surgery." Arxiv.

Publications

STATISTICS AND MACHINE LEARNING

- [46] Han, L.; Hou, J.; Cho, K.; Duan, R.; Cai, T. (2025). "Federated Adaptive Causal Estimation (FACE) of Target Treatment Effects." Journal of the American Statistical Association (JASA), accepted.
 - 2022 American Statistical Association Young Investigator Award, Section on Statistics in Epidemiology
- [45] Guo, Z.; Li, X; Han, L.; Cai, T. (2025). "Robust Inference for Federated Meta-Learning." Journal of the American Statistical Association (JASA), accepted.
- [44] **Han, L.** (2024). "Truncated, Not Forgotten Handling Left Truncation in Time-to-Event Studies." NEJM Evidence.
- [43] Liu, Y.; Levis, A; Lise-Normand, S.; **Han, L.** (2024). "Multi-Source Conformal Inference under Distribution Shift." *Proceedings of the 41st International Conference on Machine Learning (ICML)*.
- [42] Han, L.; Li, Y.; Niknam, B.; Zubizarreta, J. (2024). "Privacy-Preserving, Communication-Efficient, and Target-Flexible Causal Inference for Hospital Quality Measurement." Annals of Applied Statistics.
 - 2023 American Statistical Association Student Paper Award, Health Policy Statistics Section
 - 2022 Western North American Region of the International Biometric Society Spring Meeting Best Oral Student Paper Presentation Award
- [41] **Han, L.**; Zhu, S.; Zubizarreta, J. (2024). "Multiply Robust Federated Estimation of Targeted Average Treatment Effects." *Advances in Neural Information Processing Systems (NeurIPS)*.
 - Featured article in the 2024 American Medical Informatics Association Informatics Summit "AI and Data Science Year in Review".
- [40] **Han, L.**; Arfe, A.; Trippa, L. (2024). "Sensitivity Analyses of Clinical Trial Designs: Selecting Scenarios and Summarizing Operating Characteristics." *The American Statistician*.
 - 2021 New England Statistics Symposium Student Poster Award
- [39] **Han, L.** (2023). "Breaking Free from the Hazard Ratio: Embracing the Restricted Mean Survival Time in Clinical Trials." *NEJM Evidence*.
- [38] **Han, L.;** Wang, X.; Cai, T. (2022). "Identifying Surrogate Markers in Real-World Comparative Effectiveness Research." *Statistics in Medicine*.
 - 2021 John Van Ryzin Award
- [37] Wang, X.; Parast, L.; **Han, L.**; Tian, L; Cai, T. (2022). "Robust Approach to Combining Multiple Markers to Improve Surrogacy." *Biometrics*.

HEALTH

- [36] Bather, J.; **Han, L.**; Bennett, A.; Elliott, L.; Goodman, M. (2024). "Detecting Univariate, Bivariate, and Overall Effects of Drug Mixtures Using Bayesian Kernel Machine Regression." *The American Journal of Drug and Alcohol Abuse*.
- [35] Neuraz, A.; Lerner, I.; Birot, O.; Arias, C.; Han, L.; Bonzel, C-L.; Cai, T.; Hyunh, K.; Coulet, A. (2024). "TAXN: Translate Align Extract Normalize, a Multilingual Extraction Tool for Clinical Texts." MEDINFO.
- [34] Sperotto, F.; Gutierrez-Sacristan, A.; Makwana, S.; ... 4CE (Han, L.) (2023). "Clinical Phenotypes and Outcomes in Children with Multisystem Inflammatory Syndrome Across SARS-CoV-2 Variant Eras: a Multinational Study from the 4CE Consortium." eClinicalMedicine.
- [33] Dagliati, A.; Strasser, Z.; Abad, Z.; ... 4CE (Han, L.) (2023). "Characterization of long COVID temporal sub-phenotypes by distributed representation learning from electronic health record data: a cohort study." eClinicalMedicine.
- [32] Zhang, H.; Honerlaw, J.; Maripuri, M.; ... 4CE ((Han, L.) (2023). "Potential pitfalls in the use of real-world data for studying long COVID." *Nature Medicine*.
- [31] Day, S.; Hlatshwako, T.G.; Lloyd, A.; Han, L.; Tang, W.; Bayus, B.; Tucker, J.D. (2022). "Evaluating and Volunteering for Crowdsourced Interventions: Cross-Sectional Data on COVID-19 Safety from a University Survey." PLOS One.
- [30] Weber, G.; Hong, C.; Xia, Z; ... 4CE (Han, L.); Kohane, I.; Cai, T.; Brat, G. (2022). "International Comparisons of Laboratory Values from the 4CE Collaborative to Predict COVID-19 Mortality." NPJ Digital Medicine.
- [29] **Han, L.**; Tang, W.; Tiarney, R.; et al. (2021). "Joint International Consensus Statement on Crowdsourcing Challenge Contests in Health and Medicine: Results of a Modified Delphi Process." *BMJ Open*.
- [28] Nauffal, V.; Marstrand, P.; Han, L.; et al. (2021). "Worldwide Differences in Primary Prevention Implantable Cardioverter Defibrillator Utilization and Outcomes in Hypertrophic Cardiomyopathy." European Heart Journal.
- [27] Day, S.; Li, C.; Hlatshwako, T.; Abu-Hijleh, F.; Han, L.; Deitelzweig, C.; Bayus, B.; Ramaswamy, R.; Tang, W.; Tucker J. (2021). "Assessment of a Crowdsourcing Open Call for Approaches to University Community Engagement and Strategic Planning During COVID-19." JAMA Network Open.
- [26] Wang, C.*; Han, L.*; Stein, G.; et al. (2020). "Crowdsourcing in Health and Medical Research: A Systematic Review." Infectious Diseases of Poverty. *Co-first authors
- [25] Sidhu, K.; **Han, L.**; Picard, K.; et al. (2020). "Ventricular Tachycardia in Cardiolaminopathy: Characteristics and Considerations for Device Programming." *Heart Rhythm*.
- [24] Marston, N.; Han, L.; Olivotto, I.; et al. (2020). "Clinical Characteristics and Cardiovascular Outcomes in Childhood-Onset Hypertrophic Cardiomyopathy Compared with Adult-Onset Disease." European Heart Journal.
- [23] Marstrand, P.; **Han, L.**; Day, S.; et al. (2020). "Hypertrophic Cardiomyopathy with Left Ventricular Systolic Dysfunction: Insights from the SHaRe Registry." *Circulation*.
- [22] McCoy, T.; Han, L.; Pellegrini, A.; et al. (2020). "Stratifying Risk for Dementia Onset Using Large-Scale Electronic Health Record Data: A Retrospective Cohort Study." Alzheimer's & Dementia: The Journal of the Alzheimer's Association.

• Featured article

- [21] Lakdawala, N.; Olivotto, I.; Day, S.; **Han, L.**; et al. (2020). "Associations Between Female Sex, Sarcomere Variants and Clinical Outcomes in Hypertrophic Cardiomyopathy." *Circulation: Genomic and Precision Medicine*.
- [20] Halpaap, B.; Tucker, J.; Mathanga, D.; Juban, N.; Awor, P.; Saravia, N.; **Han, L**; et al. (2020). "Social Innovation in Global Health: Sparking Location Action." *Lancet Global Health*.

- [19] **Han, L.**; Fine, J.; Robinson, S.; Boyle, A.; Freeman, M.; Scholtes, S. (2019). "Is Seniority of Emergency Physician Associated with the Weekend Effect?" *Emergency Medicine Journal*.
 - [Invited commentary] from the President of the Royal College of Emergency Medicine
- [18] Eberly, L.; Day, S.; Ashley, E.; Jacoby D.; Jefferies; J.; Colan, S.; Rossano, J.; Semsarian, C.; Pereira, A.; Olivotto, I.; Ingles, J.; Seidman, C.; Channaoui, N.; Cirino, A.; **Han, L.;** Ho, C.; Lakdawala, N. (2019). "Association of Race with Disease Expression and Clinical Outcomes Among Patients with Hypertrophic Cardiomyopathy." *JAMA Cardiology*.
- [17] Liu, F.; Qin, Y.; Meng, S.; Zhang, W.; Tang, W.; Han, L.; et al. (2019). "HIV Self-Testing among MSM in China: A Qualitative Implementation Research Study." *Journal of Virus Eradication*.
- [16] Li, K.; Tang, W.; Wu, D.; Huang, W.; Feng, W.; Lee, A.; Feng, H.; Pan, S.; Han, L.; Mak, V.; Yang, L; Tucker, J. (2019). "Pay-it-forward Dual Gonorrhea/Chlamydia Test Uptake among MSM in China: A Pragmatic, Quasi-Experimental Study." The Lancet Infectious Diseases.
- [15] **Han, L.**; Chen, A.; Wei, S.; et al. (2018). "Crowdsourcing in Health & Health Research: A Practical Guide." World Health Organization.
- [14] Qin, Y.*; Han, L.*; Babbit, A.; et al. (2018). "Experiences Using and Organizing HIV Self-Testing." Journal of the International AIDS Society.
 *Co-first authors
- [13] **Han, L.**; Hudgens, M.; Emch, M.; et al. (2017). "RTS,S/AS01 Malaria Vaccine Efficacy is Not Modified by Seasonal Precipitation: Results from a Phase 3 Randomized Controlled Trial in Lilongwe, Malawi." *Scientific Reports*.
- [12] Zhang, T.*; Liu, C.*; **Han, L.*** et al. (2017). "Community Engagement in Sexual Health and Uptake of HIV Testing and Syphilis Testing Among MSM in China: a Cross-sectional Online Survey." *Journal of the International AIDS Society.***Co-first authors
- [11] SESH Study Group (Han, L.); Tucker, J. (2017). "Crowdsourcing to Promote HIV Testing Among MSM in China: Study Protocol for a Stepped Wedge Randomized Controlled Trial." *Trials*.
- [10] Wong, N.; Tang, W.; **Han, L.** et al. (2017). "MSM HIV Testing Following an Online Testing Intervention in China." *BMC Infectious Diseases*.
- [9] Tang, W.; Mao, J.; Tang, S.; Liu, C.; Mollan, K.; Cao, B.; Wong, T.; Zhang, Y.; Hudgens, M.; Qin, Y.; Han, L.; et al. (2017). "Disclosure of Sexual Orientation to Health Professionals in China: Results from an Online Cross-Sectional Study." Journal of the International AIDS Society.
- [8] Hu, J.; Gu, X.; Tao, X.; Qian, Y.; Babu, G.; Wang, G.; Liao, M.; Han, L.; Kang, D.; Tang, W. (2017). "Prevalence and Trends of HIV, Syphilis, and HCV in Migrant and Resident MSM in Shandong, China: Results from a Serial Cross-Sectional Study." PLoS One.
- [7] **Han, L.;** Wei, C.; Muessig, K.; et al. (2016). "HIV Test Uptake Among MSM in China: Implications for Enhanced HIV Test Promotion Campaigns Among Key Populations." *Global Public Health*.
- [6] Tang, W*.; Han, L*.; Best, J*.; et al. (2016). "Crowdsourcing HIV Test Promotion Videos: A Non-inferiority Randomized Controlled Trial in China." Clinical Infectious Diseases. *Co-first authors
- [5] Bien, C.; Best, J.; Muessig, K.; Wei, C.; Han, L.; Tucker, J. (2015). "Gay Apps for Seeking Sex Partners in China: Implications for MSM Sexual Health." AIDS and Behavior.
- [4] Best, J.; Tang, W.; Zhang, Y.; Han, L.; et al. (2015). "Sexual Behaviors and HIV/Syphilis Testing Among Transgender Individuals in China: Implications for Expanding HIV Testing Services." Sexually Transmitted Diseases.
- [3] **Han, L.;** Bien, C.; Wei, C.; et al. (2014). "HIV Self-Testing Among Online MSM in China: Implications for Expanding HIV Testing Among Key Populations." *Journal of Acquired Immune Deficiency Syndromes*.
- [2] Tucker, J.; Muessig K.; Cui, R.; Bien, C.; Lo, E.; Lee, R.; Wang, K.; **Han, L.**; et al. (2014). "Organizational Characteristics of HIV/Syphilis Testing Services for MSM in South China: a Social Entrepreneurship Analysis and Implications for Creating Sustainable Service Models." *BMC Infectious Diseases*.

[1] Wei, C.; Muessig, K.; Bien, C.; Yang, L.; Meng, R.; **Han, L.**; Yang, M.; Tucker, J. (2014). "Strategies for Promoting HIV Testing Uptake: Willingness to Receive Couple-Based and Collecting HIV Testing Among a Cross-Sectional Online Sample of MSM in China." Sexually Transmitted Infections.

TEACHING

Teaching Awards

2022-2023 Certificate of Distinction in Teaching, Harvard Faculty of Arts and Sciences 2021-2022 Certificate of Distinction in Teaching, Harvard T.H. Chan School of Public Health 2020-2021 Certificate of Distinction in Teaching, Harvard T.H. Chan School of Public Health

Primary Instructor

PHTH 6800: Causal Inference, Instructor, Spring 2025

- First course in causal inference at the Ph.D. level, emphasizing causal diagrams and counterfactual theory.

HSCI 5151: Methods for Observational Research II, Instructor, Spring 2024

 Teaching advanced methods in conducting observational research across pharmacoepidemiology, emphasizing approaches used by the OHDSI community. Focuses on using open-source software and open-science principles to conduct and interpret RWE studies.

Ph.D. Qualifying Exam Summer Course, Instructor, Summer 2021

- Teaching content review and problem-solving in probability and inference to Harvard Biostatistics Ph.D. students in preparation for the theory and methods portion of the qualifying exam
- Class size: 15

HNRS 396: Infectious Diseases, Instructor, Spring 2016

- One of eight undergraduates selected to build the curriculum and teach a course, titled "The Re-emergence of Infectious Diseases: From Cholera to Ebola and Beyond"
- Class size: 10

TEACHING FELLOW

STAT 286: Causal Inference with Applications, TF, Fall 2022

- Harvard Statistics Department's graduate-level course on causal inference, taught by Prof. Kosuke Imai
- TF rating: 4.7/5.0; class size: 50

STAT 293: Design of Experimental/Non-experimental Studies, TF. Spring 2022

- Harvard Statistics Department's graduate-level reading course on causal inference, focusing primarily on discussing new papers, taught by Prof. Jose Zubizarreta
- TF rating: 4.9/5.0; class size: 15

BST 223: Applied Survival Analysis, TF, Spring 2022

- Harvard Biostatistics Department's masters-level survival analysis course, taught by Prof. Sebastien Haneuse
- TF rating: 4.9/5.0; class size: 100

BST 222: Statistical Inference, Head TF, Fall 2019, 2020, 2021, 2022

- Head TF responsible for developing content and teaching labs for the masters' level statistical inference course, taught by Prof. Rui Duan (2021, 2022) and David Wypij (2019, 2020)
- TF ratings: 4.7/5.0 (2019); 4.8/5.0 (2020); 4.7/5.0 (2021); class size: 70

BST 238: Advanced Topics in Clinical Trials, Head TF, Spring 2021

- Designing content and teaching select lectures for advanced topics in clinical trials, e.g., surrogate endpoints; group sequential methods; meta-analyses, taught by Prof. David Wypij
- TF rating: 4.7/5.0; class size: 20

BST 214: Principles of Clinical Trials, Head TF, Spring 2020, 2021

- Revising content for a clinical trials course for clinicians and policymakers interested in the scientific, policy, and management aspects of clinical trials, taught by Prof. David Wypij
- TF rating: 4.8/5.0 (2020); 4.9/5.0 (2021); class size: 70

GLBL 394: International Relations, TA, Spring 2015, 2016

 One of 15 students who led a weekly seminar-style recitation section of 300 undergraduates on international relations (recitation size: 20)

Advising & Mentoring

SUPERVISION

Chenyin Gao (Co-mentor on postdoctoral projects)

- Harvard University, Department of Biostatistics, Postdoctoral fellow, Sep 2024-Present
- On the Role of Surrogates in Conformal Inference of Individual Causal Effects
- Bridging Fairness and Efficiency in Conformal Inference: A Surrogate-Assisted Group-Clustered Approach

Ke Zhu (Co-mentor on postdoctoral projects)

- North Carolina State University, Department of Statistics, Postdoctoral fellow, Dec 2024– Present
- Surrogate-Assisted Conformalized Causal Survival Analysis

Yi Liu (Co-advisor with Shu Yang)

- North Carolina State University, Department of Statistics, Ph.D. Candidate, Apr 2023-Present
- Multi-Source Conformal Inference Under Distribution Shift, ICML 2024
- Targeted Data Fusion for Causal Survival Analysis Under Distribution Shift

Aneeka Ratnayake (Co-mentor with Brianne Olivieri-Mui on K99/R00 postdoctoral application)

- Northeastern University, Roux Institute, Postdoctoral fellow, Jan 2025-Present
- Optimizing STI testing among older adults in the US

Kishore Vasan (Dissertation committee member, Advisor: Albert-Laszlo Barabasi)

- Northeastern University, Network Science Institute, Ph.D. Candidate, Nov 2023-Present
- Network Interference and Gender-Specific Initiatives for Career Success

Yixuan Liu (Dissertation committee member, Advisor: Albert-Laszlo Barabasi)

- Northeastern University, Network Science Institute, Ph.D. Candidate, Nov 2023-Present
- The Uneven Impact of Venues on Creative Careers

Victor Castro (Dissertation committee member, Advisor: Justin Manjourides)

- Northeastern University, Population Health Sciences, Ph.D. Candidate, Nov 2024-Present
- Integration of Patient-reported Symptoms in Real-World Data Phenotyping and Causal Research with Applications to Long COVID

Jeremy Rubin (Dissertation paper, Advisor: Jarcy Zee)

- University of Pennsylvania, Department of Biostatistics, Ph.D. Candidate, Oct 2023 Present
- Conformal Inference for Clustering Structured LASSO

Connor McLaughlin (Dissertation committee member, Advisor: Lili Su)

- Northeastern University, Department of Computer Engineering, Ph.D. Candidate, Jan 2024
 Present
- Federated Learning of Heterogeneous Treatment Effects

Zhu Lucy Shen (Independent study)

- Harvard University, Department of Biostatistics, Ph.D. Candidate, Mar 2022-Present
- Multiply Robust Federated Estimation of Targeted Average Treatment Affects, NeurIPS 2023

SERVICE

EXTERNAL PROFESSIONAL ACTIVITIES

New England Rare Disease Statistics (NERDS) Workshop Organizing Committee, 2025

 Organizing a conference gathering regulators, academics, and industry statisticians on rare diseases

Annual Symposium on Risks and Opportunities of AI in Pharmaceutical Medicine Steering Committee, 2024-2025

Organizing poster submissions and review

American Statistical Association Boston Pharmaceutical Statistics Symposium Scientific Committee, 2024

 Planning events and judging submissions for posters, lightning talks, and student awards subcommittee

American Causal Inference Conference, Abstract Reviewer, 2024

- Reviewing and scoring abstracts for the conference

American Statistical Association Statistics in Epidemiology Young Investigator Award, Paper Award Committee, 2023, 2024, 2025

 Reviewing and scoring papers for the American Statistical Association Young Investigator Award for the Joint Statistical Meetings

Data Science in Action: Machine Learning for Self-Driving Cars, 2023, 2024

 Mentored high school students from underrepresented backgrounds in statistics and machine learning

Morehead Cain Foundation, Selections Interviewer, 2018–Present

- Interviewing and evaluating high school applicants for the nation's first merit scholarship

Rhodes-Schwarzman, Orientation Facilitator, 2019–2022

- Facilitating the Leading Lives workshop for incoming and outgoing Schwarzman Scholars

Carolina Collective Initiative, Steering Committee, May-Aug 2020

- Organized an open call and judged ideas for the reopening of UNC campus during COVID-19

University Service

Northeastern Public Health and Health Sciences, Committee, Sep 2023–Present

- Planning curriculum and advising for students in the MS in Real World Evidence
- Forging collaborative research and teaching opportunities with Applied Psychology unit
- Governance, policies, and procedures committee

Harvard Biostatistics Student Committee, Co-President, Aug 2021-May 2023

- Organizing town hall meetings and small group discussions to represent Ph.D. student interests, including recruitment, qualifying exams, academics, student-life, and mental health

Harvard DEIB Committee, Representative, Aug 2020–May 2023

- Developed qualitative focus groups and quantitative surveys for Harvard Biostatistics Department efforts in Diversity, Equity, Inclusion, and Belonging (DEIB)
- Spearheading a new mentorship program connecting underrepresented minorities with mentors

Harvard Graduate Asian Baptist Student Koinonia, President, Aug 2019-May 2023

Organizing Bible study outreach and fellowship for Harvard and Boston-area graduate students

Harvard Graduate Student Council, Representative, Sep 2018-May 2021

- Evaluating funding proposals for GSAS conferences and activities

Cambridge Judge Teaching Committee, Representative, Jan-June 2018

 Assessed student and professor feedback for courses at Cambridge Judge Business School and developed a guidance for improving research programs

Journal of Schwarzman College, Co-Founder and Editor, Sep 2016–July 2017

 Established Schwarzman College's first journal aggregating global perspectives on China and developed a framework for a quarterly print publication

Tsinghua Graduate Student Union, Representative, Aug 2016–July 2017

- Translated over 300 museum exhibit labels for the Tsinghua University Art Museum
- English voice-over for Xinhua Net's explanatory video of China's Two Sessions conference

EDITORIAL SERVICE

Associate Editor

- Health Services and Outcomes Research Methodology, 2024-Present
- Journal of Causal Inference, 2023-Present

Reviewer

Statistics, Biostatistics & Machine Learning

Annals of Applied Statistics (AOAS) (3×), Biometrics (2×), Biostatistics, Electronic Journal of Statistics, IEEE Transactions on Information Forensics and Security, Journal of the American Statistical Association (JASA) (2×), Journal of Machine Learning Research (JMLR), Journal of Nonparametric Statistics, Journal of the Royal Statistical Society: Series A (JRSS-A), Research Synthesis Methods (4×), Statistical Science, Statistics in Medicine (SIM) (3×)

Public Health, Health Policy/Management & Clinical Medicine

AIDS Care, BMC Medical Research Methodology, BMC Public Health, BMJ Open, BMJ Quality & Safety, Clinical Trials, Global Public Health, Health Services Research, International Journal of Public Health, JAMA Network Open (2×), JAMA Oncology (3×), Management Science, Nature Communications (2×), Scientific Reports, Sexual Health, Sexually Transmitted Infections, Trials (2×)

Conferences, Seminars & Workshops

Organizer

- [3] International Conference on Artificial Intelligence in Medicine, Salt Lake City, Utah. (Scientific Program Committee, Jul 2024.) "AI for Reliable and Equitable Real-World Evidence Generation in Medicine."
- [2] Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China (Invited Session Organizer, Jul 2024.) "Statistical Learning Meets Causal Inference: Modern Theory and Methods."
- [1] International Conference on Health Policy Statistics, Scottsdale, AZ. (Invited Session Organizer, Jan 2023). "Statistical Advances and Policy Implications in Hospital Quality Measurement."

2024

- ICSDS, Nice, France, Dec 2024
- UPenn Center for Causal Inference Seminar, Nov 2024
- Forum on the Integration of Observational and Randomized Data, Baltimore, MD, Nov 2024
- Harvard TH Chan School of Public Health, Department of Biostatistics, Boston, MA, Oct 2024
- Harvard Medical School, Department of Health Care Policy, Boston, MA, Oct 2024
- New York University, Department of Biostatistics, New York, NY, Sep 2024
- JSM, Portland, OR, Aug 2024
- ICML, Vienna, Austria, Jul 2024
- WebENAR, Online, Jul 2024
- Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China, Jul 2024
- American Causal Inference Conference, Seattle, WA, May 2024
- NEU, Center for Signal Processing, Imaging, Reasoning, and Learning, Boston, MA, Mar 2024
- INRIA, Causal Inference and Missing Data Group, Virtual, Feb 2024

2023

- NeurIPS, New Orleans, LA, Dec 2023
- Peking University, National School of Development, Virtual, Dec 2023
- Cytel, Cambridge, MA, Dec 2023
- Forum on the Integration of Observational and Randomized Data, Washington, DC, Nov 2023
- INFORMS, Phoenix, AZ, Oct 2023
- ASA Boston Pharmaceutical Symposium, Boston, MA, Oct 2023
- Harvard University, IQSS, Applied Statistics Workshop, Cambridge, MA, Sep 2023
- RAND Center for Causal Inference Symposium, Virtual, Aug 2023
- JSM, Toronto, Canada, Aug 2023

- ASA Student Paper Award, Health Policy Statistics Section

- IMS New Researchers Conference, Toronto, Canada, Aug 2023
- ENAR Spring Meeting, Nashville, TN, Mar 2023
- Northeastern University, Health Sciences Seminar, Boston, MA, Mar 2023
- Boston University, Biostatistics Seminar, Boston, MA, Mar 2023
- Harvard University, National Studies on Air Pollution and Health Group, Cambridge, MA, Feb 2023
- UC-Berkeley / UCSF, Computational Precision Health Seminar, Berkeley, CA, Feb 2023
- Vanderbilt University Medical Center, Biostatistics Seminar, Nashville, TN, Feb 2023
- Harvard Medical School, Pharmacoepidemiology Seminar, Boston, MA, Feb 2023
- University of Washington, Biostatistics Seminar, Seattle, WA, Feb 2023
- UPenn, Biostatistics, Epidemiology, and Informatics Seminar, Philadelphia, PA, Jan 2023
- University of Virginia, Data Science Seminar, Charlottesville, VA, Jan 2023
- University of Michigan-Ann Arbor, Biostatistics Seminar, Ann Arbor, MI, Jan 2023

2022

- CMStatistics, London, UK, Dec 2022
- North Carolina State University, Statistics Seminar, Raleigh, NC, Dec 2022
- University of Utah, Biostatistics Seminar, Virtual, Dec 2022
- University of Cambridge Judge Business School, Healthcare Operations Seminar, Virtual, Nov 2022
- University of Paris, Bioinformatics Seminar, Paris, France, Nov 2022
- Banff Workshop, Oaxaca, Mexico, Aug 2022
- JSM, Washington, DC, Aug 2022
- IBC, Riga, Latvia, Jul 2022
- WNAR Spring Meeting, Virtual, Jul 2022

- Best Oral Student Paper Presentation Award

- HMS, Design of Experimental and Observational Studies Seminar, Boston, MA, Jun 2022
- ACIC, Berkeley, CA, May 2022
 - National Science Foundation New Researcher Award
- ENAR Spring Meeting, Houston, TX, Mar 2022
 - Institute of Mathematical Statistics Hannan Graduate Student Travel Award

2021

- NESS, Virtual, Oct 2021
 - Munich Re / HSB Best Poster Award
- ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Virtual, Sep 2021
 - Best Poster Award
- Johns Hopkins University, Causal Inference Working Group, Virtual, Sep 2021
- ENAR Spring Meeting, Virtual, Mar 2021
 - John Van Ryzin Award
- Harvard T.H. Chan School of Public Health, Poster Day, Virtual, Feb 2021
- Harvard-MIT Center for Regulatory Science, Doctoral Student Symposium, Virtual, Feb 2021

2020 and Earlier

- University of Michigan-Ann Arbor, Statistics for Individualized Healthcare Lab, Virtual, Dec 2020
- ASTMH Annual Meeting, National Harbor, MD, Nov 2019
- INFORMS Healthcare, Cambridge, MA, Jul 2019
- WHO Social Innovation in Health Initiative, Blantyre, Malawi, Jun 2018
- LSHTM, Centre for Evaluation Seminar Series, London, UK, May 2018
- Cambridge Judge Business School, Healthcare Ops Seminar, Cambridge, UK, Mar 2018
- Tsinghua University, Schwarzman Scholars Symposium, Beijing, China, Jun 2017
- IUSTI Asia-Pacific Conference, Okavama, Japan, Dec 2016
- UNC Project-Malawi, Lilongwe, Malawi, Mar 2016