

OFFICE	Northeastern University Department of Health Sciences Robinson Hall 316D 336 Huntington Avenue Boston, MA 02115
CONTACT	Email: lar.han@northeastern.edu Website: larrylehan.github.io Twitter: twitter.com/lhan320 Cell: (919) 272-1491
EDUCATION	Ph.D. in Biostatistics , <i>Harvard University</i> , May 2023 Advisors: Tianxi Cai, Lorenzo Trippa Committee: Rui Duan, Sebastian Schneeweiss A.M. in Biostatistics , <i>Harvard University</i> , May 2020 M.Phil. in Healthcare Operations , <i>University of Cambridge</i> , Jul 2018 <i>Distinction</i> Advisor: Stefan Scholtes M.A. in Global Affairs , <i>Tsinghua University</i> , Jul 2017 <i>Outstanding Master's Thesis Award</i> Advisor: Michael Powers B.S. in Public Health, Biostatistics , <i>University of North Carolina at Chapel Hill</i> , May 2016 <i>Highest Honors, Highest Distinction</i> Advisors: Michael Hudgens, Joseph Tucker
ACADEMIC APPOINTMENTS	Assistant Professor of Health Sciences , <i>Northeastern University</i> , Aug 2023–Present Impact Engine Fellow , <i>Real World Healthcare Navigator</i> , Aug 2023–Present Postdoctoral Fellow in Health Care Policy , <i>Harvard Medical School</i> , May 2023–Aug 2023 Advisor: Sharon-Lise Normand
FUNDING	National Heart, Lung, and Blood Institute R01HL162893 , May 2023–Present Sub-award, 30% effort Principal Investigators: Sharon-Lise Normand & Sara Pasquali Modern Analytics to Improve Quality & Outcome Assessments Following Congenital Heart Surgery World Health Organization Social Innovation in Health Research Grant , 2019–2022 Co-Principal Investigator, \$190,000 USD annually National Institutes of Health T32 COMET Training Grant , 2020–2022 Coordinator: Jeffrey Katz, Distinguished Chair in Orthopaedic Surgery, Harvard Medical School National Institutes of Health T32 Big Data to Knowledge Training Grant , 2018–2020 Coordinator: John Quackenbush, Department Chair, Harvard Biostatistics
HONORS & AWARDS	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 & PEER-REVIEWED PUBLICATIONS

RESEARCH INTERESTS

Methodological: Causal inference; Conformal inference; Data integration; Federated learning; High-dimensional statistics; Natural language processing; Semi-supervised learning; Sensitivity analysis; Surrogate markers; Survival analysis; Transfer learning

Applications: Clinical trials; Comparative effectiveness; Crowdsourcing; Electronic health records; Global health; Healthcare operations; Health policy and management; Infectious diseases; Pharmacoepidemiology; Rapid testing; Social innovation; Quality measurement

WORKING PAPERS

- [6] **Han, L.**; Liu, Y.; Levis, A. “Federated Conformal Inference under Covariate Shift.” *In preparation.*
- [5] **Han, L.**; Tang, W.; Tian, L.; Cai, T. “Multi-Institution Federated Learning of Differential COVID-19 Vaccine Efficacy.” *In preparation.*
- [4] **Han, L.**; Zhang, Y.; Duan, R. “Heterogeneous Causal Effect Estimation in Underrepresented Populations: Federated and Transfer Learning Approaches.” *In preparation.*
- [3] **Han, L.**; Hou, J.; Cai, T. “Semi-supervised Doubly Robust Estimation for Pragmatic Trial Design.” *In preparation.*
- [2] **Han, L.** and Cai, T. “Cross-Institutional EHR Data Harmonization using NLP: Prediction of Long-COVID Outcomes in French and US Hospitals.” *In preparation.*
- [1] Liu, M.; **Han, L.**; Xiong, X.; Cai, T.; Tian, L. “Federated Survival Analysis with High Dimensional and Heterogeneous Data.” *In preparation.*

PREPRINTS

- [2] Guo, Z.; Li, X; **Han, L.**; Cai, T. (2023+) “Robust Inference for Federated Meta-Learning.” *Arxiv*.
- Major revision at *Journal of the American Statistical Association*
- [1] **Han, L.**; Duan, R.; Cai, T. (2023+) “Federated Adaptive Causal Estimation (FACE) of Target Treatment Effects.” *Arxiv*.
- Major revision at *Journal of the American Statistical Association*
 - 2022 American Statistical Association Young Investigator Award, Section on Statistics in Epidemiology, Joint Statistical Meetings

PUBLICATIONS

- [37] **Han, L.**; Li, Y.; Niknam, B.; Zubizarreta, J. (2023+) “Privacy-Preserving, Communication-Efficient, and Target-Flexible Causal Inference for Hospital Quality Measurement.” *Accepted at 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
- [36] **Han, L.**; Zhu, S.; Zubizarreta, J. (2023). “Multiply Robust Federated Estimation of Targeted Average Treatment Effects.” *Accepted at NeurIPS*.
- [35] **Han, L.** (2023). “Breaking Free from the Hazard Ratio: Embracing the Restricted Mean Survival Time in Clinical Trials.” *NEJM Evidence*.
- [34] **Han, L.**; Arfe, A.; Trippa, L. (2023). “Sensitivity Analyses of Clinical Trial Designs: Selecting Scenarios and Summarizing Operating Characteristics.” *The American Statistician*.
- 2021 New England Statistics Symposium Student Poster Award
- [33] **Han, L.**; Wang, X.; Cai, T. (2022). “Identifying Surrogate Markers in Real-World Comparative Effectiveness Research.” *Statistics in Medicine*.
- 2021 John Van Ryzin Award
- [32] 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*.
- [31] 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*.
- [30] Wang, X.; Parast, L.; **Han, L.**; Tian, L; Cai, T. (2022). “Robust Approach to Combining Multiple Markers to Improve Surrogacy.” *Biometrics*.
- [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 Cardiomyopathy: 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*.

CONFERENCES, SEMINARS & WORKSHOPS

- SESSION ORGANIZATION [1] *International Conference on Health Policy Statistics, Scottsdale, AZ*. (Invited Session Organizer, Jan 2023). “Statistical Advances and Policy Implications in Hospital Quality Measurement.”
- SESSION CHAIR [3] *Joint Statistical Meetings, Toronto, Canada*. (Session Chair, Aug 2023). “Surrogate Markers: Identification, Use, and Challenges.” (Invited Session Organizer: Layla Parast)
- [2] *Joint Statistical Meetings, Washington, D.C*. (Session Chair, Aug 2022). “Matching Design and Sensitivity Analysis for Causal Inference.” (Contributed Session)
- [1] *Eastern North American Region of the International Biometric Society Spring Meeting, Virtual* (Session Chair, Mar 2021). “Medical Devices.” (Contributed Session)
- INVITED SEMINARS [23] *Applied Statistics Workshop, Harvard University, Institute for Quantitative Social Sciences, Cambridge, MA*. (Invited Speaker, Sep 2023). “Promises and Perils of Multiply Robust Federated and Transfer Learning to Estimate Causal Effects.”
- [22] *Northeastern University, Health Sciences Seminar, Boston, MA*. (Invited Speaker, Mar 2023). “The Blessings of Federation for Causal Inference.”
- [21] *Boston University, Biostatistics Seminar, Boston, MA*. (Invited Speaker, Mar 2023). “The Blessings of Federation for Causal Inference.”
- [20] *University of California–Berkeley / University of California–San Francisco, Computational Precision Health Seminar, Berkeley, CA*. (Invited Speaker, Feb 2023). “The Blessings of Federation for Causal Inference.”
- [19] *Vanderbilt University Medical Center, Biostatistics Seminar, Nashville, TN*. (Invited Speaker, Feb 2023). “The Blessings of Federation for Causal Inference.”
- [18] *Harvard Medical School, Pharmacoepidemiology Seminar, Boston, MA*. (Invited Speaker, Feb 2023). “The Blessings of Federation for Causal Inference.”
- [17] *University of Washington, Biostatistics Seminar, Seattle, WA*. (Invited Speaker, Feb 2023). “The Blessings of Federation for Causal Inference.”
- [16] *University of Pennsylvania, Biostatistics, Epidemiology, and Informatics Seminar, Philadelphia, PA*. (Invited Speaker, Jan 2023). “The Blessings of Federation for Causal Inference.”

-
- [15] *University of Virginia, Data Science Seminar, Charlottesville, VA.* (Invited Speaker, Jan 2023). “The Blessings of Federation for Causal Inference.”
 - [14] *University of Michigan–Ann Arbor, Biostatistics Seminar, Ann Arbor, MI.* (Invited Speaker, Jan 2023). “The Blessings of Federation for Causal Inference.”
 - [13] *North Carolina State University, Statistics Seminar, Raleigh, NC.* (Invited Speaker, Dec 2022). “The Blessings of Federation for Causal Inference.”
 - [12] *University of Cambridge Judge Business School, Healthcare Operations Seminar, Online.* (Invited Speaker, Nov 2022). “Data-adaptive Heterogeneous Causal Effect Estimation via Trees.”
 - [11] *University of Utah, Biostatistics Seminar, Online.* (Invited Speaker, Dec 2022). “The Blessings of Federation for Causal Inference.”
 - [10] *University of Paris, Bioinformatics Seminar, Paris, France.* (Invited Speaker, Nov 2022). “Cross-Institutional EHR Data Harmonization using NLP.”
 - [9] *Harvard Medical School, Design of Experimental and Observational Studies Seminar, Boston, MA.* (Invited Speaker, Jun 2022). “Privacy-Preserving and Communication-Efficient Causal Inference for Hospital Quality Measurement.”
 - [8] *Johns Hopkins Causal Inference Working Group, Virtual.* (Invited Speaker, Sep 2021). “Distributed Causal Inference.”
 - [7] *Harvard Chan Poster Day, Virtual* (Speaker, Feb 2021). “On the Evaluation of Surrogate Markers in Real World Data Settings.”
 - [6] *Harvard-MIT Center for Regulatory Science Doctoral Student Symposium, Virtual* (Speaker, Feb 2021). “Distributed Causal Learning.”
 - [5] *University of Michigan Statistics for Individualized Healthcare Lab, Virtual.* (Invited Speaker, Dec 2020). “Distributed Learning for Causal Modelling.”
 - [4] *London School of Hygiene & Tropical Medicine Centre for Evaluation Seminar Series, London, UK.* (Invited Speaker, May 2018). “Crowdsourcing in Health and Medicine: Developing a Practical Guide and Systematic Review.”
 - [3] *University of Cambridge Judge Business School, Healthcare Operations Seminar, Cambridge, UK.* (Invited Speaker, March 2018). “Surviving the Weekend Effect: a Competing Risks Analysis of Excess Weekend Mortality at Addenbrooke’s Hospital.”
 - [2] *Tsinghua University Schwarzman Scholars Symposium, Beijing, China.* (Invited Speaker, June 2017). “Human Survival.”
 - [1] *UNC Project-Malawi, Lilongwe, Malawi.* (Invited Speaker, Mar 2016). “Survival Analysis from a Phase 3 RCT: RTS,S/AS01 Malaria Vaccine Efficacy in Lilongwe, Malawi and its Interaction with Seasonal Precipitation.”

- CONFERENCE PRESENTATIONS
- [27] *Forum on the Integration of Observational and Randomized Data, Washington, D.C.* (Invited Speaker, Nov 2023). “Federated Transfer Learning and Applications in Data Integration for Real World Evidence.”
 - [26] *INFORMS, Phoenix, AZ.* (Community-Committee’s Choice Session, Oct 2023). “Federated Transfer Learning to Estimate the Quality of Congenital Heart Centers.”
 - [25] *Boston Pharmaceutical Symposium, Boston, MA.* (Invited Talk, Oct 2023). “Sensitivity Analysis of Clinical Trial Designs.”
 - [24] *RAND Center for Causal Inference Symposium, Online.* (Speaker, Aug 2023). “Multiply Robust Federated Estimation of Targeted Average Treatment Effects.”
 - [23] *Joint Statistical Meetings, Toronto, Canada.* (Invited Speaker, Aug 2023). “Federated Transfer Learning for Heterogeneous Causal Effects in Underrepresented Populations.”
 - [22] *Joint Statistical Meetings, Toronto, Canada.* (Invited Speaker, Aug 2023). “Privacy-Preserving and Communication-Efficient Hospital Quality Measurement.”

- **American Statistical Association Student Paper Award, Health Policy Statistics Section**

-
- [21] *Institute of Mathematical Statistics New Researchers Conference, Toronto, Canada.* (Speed Talk, Aug 2023). “Federated Transfer Learning for Heterogeneous Causal Effects in Underrepresented Populations.”
- [20] *MedInfo, Sydney, Australia.* (Co-author, Jul 2023). “TAXN: Translate Align Extract Normalize, a multilingual extraction tool for clinical texts.”
- [19] *Eastern North American Region of the International Biometric Society Spring Meeting, Nashville, TN.* (Oral, Mar 2023). “Federated and Transfer Learning Approaches to Causal Inference.”
- [18] *15th International Conference of the European Consortium for Informatics and Mathematics Working Group on Computational and Methodological Statistics, London, U.K.* (Invited Speaker, Dec 2022). “Heterogeneous Causal Effect Estimation: Federated and Transfer Learning Approaches.”
- [17] *Banff Workshop, Oaxaca, Mexico.* (Invited Speaker, Aug 2022). “Extensions to Real-World Data and Multiple Surrogate Markers.”
- [16] *Joint Statistical Meetings, Washington, D.C.* (Oral, Aug 2022). “Federated Adaptive Causal Estimation (FACE) of Target Treatment Effects.”
- **American Statistical Association Young Investigator Award, Section on Statistics in Epidemiology**
- [15] *31st International Biometric Conference, Riga, Latvia.* (Invited Speaker, Jul 2022). “Identification and Evaluation of Surrogate Markers.”
- [14] *Western North American Region of the International Biometric Society Spring Meeting, Virtual.* (Oral, Jun 2022). “Privacy-Preserving and Communication-Efficient Causal Inference for Hospital Quality Measurement.”
- **Best Oral Student Paper Presentation Award**
- [13] *American Causal Inference Conference, Berkeley, CA.* (Oral, May 2022). “Privacy-Preserving and Communication-Efficient Causal Inference for Hospital Quality Measurement.”
- **NSF New Researcher Award**
- [12] *Eastern North American Region of the International Biometric Society Spring Meeting, Houston, TX.* (Oral, Mar 2022). “Distributed Causal Inference.”
- **Institute of Mathematical Statistics Hannan Graduate Student Travel Award**
- [11] *New England Statistics Symposium, Virtual.* (Invited Speaker, Oct 2021). “Identifying Real-World Surrogate Markers for Replicating Clinical Trials.”
- [10] *New England Statistics Symposium, Virtual.* (Poster, Oct 2021). “Optimal Sensitivity Analysis for Clinical Trial Design.”
- **Munich Re / HSB Best Poster Award**
- [9] *American Statistical Association Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Virtual* (Poster, Sep 2021). “On the Evaluation of Surrogate Markers in Real World Data Settings.”
- **Best Poster Award**
- [8] *Eastern North American Region of the International Biometric Society Spring Meeting, Virtual* (Oral, Mar 2021). “On the Evaluation of Surrogate Markers in Real World Data Settings.”
- **John Van Ryzin Award**
- [7] *American Society of Tropical Medicine & Hygiene 68th Annual Meeting, National Harbor, Maryland.* (Invited Symposium Panelist, Nov 2019). “Social Innovation for Infectious Diseases of Poverty: Sparking Local Innovation.”
- [6] *INFORMS Healthcare: Transforming Health with Data, Mind, and Body, Cambridge, MA.* (Invited Panelist, July 2019). “Is Seniority of Emergency Physician Associated with the Weekend Mortality Effect?”

- [5] 12th *Program in Quantitative Genomics Conference on Biobanks: Study Design and Data Analysis*, Harvard Medical School, Boston, MA. (Poster, Nov 2018). “Excess Mortality Associated with Junior Doctor Treatment at the Weekend: An Analysis of Electronic Medical Records in the UK.”
- [4] 20th *International Union Against Sexually Transmitted Infections - Asia-Pacific Conference*, Okayama, Japan. (Oral, Dec 2016). “A Global Qualitative Systematic Review of HIV Self-testing.”
- [3] 65th *Annual American Society of Tropical Medicine & Hygiene Conference*, Atlanta, GA. (Poster, Nov 2016). “RTS,S Malaria Vaccine Efficacy Does Not Vary with Seasonal Precipitation: Results from a Phase 3 RCT in Lilongwe, Malawi.”
- [2] 21st *International AIDS Conference*, Durban, South Africa. (Poster, July 2016). “The Social Context of HIV Self-testing: A Global Qualitative Evidence Synthesis.”
- [1] *World Health Organization, Social Innovation in Health Initiative*, Blantyre, Malawi. (Oral, June 2018). “Co-Creating a Research Culture and Guide for Social Innovation.”

TEACHING

TEACHING AWARDS

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

INSTRUCTOR

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

INDEPENDENT
STUDY SUPERVISION**Zhu (Lucy) Shen**

- Harvard University, Department of Biostatistics, Ph.D. Candidate, Mar 2022–Present

Yi Liu

- North Carolina State University, Department of Statistics, Ph.D. Candidate, Apr 2023–Present

SERVICE

EXTERNAL
PROFESSIONAL
ACTIVITIES**American Statistical Association Statistics in Epidemiology Young Investigator Award, Paper Award Committee**, 2023

- 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

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

Rhodes-Schwarzman, Orientation Facilitator, 2019–Present

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

Morehead Cain Foundation, Selections Interviewer, 2018–Present

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

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 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

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

Journal of Causal Inference, 2023–Present

AD-HOC REVIEWER

Biostatistics

- *Biometrics* (2×)
- *Biostatistics*
- *Statistics in Medicine* (2×)
- *Clinical Trials*
- *Trials*

Healthcare Operations

- *Management Science*

Public Health

- *AIDS Care*
- *BMC Medical Research Methodology*
- *BMC Public Health*
- *BMJ Open*
- *Global Public Health*
- *Scientific Reports*
- *Sexually Transmitted Infections*

SKILLS

Languages & Software

- Native fluency in English and Mandarin Chinese
- R, SAS, Python (NetworkX), MatLab

Athletic Activities

- American Junior Golf Association All-Star
- Completed a US Army Special Forces Selections and Assessment training course