Larry Han

Curriculum Vitae, Updated June 2022

Contact

Email: larryan@g.harvard.edu
Website: larrylehan.github.io
Cell: (919) 272-1491

Research Interests

Methodological: Causal inference; Clinical trials; Electronic health records (EHR); Federated learning; Natural language processing (NLP); Optimization; Semi-supervised learning; Sensitivity analysis; Surrogate markers; Survival analysis; Transfer learning

Applications: Cardiology; Crowdsourcing; Global health; Health policy; Infectious diseases (Covid-19, HIV/STIs, Influenza vaccine); Rapid testing; Social innovation; Quality measurement

Education

Ph.D. Candidate in Biostatistics, *Harvard University*, Expected 2023
Advisors: Tianxi Cai, Lorenzo Trippa
Committee: Rui Duan, Sebastian Schneeweiss

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

M.Phil. in Healthcare Operations, *University of Cambridge*, 2018
Distinction (Highest Honors), Top Thesis Award
Advisor: Stefan Scholtes

M.A. in Global Affairs, *Tsinghua University*, 2017
Outstanding Master's Thesis Award
Advisor: Michael Powers

B.S. in Public Health, Biostatistics, *University of North Carolina at Chapel Hill*, 2016
Highest Honors, Highest Distinction
Advisors: Michael Hudgens, Joseph Tucker

Honors & Awards

2022 Certificate of Distinction in Teaching, Harvard Faculty of Arts and Sciences
2022 Rose Fellowship, Assistance Publique-Hopitaux de Paris
2022 American Statistical Association (ASA) Biopharmaceutical Section Scholarship Award
2022 ASA Young Investigator Award, Section on Statistics in Epidemiology
2022 National Science Foundation (NSF) New Researcher Award
2022 Institute of Mathematical Statistics (IMS) Hannan Graduate Student Travel Award
2021 John Van Ryzin Award
2021 Eastern North American Region (ENAR) Distinguished Student Paper Award
2021 ASA Biopharmaceutical Regulatory-Industry Statistics Workshop Student Poster Award
2021 New England Statistics Symposium (NESS) Student Poster Award
2021 Certificate of Distinction in Teaching, Harvard T.H. Chan School of Public Health
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

Funding

WHO/TDR Social Innovation in Health Research Grant, 2019–2022
Co-Principal Investigator, $190,000 USD annually

NIH T32 COMET Training Grant, 2020–Present
Coordinator: Jeffrey Katz, Distinguished Chair in Orthopaedic Surgery, HMS

NIH T32 Big Data to Knowledge Training Grant, 2018–2020
Coordinator: John Quackenbush, Department Chair, Harvard Biostatistics

Experience

Aegis Ventures, Consultant, 2021–Present
- Developing machine learning models and validation for the analysis of electronic health records in a joint venture with Northwell Health

VA Boston Healthcare System, WOC, 2021–Present
- Developing semi-supervised methods for the design of pragmatic trials of the Heart Failure Program at VA (supervised by Jacob Joseph)

Health Care Policy at Harvard Medical School, Research Associate, 2021–Present
- Designing robust methods for the estimation of causal effects in distributed data settings with applications for quality measurement (supervised by Jose Zubizarreta)

Social Entrepreneurship to Spur Health, Co-Founder, 2015–Present
- Founded a healthcare start-up focused on public health interventions using crowdsourcing
- Co-led a randomized controlled trial evaluating a video intervention among high-risk populations in China (details here: https://clinicaltrials.gov/ct2/show/NCT02248558).

Brigham and Women's Hospital, Statistical Consultant, 2019–2021
- Lead statistician on multiple cardiovascular genetics projects leveraging the international SHaRE Data Registry for hypertrophic cardiomyopathy (supervised by Carolyn Ho)

Bridgewater Associates, Intern, 2018
- Evaluated investment processes for Pure Alpha portfolio construction
- Developed strategies for creating a sustainable talent recruitment pipeline

Working Papers

[8] **Han, L.;** Tang, W.; Tian, L.; Cai, T. "Federated Causal Trees: Multi-Site Study of COVID-19 Vaccine Efficacy." *2022+.*

[7] **Han, L.;** Arfe, A.; Trippa, L. "Representative and Optimal Sensitivity Analysis (ROSA) for Clinical Trial Design." *2022+.*

[6] **Han, L.;** Hou, J.; Cai, T. "Semi-supervised Doubly Robust Estimation for Pragmatic Trial Design." *2022+.*

[5] **Han, L.;** Levis, A.; Duan, R. "Federated Transfer Learning for Heterogeneous Causal Effects." *2022+.*

[4] **Han, L.** and Cai, T. "Cross-Institutional EHR Data Harmonization using NLP: Prediction of Long-COVID Outcomes in French and US Hospitals." *2022+.*

[3] Han, S.; **Han, L.;** Zubizarreta, J. "Principal Resampling for Causal Inference." *2022+.*

[2] Guo, Z.; **Han, L.;** Cai, T. "Statistical Inference for Multi-source Learning: Negative Transfers and the Majority Rule." *2022+.*

[1] Liu, M.; **Han, L.;** Xiong, X.; Cai, T.; Tian, L. "Federated Survival Analysis with High Dimensional and Heterogeneous Data." *2022+.*

Preprints

[3] **Han, L.;** Li, Y.; Niknam, B.; Zubizarreta, J. "Privacy-Preserving and Communication-Efficient Causal Inference for Hospital Quality Measurement." *Arxiv, 2022 Mar.* https://arxiv.org/pdf/2203.00768.pdf.

[2] **Han, L.;** Duan, R.; Cai, T. "Federated Adaptive Causal Estimation (FACE) of Target Treatment Effects." *Arxiv, 2021 Dec.* https://arxiv.org/pdf/2112.09313.pdf.

[1] **Han, L.;** Wang, X.; Cai, T. "On the Evaluation of Surrogate Markers in Real World Data Settings." *Arxiv, 2021 Apr.* https://arxiv.org/pdf/2104.05513.pdf.

Publications

Theory and Methods

[30] Wang, X.; Parast, L.; **Han, L.;** Tian, L; Cai, T. "Robust Approach to Combining Multiple Markers to Improve Surrogacy." *Biometrics.* 2022 Apr 15. doi: 10.1111/biom.13677. https://onlinelibrary.wiley.com/doi/10.1111/biom.13677.

Crowdsourcing/Social Innovation

[29] **Han, L.;** Tang, W.; Tiarney, R.; et al. "Joint International Consensus Statement on Crowdsourcing Challenge Contests in Health and Medicine: Results of a Modified Delphi Process." *BMJ Open.* 2021 Nov; 11(11):e048699. https://bmjopen.bmj.com/content/11/11/e048699.long.

[28] Day, S.; Li, C.; Hlatshwako, T.; Abu-Hijleh, F.; **Han, L.;** Deitelzweig, C.; Bayus, B.; Ramaswamy, R.; Tang, W.; Tucker J. "Assessment of a Crowdsourcing Open Call for Approaches to University Community Engagement and Strategic Planning During COVID-19." *JAMA Network Open*, 2021 May; 4(5):e2110090. https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779869.

[27] Halpaap, B.; Tucker, J.; Mathanga, D.; Juban, N.; Awor, P.; Saravia, N.; **Han, L;** et al. "Social Innovation in Global Health: Sparking Location Action." *Lancet Global Health.* 2020 May; 8(5):e633-634.

[26] Wang, C.; **Han, L.;** Stein, G.; et al. "Crowdsourcing in Health and Medical Research: A Systematic Review." *Infectious Diseases of Poverty.* 2020 Jan; 9(1):8. https://pubmed.ncbi.nlm.nih.gov/32353305/.

[25] **Han, L.;** Chen, A.; Wei, S.; et al. "Crowdsourcing in Health & Health Research: A Practical Guide." *World Health Organization.* 2018 July. License: CC BY-NC-SA 3.0 IGO. https://apps.who.int/iris/handle/10665/273039.

[24] SESH Study Group **(Han, L.);** Tucker, J. "Crowdsourcing to Promote HIV Testing Among MSM in China: Study Protocol for a Stepped Wedge Randomized Controlled Trial." *Trials.* 2017 Oct 2;18(1):447. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5625620/.

EHRs / RCTs

[23] McCoy, T.; **Han, L.;** Pellegrini, A.; et al. "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.* 2020 Jan 16 *(Featured Article).* https://alz-journals.onlinelibrary.wiley.com/doi/full/10.1016/j.jalz.2019.09.084.

[22] **Han, L.;** Fine, J.; Robinson, S.; Boyle, A.; Freeman, M.; Scholtes, S. "Is Seniority of Emergency Physician Associated with the Weekend Effect?" *Emergency Medicine Journal.* 2019 Dec;36(12):708-715. https://emj.bmj.com/content/36/12/708.long.

[21] **Han, L.;** Hudgens, M.; Emch, M.; et al. "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.* 2017 Aug 3:7(1):7200. https://www.nature.com/articles/s41598-017-07533-w.

[20] Tang, W*.; **Han, L*.;** Best, J*.; et al. "Crowdsourcing HIV Test Promotion Videos: A Non-inferiority Randomized Controlled Trial in China." *Clinical Infectious Diseases.* 2016 Jun 1;62(11):1436-42. https://academic.oup.com/cid/article/62/11/1436/1745296?login=false.
**Co-first authors*

Cardiology

[19] Nauffal, V.; Marstrand, P.; **Han, L.;** et al. "Worldwide Differences in Primary Prevention Implantable Cardioverter Defibrillator Utilization and Outcomes in Hypertrophic Cardiomyopathy." *European Heart Journal*, 2021 Sep, 42(38), 3932-3944. https://academic.oup.com/eurheartj/article-abstract/42/38/3932/6365852?redirectedFrom=fulltext.

[18] Marston, N.; **Han, L.;** Olivotto, I.; et al. "Clinical Characteristics and Cardiovascular Outcomes in Childhood-Onset Hypertrophic Cardiomyopathy Compared with Adult-Onset Disease." *European Heart Journal.* 2020 May, 42(20), 1988-1996. https://academic.oup.com/eurheartj/article/42/20/1988/6189026.

[17] Lakdawala, N.; Olivotto, I.; Day, S.; **Han, L.;** et al. "Associations Between Female Sex, Sarcomere Variants and Clinical Outcomes in Hypertrophic Cardiomyopathy." *Circulation: Genomic and Precision Medicine.* 2020 Dec. 14(1), e003062. https://www.ahajournals.org/doi/pdf/10.1161/CIRCGEN.120.003062.

[16] Sidhu, K.; **Han, L.;** Picard, K.; et al. "Ventricular Tachycardia in Cardiolaminopathy: Characteristics and Considerations for Device Programming." *Heart Rhythm.* 2020 Oct 1; 17(10):1704-1710. https://www.heartrhythmjournal.com/article/S1547-5271(20)30457-4/fulltext.

[15] Marstrand, P.; **Han, L.;** Day, S.; et al. "Hypertrophic Cardiomyopathy with Left Ventricular Systolic Dysfunction: Insights from the SHaRe Registry." *Circulation.* 2020 Apr 28; 141(17):1371-1383. https://pubmed.ncbi.nlm.nih.gov/32228044/.

[14] 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. "Association of Race with Disease Expression and Clinical Outcomes Among Patients with Hypertrophic Cardiomyopathy." *JAMA Cardiology.* 2019 Dec; 5(1), 83-91. https://jamanetwork.com/journals/jamacardiology/fullarticle/2755970.

HIV and STD Testing

[13] Liu, F.; Qin, Y.; Meng, S.; Zhang, W.; Tang, W.; **Han, L.;** et al. "HIV Self-Testing among MSM in China: A Qualitative Implementation Research Study." *Journal of Virus Eradication.* 2019 Nov 4;5(4):220-224. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6844410/.

[12] Li, K.; Tang, W.; Wu, D.; Huang, W.; Feng, W.; Lee, A.; Feng, H.; Pan, S.; **Han, L.;** Mak, V.; Yang, L; Tucker, J. "Pay-it-forward Dual Gonorrhea/Chlamydia Test Uptake among MSM in China: A Pragmatic, Quasi-Experimental Study." *The Lancet Infectious Diseases.* 2019 Jan;19(1):76-82. https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(18)30556-5/fulltext.

[11] Qin, Y.*; **Han, L.*;** Babbit, A.; et al. "Experiences Using and Organizing HIV Self-Testing." *Journal of the International AIDS Society.* 2018 Jan 28:32(3):371-381. https://pubmed.ncbi.nlm.nih.gov/29194120/.
Co-first authors

[10] Wong, N.; Tang, W.; **Han, L.** et al. "MSM HIV Testing Following an Online Testing Intervention in China." *BMC Infectious Diseases.* 2017 June 19;17(1):437. https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-017-2546-y.

[9] Zhang, T.*; Liu, C.*; **Han, L.*** et al. "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.* 2017 Apr 3:20(1):21372. https://pubmed.ncbi.nlm.nih.gov/28406270/.
Co-first authors

[8] Tang, W.; Mao, J.; Tang, S.; Liu, C.; Mollan, K.; Cao, B.; Wong, T.; Zhang, Y.; Hudgens, M.; Qin, Y.; **Han, L.;** et al. "Disclosure of Sexual Orientation to Health Professionals in China: Results from an Online Cross-Sectional Study." *Journal of the International AIDS Society.* 2017 Feb 6;20(1):21416. https://pubmed.ncbi.nlm.nih.gov/28361498/.

[7] Hu, J.; Gu, X.; Tao, X.; Qian, Y.; Babu, G.; Wang, G.; Liao, M.; **Han, L.;** Kang, D.; Tang, W. "Prevalence and Trends of HIV, Syphillis, and HCV in Migrant and Resident MSM in Shandong,

China: Results from a Serial Cross-Sectional Study." *PLoS One.* 2017 Jan 19;12(1):e0170443. https://pubmed.ncbi.nlm.nih.gov/28103295/.

[6] **Han, L.;** Wei, C.; Muessig, K.; et al. "HIV Test Uptake Among MSM in China: Implications for Enhanced HIV Test Promotion Campaigns Among Key Populations." *Global Public Health.* 2016 Jan:1-14. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4955642/.

[5] Best, J.; Tang, W.; Zhang, Y.; **Han, L.;** et al. "Sexual Behaviors and HIV/Syphilis Testing Among Transgender Individuals in China: Implications for Expanding HIV Testing Services." *Sexually Transmitted Diseases.* 2015 May;42(5):281-5. https://pubmed.ncbi.nlm.nih.gov/25868142/.

[4] Bien, C.; Best, J.; Muessig, K.; Wei, C.; **Han, L.;** Tucker, J. "Gay Apps for Seeking Sex Partners in China: Implications for MSM Sexual Health." *AIDS and Behavior.* 2015 June;19(6):941-6. https://pubmed.ncbi.nlm.nih.gov/25572834/.

[3] Tucker, J.; Muessig K.; Cui, R.; Bien, C.; Lo, E.; Lee, R.; Wang, K.; **Han, L.;** et al. "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.* 2014 Nov 25;14:601. https://pubmed.ncbi.nlm.nih.gov/25422065/.

[2] **Han, L.;** Bien, C.; Wei, C.; Muessig, K.; Yang, M.; Liu, F.; Yang, L.; Meng, G.; Emch, M.; Tucker, J. "HIV Self-Testing Among Online MSM in China: Implications for Expanding HIV Testing Among Key Populations." *Journal of Acquired Immune Deficiency Syndromes.* 2014 Oct 1;67(2):216-21. https://pubmed.ncbi.nlm.nih.gov/24991972/.

[1] Wei, C.; Muessig, K.; Bien, C.; Yang, L.; Meng, R.; **Han, L.;** Yang, M.; Tucker, J. "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.* 2014 Sep;90(6):469-74. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4151526/.

Talks & Conferences

[31] "Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers." *Banff Workshop, Oaxaca, Mexico.* (Invited Speaker, Aug 2022).

[30] "Federated Adaptive Causal Estimation (FACE) of Target Treatment Effects." *JSM, Washington, D.C.* (Oral, Aug 2022). **ASA Young Investigator Award, Section on Statistics in Epidemiology.**

[29] "Identification and Evaluation of Surrogate Markers." *IBC, Riga, Latvia.* (Invited Speaker, Jul 2022).

[28] "Privacy-Preserving and Communication-Efficient Causal Inference for Hospital Quality Measurement." *Design of Experimental and Observational Studies, Boston, MA.* (Oral, Jun 2022).

[27] "Privacy-Preserving and Communication-Efficient Causal Inference for Hospital Quality Measurement." *American Causal Inference Conference, Berkeley, CA.* (Oral, May 2022). **NSF New Researcher Award.**

[26] "Distributed Causal Inference." *ENAR, Houston, TX.* (Oral, Mar 2022). **IMS Hannan Graduate Student Travel Award.**

[25] "Identifying Real-World Surrogate Markers for Replicating Clinical Trials." *New England Statistics Symposium, Virtual.* (Invited Speaker, Oct 2021).

[24] "Optimal Sensitivity Analysis for Clinical Trial Design." *New England Statistics Symposium, Virtual.* (Poster, Oct 2021). **Munich Re / HSB Best Poster Award**.

[23] "Distributed Causal Inference." *Johns Hopkins Causal Inference Working Group, Virtual.* (Invited Speaker, Sep 2021).

[22] "On the Evaluation of Surrogate Markers in Real World Data Settings." *ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Virtual* (Poster, Sep 2021). **Best Poster Award**.

[21] "On the Evaluation of Surrogate Markers in Real World Data Settings." *ENAR, Virtual* (Oral, Mar 2021). **John Van Ryzin Award and ENAR Distinguished Student Paper Award**.

[20] "On the Evaluation of Surrogate Markers in Real World Data Settings." *Harvard Chan Poster Day, Virtual* (Oral, Feb 2021). **Best Student Poster Award**.

[19] "Distributed Causal Learning." *Harvard-MIT Center for Regulatory Science Doctoral Student Symposium, Virtual* (Oral, Feb 2021).

[18] "Distributed Learning for Causal Modelling." *University of Michigan Statistics for Individualized Healthcare Lab, Virtual.* (Invited Speaker, Dec 2020).

[17] "Social Innovation for Infectious Diseases of Poverty: Sparking Local Innovation." *American Society of Tropical Medicine & Hygiene 68th Annual Meeting, National Harbor, Maryland.* (Invited Symposium Panelist, Nov 2019).

[16] "Is Seniority of Emergency Physician Associated with the Weekend Mortality Effect?" *INFORMS Healthcare: Transforming Health with Data, Mind, and Body.* MIT Sloan School of Management, Cambridge, MA. (Invited Panelist, July 2019).

[15] "Excess Mortality Associated with Junior Doctor Treatment at the Weekend: An Analysis of Electronic Medical Records in the UK." *Biobanks: Study Design and Data Analysis,* Program in Quantitative Genomics, Harvard Medical School, Boston, MA. (Poster, Nov 2018).

[14] "Co-Creating a Research Culture and Guide for Social Innovation." *World Health Organization Social Innovation in Health Initiative, Blantyre, Malawi.* (Oral, June 2018).

[13] "Crowdsourcing in Health and Medicine: Developing a Practical Guide and Systematic Review." *London School of Hygiene & Tropical Medicine Centre for Evaluation Series, London, UK.* (Oral, May 2018).

[12] "Surviving the Weekend Effect: a Competing Risks Analysis of Excess Weekend Mortality at Addenbrooke's Hospital." *Cambridge Judge Business School Healthcare Operations Lecture Series, Cambridge, UK.* (Oral, March 2018).

[11] "Human Survival." *Schwarzman Scholars Symposium, Beijing, China.* (Oral, June 2017). **First Prize**.

[10] "A Global Qualitative Systematic Review of HIV Self-testing." *20th International Union Against Sexually Transmitted Infections - Asia-Pacific Conference, Okayama, Japan.* (Oral, Dec 2016).

[9] "RTS,S Malaria Vaccine Efficacy Does Not Vary with Seasonal Precipitation: Results from a Phase 3 RCT in Lilongwe, Malawi." *65th Annual American Society of Tropical Medicine & Hygiene Conference, Atlanta, GA.* (Poster, Nov 2016).

[8] "The Social Context of HIV Self-testing: A Global Qualitative Evidence Synthesis." *21st International AIDS Conference, Durban, South Africa.* (Poster, July 2016).

[7] "Survival Analysis from a Phase 3 RCT: RTS,S/AS01 Malaria Vaccine Efficacy in Lilongwe, Malawi and its Interaction with Seasonal Precipitation." *UNC Project-Malawi, Lilongwe, Malawi.* (Oral, Mar 2016).

[6] "Tailoring Mass Media MSM HIV Test Interventions to Reach High-Risk Men." *Conference on Retroviruses and Opportunistic Infections (CROI) 2016, Boston, MA.* (Poster, Feb 2016).

[5] "Crowdsourcing to Spur First-time HIV Testing among MSM and Transgender Individuals in China: a Non-inferiority Pragmatic Randomized Controlled Trial." *8th IAS Conference on HIV Pathogenesis Treatment & Prevention, Vancouver, Canada.* (Oral, July 2015).

[4] "Availability and Quality of Online HIV Self-Test Kits in China and the United States." *Conference on Retroviruses and Opportunistic Infections (CROI) 2015, Seattle, WA.* (Poster, Feb 2015).

[3] "HIV/Syphilis Risk and Testing Among Transgender Individuals in China." *18th International Union Against Sexually Transmitted Infections - Asia-Pacific Conference,* Bangkok, Thailand. (Poster, Nov 2014).

[2] "An Online Survey of HIV Self-testing among online MSM in China." *20th International AIDS Conference, Melbourne, Australia.* (Poster, July 2014).

[1] "Spurring Innovation in Designing HIV Testing Programs: A Crowdsourcing Contest-based Approach." *5th Annual CUGH Conference, Washington, DC.* (Poster, May 2014).

Teaching

Causal Inference (STAT 293), Head Teaching Fellow, Spring 2022
- Harvard Statistics Department's graduate-level course on causal inference, focusing primarily on reading and discussing new papers (TF rating: 4.9/5.0; class size: 15)

Applied Survival Analysis (BST 223), Teaching Fellow, Spring 2022
- Teaching labs for the Harvard Biostatistics Department's masters-level survival analysis course (TF rating: 4.9/5.0; class size: 100)

Statistical Inference (BST 222), Head Teaching Fellow, Fall 2019, 2020, 2021
- Head TF responsible for developing content and teaching labs for the masters' level statistical inference course using Casella and Berger (TF ratings: 4.6/5.0 (2019); 4.8/5.0 (2020); 4.7/5.0 (2021); class size: 70)

PhD Qualifying Exam Summer Course, Co-Instructor, Summer 2021
- Teaching content review and problem-solving in probability and inference for PhD students in preparation for the theory portion of the PhD qualifying exam (class size: 15)

Advanced Topics in Clinical Trials (BST 238), Head Teaching Fellow, Spring 2021
- Designing content and teaching select lectures for advanced topics in clinical trials, e.g., surrogate endpoints; interim analyses; group sequential methods; meta-analyses (TF rating: 4.5/5.0; class size: 20)

Principles of Clinical Trials (BST 214), Head Teaching Fellow, 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 (TF rating: 4.8/5.0 (2020); 4.9/5.0 (2021); class size: 70)

Infectious Diseases (HNRS 396), 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)

International Relations (GLBL 394), Teaching Assistant, Spring 2015, 2016
- One of 15 students who led a weekly seminar-style recitation section of 300 undergraduates on international relations (recitation size: 20)

Service

International Conference on Health Policy Statistics, Session Organizer, Jan 2023
- Organized an invited session titled, "Statistical Advances and Policy Implications in Hospital Quality Measurement."

Harvard Biostatistics Student Committee, Co-President, Aug 2021–Present
- Organizing town hall meetings and small group discussions to represent PhD student interests, including recruitment, qualifying exams, academics, student-life, and mental health

Harvard DEIB Committee, Representative, Aug 2020–Present
- Developing qualitative focus groups and quantitative surveys to better understand how the Harvard Biostatistics Department can become more diverse, inclusive, and equitable
- Spearheading a new mentorship program connecting underrepresented minorities with mentors

Harvard Graduate Asian Baptist Student Koinonia, President, Aug 2019–Present
- Organizing Bible study outreach and fellowship for Harvard and Boston-area graduate students

Rhodes-Schwarzman, 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

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

- Evaluating funding proposals for GSAS conferences and activities

Carolina Collective Initiative, Steering Committee, May–Aug 2020
- Organized an open call and judged ideas for the reopening of UNC campus during COVID-19

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

Referee

AIDS Care
Biometrics
Biostatistics
BMC Public Health
BMJ Open
Global Public Health
Scientific Reports
Sexually Transmitted Infections
Statistics in Medicine
Trials

Skills

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

Athletic Activities
- Former top-ranked junior golf player in the US
- American Junior Golf Association All-Star
- Completed a US Army Special Forces Selections and Assessment training course