

Larry Han

Curriculum Vitae, Updated December 2020

CONTACT	248 Concord Avenue Cambridge, MA 02138	larryhan@fas.harvard.edu (919) 272-1491
EDUCATION	<b>Harvard University</b> PhD in Biostatistics AM in Biostatistics Advisor: Tianxi Cai	Boston, MA 2018-Present 2020
	<b>University of Cambridge</b> MPhil in Management Science, Operations <i>Distinction, Top Thesis</i> Thesis: Surviving the Weekend Effect: A Competing Risks Analysis of Mortality in the Emergency Department of Cambridge University Hospital (Published in <i>Emergency Medicine Journal</i> ) Advisor: Stefan Scholtes	Cambridge, UK 2018
	<b>Tsinghua University</b> MA in Global Affairs <i>Outstanding Thesis Award</i> Thesis: Reformulating the Magic Pill: The Economics of Pharmaceutical Drug Reform in China Advisor: Michael Powers	Beijing, China 2017
	<b>University of North Carolina at Chapel Hill</b> BS in Public Health, Biostatistics <i>Highest Honors, Highest Distinction, Phi Beta Kappa</i> Thesis: RTS,S/AS01 Malaria Vaccine Efficacy is Not Modified by Seasonal Precipitation: Results from a Phase 3 RCT in Malawi (Published in <i>Scientific Reports</i> ) Advisor: Michael Hudgens	Chapel Hill, NC 2016
	<b>NIH T32 COMET Training Grant</b> Coordinator: Prof. Jeffrey Katz, Distinguished Chair in Orthopaedic Surgery, HMS	July 2020-Present
	<b>NIH T32 Big Data to Knowledge Training Grant</b> Coordinator: Prof. John Quackenbush, Department Chair, Harvard Biostatistics	Aug 2018-June 2020
	<b>WHO/TDR Social Innovation in Health Research Grant</b> Co-Principal Investigator, \$190,000 USD	Jan-Dec 2019
	<b>ENAR Distinguished Student Paper Award</b> – <i>On the Evaluation of Surrogate Markers in Real World Data Settings</i>	2021
	China Hands 25 Under 25 Leaders in US-China Relations University of Cambridge Distinction and Top Thesis Gates Cambridge Scholarship Tsinghua University Outstanding Master’s Thesis Award Schwarzman Scholarship Phillips Ambassadors 10-Year Anniversary Award Order of the Golden Fleece Delta Omega Award of Excellence Goldwater Scholarship Phillips Ambassadorship Morehead-Cain Scholarship National Merit Scholarship	2019 2018 2017 2017 2016 2016 2016 2015 2014 2012 2012

## WORK EXPERIENCE

**Brigham and Women's Hospital** Boston, MA  
Biostatistician (Contractor) Mar 2019-Present

- Conducting statistical analysis and interpretation on multiple cardiovascular genetics papers related to the international SHaRE Data Registry for hypertrophic cardiomyopathy patients

**Social Entrepreneurship to Spur Health** Guangzhou, China  
Co-Founder & Director of Strategy June 2015-Present

- Founded and registered a health development start-up focused on public health, patient-physician trust, and 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>).

**Bridgewater Associates** Westport, CT  
Management Associate Intern June-Aug 2018

- Evaluated investment processes for portfolio construction and improving client engagement
- Developed strategies for creating a sustainable talent recruitment pipeline

**BP plc** Beijing, China  
Econometrics Intern March-July 2017

- Conducted industrial energy demand analysis on coal, oil, and natural gas in Chinese for the BP Statistical Review of World Energy 2017 and BP Energy Outlook 2018

**Wasserman Media Group** New York, NY  
Golf Consultant May-Aug 2015

- Developed a novel proprietary method using 10MM datapoints for quantifying PGA TOUR event marketability

**International Diagnostics Centre** London, UK  
Research Fellow May-Aug 2014

- Co-wrote an awarded NIH R01 grant, "Spurring Innovation on HIV Testing and Linkage: A Crowdsourcing Approach"
- Designed and executed a non-inferiority randomized controlled trial to examine HIV testing behavior among key populations in China

## LEADERSHIP

**Harvard Biostatistics Diversity, Inclusion, and Equity Committee** Boston, MA  
PhD Student 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

**Harvard Biostatistics Mental Health Working Group** Boston, MA  
PhD Student Representative Aug 2020 - Present

- Lead for promotion of department community at a distance during the COVID-19 pandemic

**Carolina Collective Initiative** Chapel Hill, NC  
Organizing Committee, Judging Committee May - Aug 2020

- Organizing an open call and judging creative ideas for the reopening of UNC campus in the COVID-19 era

**Harvard Graduate Student Council** Cambridge, MA  
Biostatistics Representative Sep 2018-Present

- Evaluating funding proposals for GSAS conferences and activities

**Harvard Graduate Asian Baptist Student Koinonia** Cambridge, MA  
President Aug 2019-Present

- Organizing Bible studies and fellowship for Harvard and Boston-area graduate students

**Cambridge Judge Business School Teaching Committee** Cambridge, UK  
MPhil Student Representative Jan-June 2018

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

**Tsinghua Graduate Student Union**

Beijing, China

Representative

Sep 2016-July 2017

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

**Journal of Schwarzman College**

Beijing, China

Co-Founder, Editor

Sep 2016-July 2017

- Established Schwarzman College's first journal aggregating global perspectives on China
- Developed a framework for a quarterly print and online publication for future classes

## TEACHING

**BST 222 Statistical Inference, Teaching Fellow**

Fall 2020, 2019

- Developing content for and teaching labs for the Harvard Biostatistics Department's masters-level statistical inference course

**BST 214 Advanced Topics in Clinical Trials, Teaching Fellow**

Spring 2020, 2021

- Head TF for the Harvard Biostatistics Department's advanced topics course on the design and analysis of modern clinical trials

**HNRS 396 Instructor**

2015-2016

- 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"

**GLBL 394 TA**

2014-2016

- One of 15 students who led a weekly seminar-style recitation section of 300 undergraduates on international relations

## PUBLICATIONS

- [24] Halpaap B.; Tucker J.; Mathanga D.; Juban N.; Awor P.; Saravia N.; **Han L.**; de Villiers K.; Kitamura M.; Cuervo L.; Peeling R.; Reeder J. "Social Innovation in Global Health: Sparking Location Action." *Lancet Global Health*. 2020 May; 8(5):e633-634.
- [23] 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.
- [22] Wang, C.; **Han, L.**; Stein, G.; et al. "Crowdsourcing in Health and Medical Research: A Systematic Review." *Infectious Diseases of Poverty*. 2020 Jan 20; 9(1):8.
- [21] McCoy, T.; **Han, L.**; Pellegrini, A.; Tanzi, R.; Berretta, S.; Perlis, R. "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).
- [20] **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.
- [19] 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 4.
- [18] Liu, F.; Qin, Y.; Meng, S.; Zhang, W.; Tang, W.; **Han, L.**; Liu, C.; Zhang, Y.; Huang, S.; Zheng, H.; Yang, B.; Tucker, J. "HIV Self-Testing among MSM in China: A Qualitative Implementation Research Study." *Journal of Virus Eradication*. 2019 Nov 4;5(4):220-224.
- [17] 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.

- [16] **Han, L.**; Chen, A.; Wei, S.; et al. "Crowdsourcing in Health & Health Research: A Practical Guide." *Geneva: World Health Organization*. 2018 July. License: CC BY-NC-SA 3.0 IGO.
- [15] Qin, Y.\*; **Han, L.\***; Babbitt, A.; et al. "Experiences Using and Organizing HIV Self-Testing." *Journal of the International AIDS Society*. 2018 Jan 28;32(3):371-381.  
*Co-first authors*
- [14] 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.
- [13] **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.
- [12] 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.
- [11] 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.  
*Co-first authors*
- [10] Tang, W.; Mao, J.; Tang, S.; Liu, C.; Mollan, K.; Cao, B.; Wong, T.; Zhang, Y.; Hudgens, M.; Qin, Y.; **Han, L.**; Ma, B., Yang, B., Ma, W.; Wei, C.; Tucker, J. "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.
- [9] 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, Syphilis, 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.
- [8] 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. doi: 10.1093/cid/ciw171.  
*\*Co-first authors*
- [7] **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.
- [6] Best, J.; Tang, W.; Zhang, Y.; **Han, L.**; Liu, F.; Huang, S.; Yang, B.; Wei, C.; Tucker, J. "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.
- [5] 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.
- [4] Tucker, J.; Muessig K.; Cui, R.; Bien, C.; Lo, E.; Lee, R.; Wang, K.; **Han, L.**; Liu, F.; Yang, L.; Yang, B.; Larson, H.; Peeling, R. "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.
- [3] **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.
- [2] 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.
- [1] Tucker, J.; Galler, S.; O. Sesh Team; **Han, L.** "Spurring Innovation in Designing HIV Testing Programs: A Crowdsourcing Contest-based Approach." *Annals of Global Health*. 2014 May;80(3):223-4.

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- INVITED TALKS/  
PRESENTATIONS
- [18] **Han, L.** “Distributed Learning for causal Modelling.” *Michigan Statistics for Individual ized Health-care Lab, Ann Arbor, MI.* (Invited Seminar, Dec 2020).
  - [17] **Han, L.** “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] **Han, L.;** Fine, J.; Robinson, S.; et al. “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] **Han, L.;** Fine, J.; Robinson, S.; et al. “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] **Han, L.;** Tucker, J. “Co-Creating a Research Culture and Guide for Social Innovation.” *World Health Organization Social Innovation in Health Initiative, Blantyre, Malawi.* (Oral, June 2018).
  - [13] **Han, L.;** Wang, C.; Stein, G. et al. “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] **Han, L.;** Fine, J.; Scholtes, S. “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] **Han, L.** “Human Survival.” *Schwarzman Scholars Symposium, Beijing, China.* (Oral, June 2017; First Prize).
  - [10] **Han, L.;** Qin, Y.; Babbitt, A.; et al. “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] **Han, L.;** Hudgens, M.; Emch, M.; et al. “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] Qin, Y.; **Han, L.;** Babitt, A.; et al. “The Social Context of HIV Self-testing: A Global Qualitative Evidence Synthesis.” *21st International AIDS Conference, Durban, South Africa.* (Poster, July 2016).
  - [7] **Han, L.;** Hudgens, M.; Hoffman, I.; et al. “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] Wong, N.; Tang, W.; **Han, L.;** et al. “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] **Han, L.;** Tang, W.; Best, J.; et al. “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] Fengying, L.; **Han, L.;** Tang, W.; et al. “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] Tang, W.; Best, J.; Zhang, Y.; **Han, L.;** et al. “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] **Han, L.;** Bien, C.; Tucker, J.; et al. “An Online Survey of HIV Self-testing among online MSM in China.” *20th International AIDS Conference, Melbourne, Australia.* (Poster, July 2014).
  - [1] Tucker, J.; Galler, S.; **Han, L.** “Spurring Innovation in Designing HIV Testing Programs: A Crowdsourcing Contest-based Approach.” *5th Annual CUGH Conference, Washington, DC.* (Poster, May 2014).

## 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