

SCPKU Summer Seminar

June 22 - July 12, 2025

AI-Enabled Global Public Health and Population Health Management

Instructors: Professors **Michelle Williams** and **Karen Eggleston**

Teaching Assistant: **Victoria Liu**, liucx@stanford.edu

June 11, 2025

Seminar Syllabus

We will generally hold class sessions Monday-Wednesday, preserving Thursday and Friday for Field Trips and/or Group work.

Classes will generally run from 9am to Noon in [Room G14-15](#) on the Garden Level of SCPKU.

Overview: This three-week intensive seminar focuses on advancing global health through cross-cultural collaboration and the application of cutting-edge technology in population health and health policy decision-making. Topics range from the fundamentals of machine learning, causal inference, and basic health economics concepts to case studies of AI-enabled population health programs, bias mitigation strategies, privacy protection protocols, and transparency in AI decision-making. Stanford students will interact with a carefully selected group of graduate students from Peking University and Hainan Medical School to explore advanced applications and ethical considerations in AI-driven global public health and population health management. Classroom discussion will be complemented by field visits in Beijing and a trip to Hainan to learn about AI-enabled tools deployed in relatively resource-poor settings and emerging economic zones.

Course website: <https://piazza.com/stanford/summer2025/scpku2025/info>

AllDayTA:

Each student will

- choose one course reading to summarize for the class and lead discussion on one of the days designated (e.g. weeks 2 or 3).
- work in a small group on a project to be presented on the final day, July 11th.

Useful Resources:

Crisis24 hotline: +1(443)716-2305 - download app.

<https://crisis24horizon.com/Stanford/login>

<https://www.youtube.com/watch?v=xesDRkU9zzM>

<https://internationaltravel.stanford.edu/>

Week 1	
Sunday 6/22 9am-11am	On-Site Orientation & Logistics
Monday 6/23 9am - 12	Karen & Michelle: Introductions and Course Overview Guests: Yi Ning , Dean, Hainan Medical University Hai-Jun Wang , Vice Dean, Peking University (PKU) School of Public Health Karen: Comparative Health Systems, UHC & Overview of PRC Health Care System
Tuesday 6/24 9am - 12	Michelle: Global Health Trends - Maternal and Child Health, Cancer, Mental Health Karen: Global Health Trends - Aging, Cardiometabolic Disorders, NCD (Economics of demographic transition) Guest: 10am: Professor Gordon Liu (LIU Guo'En), Director, Peking University Institute for Global Health and Development (iGHD), national health policy adviser, on "Healthy China 2030" and China's healthcare system Guest: 11am: Assist. Prof. Jianan Yang , PKU iGHD (health economics of nudges in China and beyond)
Wednesday 6/25 9am -10:00am	Guest: Dr. Roger Glass , Former Director of the Fogarty International Center, President of the China Medical Board. (Zoom: 9:00-10:00am Beijing Time; 9:00-10:00pm Tuesday June 24th)
10:30-11:30	Guest: Prof. Jue Liu , PKU School of Public Health, Applications of AI and Machine Learning in China (in-person lecture @SCPKU)
11:00-12:30	Yi Ning , Dean, Hainan Medical University. Introduction to Deidentified Data on Health Checkups in PRC for Data Analysis Exercise
Afternoon - Field Trip	Karen: comments on economics of AI in health policy; moderated discussion Afternoon Fieldtrip Led by Ni Ying: Meinian Headquarters
Thursday 6/26 PKU Medical Campus (9am- 12 noon)	Field Trip PKU Health Science Campus 北京大学医学部 - SPH 9-9:30 Dean Siyan Zhan 9:30-11 A/Prof. Heling Bao , Cervical Cancer Research 10:30-11:30 Prof. Luxia Zhang , National Institute of Health Data Science
Afternoon	Visit Beijing University of Chinese Medicine (BUCM) - China's premier Traditional Chinese Medicine (TCM) institution setting the national standard for TCM education. During this program, you will be able to attend specialized TCM lectures, engage in dynamic discussions with BUCM students, and participate in hands-on workshops exploring pulse diagnosis, moxibustion, tuina massage, tai chi, and acupuncture

Week 1 (continued)

Friday 6/27 China Central CDC in morning; PKU Medical campus afternoon (all day)	Field Trip to Chinese Center for Disease Control and Prevention 中国疾病预防控制中心慢性非传染性疾病预防控制中心 National Center for Chronic and Noncommunicable Disease Control and Prevention, Chinese Center for Disease Control and Prevention 27 Nanwei Road, Xicheng District, Beijing, P.R. China, 100050 9:00-9:10 Welcome remarks 9:10-9:40 Lecture 1 (Dr. Michelle Williams, Applications of AI and Machine Learning in Public Health) 9:40-10:10 Lecture 2 (Dr. Karen Eggleston, AI for Healthy Aging: An Economic Perspective) 10:10-10:20 Break (move to in-house discussion meeting room) 10:20-10:50 Introduction of NCD center 10:50-11:20 Dr. Maigeng Zhou : NCD control research & policies, use of AI in China 11:20-11:50 Discussion 11:50 Luncheon at nearby restaurant & then travel back to PKU Health Science campus China Center for Health Development Studies , Peking University Director REN Minghui , Professors MA Xiaochen, XU Jin, FANG Hai, and others
Saturday 6/28 09:00 10:00-12:00 13:00-14:00 14:30-17:00 18:00-19:00	Visit the Great Wall of China, and (National Museum of China or Summer Palace) Meet in the hotel lobby Visit the Great Wall of China Lunch Visit the National Museum of China <u>or</u> Summer Palace Dinner
Sunday 6/29 08:30 09:30-11:30 12:00-13:00 14:00-16:00 17:00-18:00	Visit the Forbidden City Meet in the hotel lobby Visit the Forbidden City Lunch Cultural Activities (Yangzhou Lacquerware, Dunhuang Stone Powder Painting, etc.) Free time : Self-exploration in Nanluogu Lane or Wangfujing Street

Week 2

Monday 6/30	Ann Aerts: President, Novartis Foundation; Leader, AI4Healthy Cities Michelle: Discussion of Health Checkup Data - Applications of AI/Advanced Analytics for Disease Risk Prediction Karen & Michelle: moderated discussion to finalize student groups for projects. Student presentations of chosen readings
Tuesday 7/1	Karen: Applications of AI in NCD Control and Prevention Example: Diabetes prevention and control; local, regional, and national diabetic retinopathy screening programs; causal inference from check-ups metabolic syndrome/diabetes screening Guest: Jieming Zhong, Director, NCD Control Division, Zhejiang Provincial CDC, Epidemiology and digital management of Diabetes in Zhejiang [Zoom] Student presentations of chosen readings
Wednesday 7/2	Travel to Hainan: CZ3120, 13:05 from Daxing Airport
Thursday 7/3 9-Noon: Introductions/Welcome Lecture Computer Lab Exercise Dinner (TBD)	Yi Ning, Welcome and Introductions Yuhui Zhang, Deputy General Director of the Health Commission of Hainan Province Lecture Title: Applications and Practice of Digital Therapeutics: Insights from Hainan Group Exercises with Health Checkup Data: Cervical Cancer Analytical Project - Using Health Checkup Data Prepare for Exercise by reading the following paper and others from June 26th Session Bao HL, Jin C, Wang S, Song Y, Xu ZY, Yan XJ, Li LM, Ning Y, Wang HJ. Prevalence of cervicovaginal human papillomavirus infection and genotypes in the pre-vaccine era in China: A nationwide population-based study. Journal of Infection. 2021 Apr;82(4):75-83 Students will gain familiarity with the database and begin working with the data in preparation of developing future projects. Dean Yi Ning - Dinner Host
Friday 7/4 9-Noon: Computer Lab Exercise Afternoon: Field trip	Yi Ning and Michelle Group Exercises with Health Checkup Data (Continued) Field Trip Visit Center for Disease Control and Public Health Center (Infectious Disease Hospital)
Saturday 7/5	Educational/Cultural Activities - Visit the Boao Medical Zone - Institute for Real World Study Boao Lecheng International Medical Tourism Pilot Zone Exhibition Center
Sunday 7/6	Travel Back to Beijing: CZ6365, 13:05 from Meilan International Airport

Week 3	
Monday 7/7	Michelle & Karen: Debrief Michelle and Yi Continue analyses started on fieldtrip; promote and consolidate student project groups Student presentations of chosen readings
Tuesday 7/8	Guest (zoom 9am): CK Cheruvettolil , former Senior Strategy Officer for Digital Health and Artificial Intelligence at the Bill & Melinda Gates Foundation, now adviser to United Nations and the World Bank on supporting AI infrastructure for low-income countries Michelle: Applications of AI in PH Priority Setting Karen: Disparities and AI Bias: urban/rural, race/ethnicity; gender [Office Hours and Group Work]
Wednesday 7/9	Guest Lecture: Fawad Butt , Former Chief Data Officer at Kaiser Permanente, Optum and UnitedHealthcare, Founder and CEO Penguin AI – Will lecture on AI Readiness in Healthcare and Public Health, Trends, Innovation, Impact, Governance and Data Governance, Entrepreneurship (Zoom: 9:00-10:00am Beijing Time; 6:00-7:00pm Tuesday July 8th) Karen: AI and Aging; Discussion of SNU collaboration on AI for aging-in-place (AI4AIP) [Time for students to work on projects]
Thursday 7/10	OFFICE HOURS & Time for Students to work on completing group projects and preparing their presentations
Dinner (time: TBD)	Invited to Dinner with James Chau - Details TBD
Friday 7/11	Student Presentation(s) James Chau (China-US Exchange Foundation) - Keynote Speaker Closing Reception @ SCPKU - Faculty, Students and Guests
Saturday 7/12	Free time/ Travel back to US
Sunday 7/13	Travel back to US

Post Course Activities: Independent Study Opportunities with Hainan-SoM and PKU-SPH & iGHD

Overview AI in Public Health

Georges Hattab, et al. The Way Forward to Embrace Artificial Intelligence in Public Health. *AJPH*, 2025 115:2, 123-128.

"Leveraging AI for Public Health Communication: Opportunities and Risks" (2024) deBeaumont Foundation <https://debeaumont.org/news/2024/leveraging-ai-for-public-health-communication-opportunities-and-risks/>

2025 AI Index Report, Chapter 5 on science and medicine, <https://hai.stanford.edu/ai-index/2025-ai-index-report>

AI Grand Rounds podcast from NEJM AI: <https://ai-podcast.nejm.org/>

Overview of China's Health System

Yip, Winnie, Hongqiao Fu, Weiyan Jian, Jue Liu, Jay Pan, Duo Xu, Hanmo Yang, and Tiemin Zhai. "Universal health coverage in China part 1: progress and gaps." *The Lancet Public Health* 8, no. 12 (2023): e1025-e1034.

[https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(23\)00254-2/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(23)00254-2/fulltext)

Yip, Winnie, Hongqiao Fu, Weiyan Jian, Jue Liu, Jay Pan, Duo Xu, Hanmo Yang, and Tiemin Zhai. "Universal health coverage in China part 2: addressing challenges and recommendations." *The Lancet Public Health* 8, no. 12 (2023): e1035-e1042.

Supplemental: Meng, Qingyue, et al, 2019. China's health system reforms: review of 10 years of progress. *The BMJ*. Available at <https://www.bmj.com/china-health-reform>

Ethical Considerations in AI-Driven Healthcare

"Health Equity and Ethical Considerations in Using Artificial Intelligence in Public Health and Medicine" (2024) – Dankwa-Mullan https://www.cdc.gov/pcd/issues/2024/24_0245.htm

"Augmented Intelligence Development, Deployment, and Use in Health Care" (2024) <https://www.ama-assn.org/system/files/ama-ai-principles.pdf>. (see PDF)

Schaekermann M, Spitz T, Pyles M, et al. Health equity assessment of machine learning performance (HEAL): a framework and dermatology AI model case study. *EClinicalMedicine*. 2024 Mar 14;70:102479. doi: 10.1016/j.eclinm.2024.102479. PMID: 38685924; PMCID: PMC11056401.

Data Sources and Useful Resources

Stanford "AI playground"

Global Burden of Disease estimates & visualizations, The Institute for Health Metrics and Evaluation (IHME) -- <https://vizhub.healthdata.org/subnational/china>

Gateway to Global Aging Data, [G2aging](https://g2aging.org/) – harmonized China Health and Retirement Longitudinal Study (CHARLS) (https://charls.charlsdata.com/pages/Data/harmonized_charls/en.html)

China Health and Nutrition Survey (CHNS), <https://www.cpc.unc.edu/projects/china>

Week 1: Foundations

Focus: Establishing crucial foundations in global health trends across multiple domains (maternal and child health, cancer, cardiometabolic disorders, etc), causal inference, and basic health economics relevant to population health and health policy decision-making. Discussion of Healthy China 2030. Applications of AI and machine learning methods in China.

Key Topics:

- Basic health economics concepts (e.g., public goods, externalities, behavioral health, opportunity costs, incentives for innovation).
- Introduction to the application of these concepts in population health and health policy.
- Overview of China's demography, epidemiology, and health system

Potential Learning Activities:

- Focused readings and student summaries.
- Expert guest lectures from Stanford faculty on US healthcare and public health systems' integration of AI methodologies, organizational incentives, and financing structures.
- Expert guest lectures from PKU faculty on Chinese healthcare and public health systems' integration of AI methodologies, organizational incentives, and financing structures.

Readings 6/23

Monica Bharel, John Auerbach, Von Nguyen, Karen B. DeSalvo. Transforming Public Health Practice with Generative Artificial Intelligence. *Health Affairs* HEALTH AFFAIRS 43; 6 (2024): 776-782

Liu Z, Han N, Su T, Ji Y, Bao H, Zhou S, Luo S, Wang H, Liu J, **Wang HJ**. Interpretable machine learning to identify important predictors of birth weight: A prospective cohort study. *Front Pediatr*. 2022 Nov 11;10:899954.

Tang Z, Ji Y, Zhou S, Su T, Yuan Z, Han N, Jia J, **Wang HJ**. Development and Validation of Multi-Stage Prediction Models for Pre-eclampsia: A Retrospective Cohort Study on Chinese Women. *Frontiers in Public Health*. 2022 May 30;10:911975.

Cutler, David M. "What artificial intelligence means for health care." In *JAMA Health Forum*, vol. 4, no. 7, pp. e232652-e232652. American Medical Association, 2023.

Supplemental: Brynjolfsson, Erik. "The Turing trap: The promise & peril of human-like artificial intelligence." *Daedalus* 151, no. 2 (2022): 272-287.

Sahni, Nikhil, George Stein, Of McKinsey, Rodney Zimmel, and David M. Cutler. *The potential impact of artificial intelligence on healthcare spending*. Vol. 30857. Cambridge, MA, USA:: National Bureau of Economic Research, 2023.

Readings 6/24

Cutler, David, Angus Deaton, and Adriana Lleras-Muney. "The Determinants of Mortality." *The Journal of Economic Perspectives* 20.3 (2006): 97-120.

Eggleston, K. and Victor R. Fuchs, 2012. "The New Demographic Transition: Most Gains in Life Expectancy Now Realized Late in Life," *Journal of Economic Perspectives* 26(3): 137-56.

<http://www.aeaweb.org/articles.php?doi=10.1257/jep.26.3.137> [only introduction & “Demographic Transition across Stages of Economic Development” discussion – skip the US part]

Baicker, Katherine, and Ziad Obermeyer. “Overuse and underuse of health care: new insights from economics and machine learning.” In *JAMA health forum*, vol. 3, no. 2, pp. e220428-e220428. American Medical Association, 2022

Ding, Hui, Yiwei Chen, Min Yu, Jieming Zhong, Ruying Hu, Xiangyu Chen, Chunmei Wang, Kaixu Xie, Karen Eggleston. “The Effects of Chronic Disease Management in Primary Health Care: Evidence from Rural China,” *Journal of Health Economics*, <https://doi.org/10.1016/j.jhealeco.2021.102539>

He, Daixin, Fangwen Lu, and Jianan Yang. “Impact of Self- or Social-Regarding Health Messages: Experimental Evidence Based on Antibiotics Purchases.” *Journal of Development Economics* 163 (June 1, 2023): 103056. <https://doi.org/10.1016/j.jdeveco.2023.103056>.

Supplemental: Healthy China 2030, https://www.gov.cn/zhengce/2016-10/25/content_5124174.htm

NEJM AI Grand Rounds with Larry Summers 2024: <https://ai-podcast.nejm.org/>
<https://www.podbean.com/ew/pb-hi7ce-176dd77>

Arrow, Kenneth J. “Uncertainty and the welfare economics of medical care.” *American Economic Review* 53, no. 5 (1963): 941-973.

Fuchs VR. “Major Concepts of Health Care Economics.” *Ann Intern Med*. 2015; 162:380-383. Doi:10.7326/M14-1183. <http://annals.org/article.aspx?articleid=2173507>

“Characteristics of the Health Sector,” chapter from János Kornai and K. Eggleston, *Welfare, Choice and Solidarity in Transition: Reforming the Health Sector in Eastern Europe*, Cambridge, UK: Cambridge University Press, 2001.

Readings 6/26

Bao HL, Jin C, Wang S, Song Y, Xu ZY, Yan XJ, Li LM, **Ning Y, Wang HJ**. Prevalence of cervicovaginal human papillomavirus infection and genotypes in the pre-vaccine era in China: A nationwide population-based study. *Journal of Infection*. 2021 Apr;82(4):75-83

Zhao Y, **Bao H**, Ma L, Song B, Di J, Wang L, Gao Y, Ren W, Wang S, **Wang HJ**, Wu J. Real-world effectiveness of primary screening with high-risk human papillomavirus testing in the cervical cancer screening programme in China: a nationwide, population-based study. *BMC Med*. 2021 Jul 15;19(1):164.

Bao H, Ma L, Zhao Y, Song B, Di J, Wang L, Gao Y, Ren W, Wang S, Wu J, **Wang HJ**. Age-specific effectiveness of primary human papillomavirus screening versus cytology in a cervical cancer screening program: a nationwide cross-sectional study. *Cancer Commun(Lond)*. 2022 Mar;42(3):191-204.

Readings 6/27

Field Trip – Central China CDC

Zhou, Maigeng et al. Mortality, morbidity, and risk factors in China and its provinces, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, Volume 394, Issue 10204, 1145 - 1158

Peng, Wen, Shiqi Chen, Xinguang Chen, Yue Ma, Tingting Wang, Xiaomin Sun, Yaogang Wang, Gangqiang Ding, and Youfa Wang. "Trends in major non-communicable diseases and related risk factors in China 2002–2019: an analysis of nationally representative survey data." *The Lancet Regional Health–Western Pacific* 43 (2024).

Week 2: Applications and Real-World Insights

Focus: Learning about AI applications in clinical and population settings and gaining practical insights through field visits.

Key Topics:

- Deep learning for health outcome prediction.
- Critical assessment of algorithms used in clinical and population health settings.
- Applications of AI-enabled tools in relatively resource-poor settings.
- AI-enabled economic, environmental, and health policy decision analyses in emerging economic zones.

Potential Learning Activities:

- Classroom training tabletop exercises.
- Strategic field visits to healthcare facilities and technology companies to observe real-world implementation of advanced analytics.

Field Trips

- Field trip to Hainan Medical School.
- Field trip and guest lectures from the PRC Central CDC and Zhejiang provincial CDC on chronic disease control and plans for leveraging Zhejiang's new biobank.

Readings 6/30:

"AI-driven evolution of precision population cardiovascular health in cities" (2025)

Darren Tanner, Yongkang Zhang, Ji Eun Chang, Peter Speyer, Elizabeth Adamson 4, Ann Aerts, Juan M Lavista Ferres, William B Weeks. Machine learning to evaluate the relationship between social determinants and diabetes prevalence in New York City. *BMJ Public Health* 2024 Sep 24;2(2):e001394. doi: [10.1136/bmjph-2024-001394](https://doi.org/10.1136/bmjph-2024-001394)

Lu Z, Dong B, Cai H, Tian T, Wang J, Fu L, Wang B, Zhang W, Lin S, Tuo X, Wang J, Yang T, Huang X, Zheng Z, Xue H, Xu S, Liu S, Sun P, Zou. Identifying Data-Driven Clinical Subgroups for Cervical Cancer Prevention With Machine Learning: Population-Based, External, and Diagnostic Validation Study. *JMIR Public Health Surveill.* 2025 Mar 19;11:e67840. doi: [10.2196/67840](https://doi.org/10.2196/67840).

Readings 7/1

Diabetes prevention (AI in DR Screening), health checkups, & causal inference

Wang, Serena CY, Grace Nickel, Kaushik P. Venkatesh, Mariam M. Raza, and Joseph C. Kvedar. "AI-based diabetes care: risk prediction models and implementation concerns." *NPJ digital medicine* 7, no. 1 (2024): 36.

Iizuka, Toshiaki, Katsuhiko Nishiyama, Brian Chen, and Karen Eggleston. "False alarm? Estimating the marginal value of health signals." *Journal of Public Economics* 195 (2021): 104368.
<https://doi.org/10.1016/j.jpubeco.2021.104368>

Ruamviboonsuk, Paisan, Richa Tiwari, Rory Sayres, Variya Nganthavee, Kornwipa Hemarat, Apinpat Kongprayoon, Rajiv Raman et al. "Real-time diabetic retinopathy screening by deep learning in a multisite national screening programme: a prospective interventional cohort study." *The Lancet Digital Health* 4, no. 4 (2022): e235-e244.

AHPP webinar "Bringing AI from Code to Clinic: Perspectives from a Google Health Cross-Functional Team," https://youtu.be/HmlQM5UzPlg?si=mV2beZy5_07OkoC4

Gunasekeran, Dinesh Visva, Steven Miller, Wynne Hsu, Mong Li Lee, Hon Tym Wong, Mun Tuck Lee, Ecosse Lamoureux, Daniel Shu Wei Ting, Gavin Siew Wei Tan, and Tien-Yin Wong. "National Use of Artificial Intelligence for Eye Screening in Singapore." *NEJM AI* (2024): Alcs2400404.

Brant, Arthur, Preeti Singh, Xiang Yin, Lu Yang, Jay Nayar, Divleen Jeji, Yossi Matias et al. "Performance of a deep learning diabetic retinopathy algorithm in India." *JAMA Network Open* 8, no. 3 (2025): e250984-e250984.

Week 3: Implementation and Ethics

Focus: Culminating in implementation strategies and a deep dive into ethical considerations of AI deployment in healthcare. Completing student group projects.

Key Topics:

- Ethical AI deployment in healthcare.
- Addressing cross-cultural implementation challenges.
- Global health policy and technology transfer considerations.

Potential Learning Activities:

- Collaborative projects - refinement of the analytic exercises from Week 2.
- Class exercises encouraging robust discussions of global health policy and technology transfer.

Readings:

Obermeyer, Ziad, Brian Powers, Christine Vogeli, and Sendhil Mullainathan. "Dissecting racial bias in an algorithm used to manage the health of populations." *Science* 366, no. 6464 (2019): 447-453.

Mullainathan, Sendhil, and Ziad Obermeyer. 2021. "On the Inequity of Predicting A While Hoping for B." *AEA Papers and Proceedings* 111: 37-42. DOI: 10.1257/pandp.20211078

Ahmed M, Spooner B, Isherwood J, et al. (October 04, 2023) A Systematic Review of the Barriers to the Implementation of Artificial Intelligence in Healthcare. *Cureus* 15(10): e46454. DOI 10.7759/cureus.46454

"Algorithms for Equity and Inequity," Mullainathan keynote at NBER "Trends and Patterns in Health Disparities" May 2025 [recording will be provided on Piazza]

<https://cdh.stanford.edu/generative-ai-health-low-middle-income-countries>

Collins, Gary S., Karel GM Moons, Paula Dhiman, Richard D. Riley, Andrew L. Beam, Ben Van Calster, Marzyeh Ghassemi et al. "TRIPOD+ AI statement: updated guidance for reporting clinical prediction models that use regression or machine learning methods." *BMJ* 385 (2024).

Sunderajah, Viknesh, Hutan Ashrafian, Sherri Rose, Nigam H. Shah, Marzyeh Ghassemi, Robert Golub, Charles E. Kahn Jr et al. "A quality assessment tool for artificial intelligence-centered diagnostic test accuracy studies: QUADAS-AI." *Nature medicine* 27, no. 10 (2021): 1663-1665.

Chen, Irene Y., Emma Pierson, Sherri Rose, Shalmali Joshi, Kadija Ferryman, and Marzyeh Ghassemi. "Ethical machine learning in healthcare." *Annual review of biomedical data science* 4, no. 1 (2021): 123-144.

Supplemental: _Alsan, Marcella, Owen Garrick, and Grant Graziani. "Does diversity matter for health? Experimental evidence from Oakland." *American Economic Review* 109, no. 12 (2019): 4071-4111.

Alsan, Marcella, and Marianne Wanamaker. "Tuskegee and the health of black men." *The quarterly journal of economics* 133, no. 1 (2018): 407-455.