ZEHUI ZHOU

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EDUCATION

Brown University School of Public Health, Providence, RI, Expected in May 2028
PhD in Health Services Research, Health Economics Track
Relevant Coursework: Applied Econometrics I & II, Epidemiology Methods I & II, Health Services Research Methods I, Medicare Policy Examination (Using Stata), Statistical Programming with R

Yale School of Public Health, New Haven, CT, May 2023
MPH in Health Policy, Public Health Modeling Concentration
Relevant Coursework: Advanced Health Economics, Advanced Topics in Modeling Health Care Decisions (Using Python), Regression Models (Using SAS), Health Economics & US Policy

The George Washington University, Washington, DC, May 2018
BS in Economics; Minors in Mathematics and Statistics
Summa cum laude
Major GPA: 4.00/4.00; Cumulative GPA: 3.89/4.00

RESEARCH EXPERIENCE

Research Assistant, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

Project 1: **Evaluating Home Healthcare Agency and Home Healthcare Professional Responsiveness to Safety Threats During Older Adults' Care Transitions in the Era of COVID-19**, funded by the Agency for Healthcare Research and Quality (PI: Alicia Arbaje), June 2022–June 2024

- Conducted literature reviews on home health care and dementia
- Analyzed data from the Outcome and Assessment Information Set (OASIS), an assessment tool used in home health care to measure patients' functional status, clinical status, and service needs
- Constructed a logistic regression model to determine the impact of COVID-19 on health outcomes of older adults in home healthcare settings using Stata
- Interpreted data to develop reports and presentations detailing analysis methods, findings, limitations, and recommendations to improve home health care and outcomes during COVID-19
- Drafted methods and finding sections of a manuscript for publication

Project 2: **The Role of Certified Infection Preventionists in Reducing Hospital-Associated Infections and Improving Patient Safety Outcomes** (Co-PIs: Yea-Jen Hsu, Jill Marsteller), August 2020–August 2022

- Reviewed empirical studies on the impact of certified infection prevention and control (CIC) specialists on infection prevention and patient safety in acute care settings
- Contributed to building an analytic dataset by cleaning and pooling five years of American Hospital Association (AHA) Annual Survey data, Centers for Medicare & Medicaid Services (CMS) Hospital Compare data, and clinical data
- Examined the relationship of CIC certification with hospital-acquired infections and patient safety outcomes using the analytic dataset
- Created a research poster and assisted in writing manuscripts for publication

Project 3: **Accelerating Collaborations for Evaluation Matching Service**, funded by the Robert Wood Johnson Foundation (Co-PIs: Albert Wu, Jill Marsteller), August 2020–August 2022

- Assisted in expanding Evidence for Action (E4A) research funding to community-based non-profits, social service providers, government agencies, and other less traditionally funded applicants
- Distributed survey questionnaires that evaluated the partnership between researchers and applicants, monitored survey data on Qualtrics, and conducted data cleaning and analyses
- Assisted in writing manuscripts, drafted reports, and created presentation slides
- Organized weekly team meetings, created agendas for the meetings, and tracked progress on action items assigned to team members

Project 4: **An Implementation Science Study of Nursing Use of Music for Pain (M4P)** (Co-PIs: Jill Marsteller, Vinciya Pandian, Elizabeth Scala), November 2020–August 2022
- Constructed different types of music collections, and created and monitored music accounts
- Built an analytic dataset from electronic health records (EHRs) using Stata
- Developed a linear regression model to evaluate the effect of music interventions on patients' pain by comparing pain scores in pre-intervention and post-intervention periods

Project 5: **Working through the Pain: Understanding Challenges and Strategies of Construction Workers Dealing with Pain** (Co-PIs: Yea-Jen Hsu, Jill Marsteller), March 2022–August 2022
- Drafted a study protocol for Institutional Review Board (IRB) review
- Created a survey that was used to determine the extent of pain and working with pain among construction workers and to understand approaches they used to manage and relieve pain

Research Assistant, Johns Hopkins Center for Health Equity, Baltimore, MD
Project 1: **The Five Plus Nuts & Beans for Kidneys Study**, funded by the National Institute for Minority Health and Health Disparities (Co-PIs: Deidra Crews, Edgar Miller), May 2019–May 2021
- Conducted pre-screening calls and recruited patients for the study
- Performed in-person screenings to collect medical information and biospecimen samples
- Organized and produced fact posters and a photobook for the participants
- Conducted focus groups and interviews to understand the food environment in Baltimore from the perspectives of African Americans with kidney issues and hypertension
- Performed qualitative analyses using MAXQDA and drafted a manuscript for the PhotoVoice project

Project 2: **The RICH LIFE (Reducing Inequities in Care of Hypertension: Lifestyle Improvement For Everyone) Study**, funded by the National Heart, Lung, and Blood Institute (NHLBI) in collaboration with the Patient-Centered Outcomes Research Institute (PCORI) (Co-PIs: Lisa Cooper, Jill Marsteller), August 2018–August 2020
- Conducted blood pressure monitoring fidelity audits at 30 participating sites
- Trained research program assistants to conduct patient outreach and data collection, and conducted data quality checks for all the data collected by research program assistants
- Interviewed care managers from participating health systems to understand their experience of care delivery and challenges of implementing the RICH LIFE blood pressure protocol
- Generated statistical reports on participants' health outcomes using REDCap, produced statistical reports on program metrics using Qualtrics, and conducted data analyses using Stata
- Supported clinicians in preparing and writing manuscripts and in processing IRB applications
- Assisted in developing a massive open online course for researchers and public health practitioners
- Assisted in developing virtual and in-person blood pressure training programs for the American Heart Association

PUBLICATIONS
Journal Articles (Peer-Reviewed)
- Arbaje AI, Hsu YJ, **Zhou Z**, Greyson S, Gurses AP, Keller S, Marsteller J, Bowles KH, McDonald MV, Vergez S, Harbison K, Hohl D, Carl K, Leff B. Characterizing changes to older adults' care transition patterns from hospital to home care in the initial year of COVID-19. *Journal of the American Geriatrics Society*. 2024;72(4):1079-1087.
- Sumergrade Webster J, Watson H, Johnson AA, **Zhou Z**, Pantelyat A, Marsteller JA, Pandian V. Music as a patient-centered approach to pain management: Patient collaboration with nurse-led research team. *Journal of Clinical Nursing*. 2023;32(19-20):6768-6770.
- Marsteller JA, Hsu YJ, Weeks K, Oduwole M, Boonyasai RT, Avornu GD, Dietz KB, **Zhou Z**, Brown D, Hines A, Chung S, Lubomski L, Carson KA, Ibe C, Cooper LA; RICH LIFE Project Investigators. Assessing factors influencing commitment to a disparities reduction intervention: social justice attitudes and organizational mission. *Journal for Healthcare Quality*. 2023;45(4):209-219.
- Hsu YJ, **Zhou Z**, Nosakhare E, Marsteller JA. Impact of certified infection preventionists in acute care settings: a systematic review. *American Journal of Infection Control*. 2023;51(3):334-339.
- Hines AL, Brody R, **Zhou Z**, Collins S, Omenyi C, Miller ER, Cooper LA, Crews DC. Contributions of structural racism to the food environment: a photovoice study of Black residents with hypertension in Baltimore, MD. *Circulation: Cardiovascular Quality and Outcomes*. 2022; 15(11):e009301.
- Zhu J, Li L, **Zhou Z**, Lou Q, Wu AW. Variations in patient safety climate in Chinese hospitals. *Journal of Patient Safety*. 2021;17(3):e214-e221.

Other Publications/Materials
- Hsu YJ, Marsteller JA, **Zhou Z**. Finalizing study implementation plan for the Certification Board of Infection Control and Epidemiology. 2020.
- Hines AL, Brody R, **Zhou Z**, Collins SV, Omenyi C, Miller ER, Cooper LA, Crews D. Abstract 14820: Hypertensive patients' perceptions of the food environment. *Circulation*. 2020;142(Suppl_3):A14820.

PRESENTATIONS
- Hsu YJ, **Zhou Z**, Marsteller J. The role of certified infection preventionists in reducing hospital-associated infections and improving patient safety outcomes. Poster Presentation, AcademyHealth Annual Research Meeting, Washington, DC, June 2022
- Boonyasai RT, **Zhou Z**, McCannon E. Measuring blood pressure in primary care. Grace Medical Center Training Session, September 2020

TEACHING EXPERIENCE
Teaching Fellow, Yale School of Public Health, New Haven, CT, Fall 2022
HPM 570: Cost-Effectiveness Analysis and Decision-Making (graduate level)
Instructor: Prof. A. David Paltiel
- Held office hours and review sessions
- Graded exams and assignments

Economics Tutor, Omicron Delta Epsilon Economics Honor Society Alpha Chapter at the George Washington University, Washington, DC, September 2016–May 2018
- Assisted students in understanding complex concepts and terminology of economics

LEADERSHIP AND SERVICE WORK

COVID Testing Site Operator, Yale Pathology Labs and SalivaDirect^{TM}, New Haven, CT, January 2022–May 2023
- Provided free COVID polymerase chain reaction (PCR) tests to New Haven residents
- Operated and organized the testing site
- Collected and entered patient information into the system

Vice President and Chair of Arts and Culture, Association of Chinese Students and Scholars at Yale (ACSSY), New Haven, CT, August 2021–May 2023
- Planned and organized various large entertainment events to promote social and cultural exchanges
- Disseminated Chinese arts and culture to students at Yale University
- Facilitated board meetings and formulated action plans

Volunteer Coach, Volo City Kids Foundation, Baltimore, MD, September 2019–March 2020
- Created a plan for each session, set up equipment, and coordinated activities with other volunteers
- Demonstrated the drills and led players through skill workout
- Managed players during games and assisted with the engagement of all players

Clinical Assistant, The Second Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, Zhejiang, China, Summer 2018
- Assisted physicians and nurses in scheduling patients and preparing medical equipment
- Collected basic information from patients and entered data into online systems
- Educated patients and families about diet, exercise, and healthy lifestyle behaviors

Patient Partner, Johns Hopkins Bayview Medical Center, Baltimore, MD, Summers 2016 and 2017
- Acted as liaison between patients/visitors and hospital staff and kept lines of communication open
- Provided patients with information about hospital policies as well as patient rights and responsibilities
- Reported patient concerns to appropriate staff and assisted in resolving problems

Recruitment Chair, Pi Delta Psi Fraternity at the George Washington University, Washington, DC, December 2015–May 2017
- Planned, organized, and coordinated the spring and fall formal recruitment processes
- Interviewed candidates, chaired recruitment meetings, and facilitated recruitment decisions
- Assigned work shifts to fraternity members

AWARDS AND HONORS
- Horstmann Scholarship, Yale School of Public Health, August 2021–May 2023
- Omicron Delta Epsilon Economics Honor Society Alpha Chapter, September 2016–present
- National Society of Collegiate Scholars, October 2014–May 2018
- Presidential Academic Scholarship, The George Washington University, August 2014–May 2018

CONFERENCE ATTENDANCE
- AcademyHealth Annual Research Meeting, Washington, DC, June 2022
- International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Annual International Meeting, Baltimore, MD, May 2018

SKILLS AND QUALIFICATIONS
- Computer: Stata, R, Python, SAS; Microsoft Word, Excel, PowerPoint, Access; Endnote; REDCap, Qualtrics; MAXQDA
- Language: Mandarin (Native), English (Fluent)