

HONGJIE (HARRY) QIAN

CURRICULUM VITAE

NAME: Hongjie (Harry) Qian, MS, BScPharm ([LinkedIn](#))
ADDRESS: Center for Pharmacoepidemiology & Treatment Sciences
Institute for Health, Health Care Policy and Aging Research
Rutgers University
112 Paterson Street
New Brunswick, NJ 08901
EMAIL: hongjie.qian@rutgers.edu
WEBSITE: hongjie-qian.github.io

EDUCATION

Doctor of Philosophy, Public Health – Epidemiology 09/2025 – Present
Specializing in Pharmacoepidemiology

Rutgers, The State University of New Jersey, New Brunswick, NJ, USA

GPA: 4.0/4.0

- Focus Area: Cardiometabolic Pharmacoepidemiology, Geriatrics, Health Economics & Outcomes Research, Real World Evidence
- Graduate Certificate in *Health Outcomes, Policy, and Economics*
- Advisor: Chintan Dave, PharmD, PhD

Master of Science, Biostatistics 09/2023 – 06/2025

University of California, San Diego, La Jolla, CA, USA

GPA: 3.9/4.0

- Focus Area: Cardiometabolic Pharmacoepidemiology, Patient-Reported Outcomes
- Advisor: Inmaculada Hernandez, PharmD, PhD & Lanting Yang, PhD, MPH

Bachelor of Science, Pharmacy 09/2019 – 06/2023

China Pharmaceutical University, Nanjing, PR China

GPA: 3.8/4.0

- Focus Area: Quantitative Clinical Pharmacology, Pharmacokinetic Modeling
- Advisor: Hua He, PhD, MS

Bachelor of Science (Hons), Biochemistry and Pharmacology 09/2019 – 06/2023

University of Strathclyde, Glasgow, Scotland, UK

GPA: 3.7/4.0

- Honors degree: Upper Second (2:1)
- Advisor: Susan Chalmers, PhD

SKILLS

- **Programming:** R, SAS, SQL, Python, HTML/CSS, MATLAB, Mathematica, NONMEM
- **Data Viz:** Tableau, ggplot2, RShiny, matplotlib, GraphPad, Power BI
- **Data Tools:** AWS, PostgreSQL, Pandas, SciPy, NumPy, PyTorch, TensorFlow, JSON API
- **Databases:** Medicare FFS, CPRD, MarketScan, Optum Clinformatics, Flatiron, SEER-Medicare, FAERS, NSDUH, NHATS

INDUSTRY EXPERIENCE

Artificial Intelligence & Automation in Clinical Pharmacology 06/2025 – 08/2025

Research Intern, Clinical Pharmacology, Arcus Biosciences

Advisor: Ian Linsmeier, PhD, MS

- Developed an R-based, GitHub-integrated, automated package to detect, classify, and export subject-level records across longitudinal PK/ADA datasets, enabling audit-ready and reproducible review.

- Implemented internal validation, changelogs, and request-based review to support downstream modeling and quality assurance in a Phase 3 trial of domvanalimab + zimberelimab combination therapy.
- Conducted a systematic literature review on AI/ML in clinical pharmacology/pharmacometrics and regulatory submissions (NDA/BLA), highlighting dose optimization and model-informed drug development.

ICD-10 Code Disease Severity Modeling

06/2024 – 09/2024

Research Intern, Data Science & Digital Science – Global Development, Johnson & Johnson Innovative Medicine

Advisor: Meagan Rubel, PhD, MPH

- Designed a pipeline matching the FDA Adverse Event Reporting System and FDA OpenLabel databases (2019–present, 13M reports) for on-market drugs for drug safety monitoring and regulatory compliance.
- Used EHRs & claims across therapeutic areas to define clinical trial cohorts by mapping ICD-10/CPT codes to adverse events via LLMs and GenAI, understanding disease progression and patient outcomes.
- Validated reference sets of severity indicators with RWD and identified impacts of demographic & regional factors on trial site selection with explainable AI models, optimizing target population characteristics.

RESEARCH EXPERIENCE

Multimorbidity Modified SGLT2i vs GLP-1RA Target Trial Emulation

10/2025 – Present

Research Lead, Rutgers Center for Pharmacoepidemiology & Treatment Sciences (PETS)

Advisor: Chintan Dave, PharmD, PhD

- Emulating a Medicare-based trial (2013–2021) among older adults with T2D (>250k) comparing CV benefits (HHF) and harms (DKA) of 2nd-line glucose-lowering agents, stratified by terciles of Multimorbidity Weighted Index, Claims-based Frailty Index, and Combined Comorbidity Index.
- Applied IPTW for risk estimation and derived marginal hazard ratios and risk differences at prespecified percentiles to assess effect modification by multimorbidity burden and heterogeneous effects.

Tobacco Use and Risk Perception in Adults with Respiratory Disorders

10/2025 – Present

Biostatistician, Collaborating with the Department of Pharmacy Practice & Administration, Western University

Collaborator: Ligang Liu, PharmD, MPH

- Conducting a cross-sectional study using NSDUH 2021–2023 data to estimate tobacco and nicotine use prevalence and assess associations between respiratory disorders (COPD, asthma), smoking risk perception, and healthcare engagement.
- Applying complex survey design methods to generate nationally representative estimates and identify sociodemographic and clinical predictors of use and counseling receipt.

Patient-Reported Outcomes of VeNS in PTSD-Related Insomnia

11/2024 – 06/2025

Research Analyst, UC San Diego Department of Psychiatry & VA San Diego

Advisor: Xin M. Tu, PhD & Peter Colvonen, PhD

- Led statistical modeling for a randomized, double-blinded, sham-controlled trial assessing the safety and efficacy of vestibular nerve stimulation (VeNS) for insomnia in veterans with PTSD.
- Analyzed patient-reported outcomes (SF-36) via structural equation models across 94 participants from Hong Kong and 52 from Northern Ireland; validated time-of-day effects on sleep latency and quality.

ACEi Discontinuation Pattern in Medicare SGLT2i Users

01/2024 – 06/2025

Research Assistant, Division of Clinical Pharmacy, UC San Diego

Advisor: Inmaculada Hernandez, PharmD, PhD & Lanting Yang, PhD, MPH

- Conducted a retrospective cohort study using Medicare data (>2M users, 2012–2020), examining ACEi use and discontinuation among T2D patients initiating SGLT2i.
- Identified that ACEi discontinuation was significantly associated with specific demographics, comorbidities, and racial variation in medication adherence.

Doxorubicin-Trastuzumab Cardiotoxicity QSP-PBPK-TD Platform

04/2022 – 08/2023

Research Assistant, Center of Drug Metabolism & Pharmacokinetics, China Pharmaceutical University

Advisor: Hua He, PhD, MS

- Developed and validated an *in-silico* platform integrating QSP-PBPK modeling and hiPSC-CM data to predict cardiotoxicity risk of doxorubicin-trastuzumab combination therapy, with simulations adjusted for clinical relevance based on *in vitro-in vivo* expansion (IVIVE).

RESEARCH FUNDING

Active

Evaluating the Role of Multimorbidity in Modulation Medication Effects in Older Adults

(R01HL163163)

02/2023 – 01/2028

Funding Agency: National Heart, Lung and Blood Institute, National Institutes of Health

- PI: Chintan Dave, PharmD, PhD
- Role: Research Assistant

Strengthening the Evidence Base to Support Medication Prescribing in Older Adults with Chronic Kidney Disease (R01DK139163)

01/2025 – 12/2028

Funding Agency: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health

- PI: Chintan Dave, PharmD, PhD
- Role: Research Assistant

PUBLICATIONS

- **Qian, H.**, Hernandez, I., & Yang, L. (2026). Predictors of Discontinuation of Angiotensin Converting Enzyme Inhibitors Use Among Medicare Beneficiaries Using Sodium-Glucose Cotransporter 2 Inhibitors. *Pharmacoepidemiology and Drug Safety*, 35(4), e70352.
- Sang, L., Zhou, Z., Luo, S., **Qian, H.**, Zhou, Y., He, H., & Hao, K. (2024). An *in-silico* platform to predict cardiotoxicity risk of anti-tumor drug combination with hiPSC-CMs based *in vitro* study. *Pharmaceutical Research*, 41(2), 247–262.

IN PREPARATION

- Qian, H., O'Malley, K., & Dave, C. Association of Multimorbidity Burden with the Safety and Effectiveness of SGLT2 Inhibitors Versus DPP-4 Inhibitors Among Older Adults with Type 2 Diabetes.

SOFTWARE

- **cpddc**: Clinical Pharmacology Data Diff Changelog (R package) 12/2025
Author & Developer. QC automation and version-difference reporting for PK/ADA datasets across vendor transfers.

SYMPOSIUMS, SEMINARS, AND ORAL PRESENTATIONS

INTERNATIONAL

- **ISPE 2026 Annual Meeting (Milan, Lombardy, Italy)** 08/2026
Effect Modification by Multimorbidity Burden on the Effectiveness and Safety of SGLT2 inhibitors in Older Adults with T2D: A Target Trial Emulation study.

INTERNAL

- **2025 Arcus Biosciences Internship Research Presentation (Hayward, CA)** 08/2025
An Automated, GitHub-Compatible, and Regulated Tool for Clinical Pharmacology Data Difference Changelog (DDC).
- **2024 Janssen Oncology Intern Research Symposium (San Diego, CA)** 08/2024
Identifying & Modifying Toxic Events at the ICD-10 Level in JJIM Clinical Studio.

PEER-REVIEWED ABSTRACTS, PODIUM, AND POSTER PRESENTATIONS

- **ISPOR 2026 (Philadelphia, PA)** 05/2026
Effect Modification by Multimorbidity Burden on the Effectiveness and Safety of SGLT2 inhibitors in Older Adults with T2D: A Target Trial Emulation study.
- **2024 American College of Clinical Pharmacy Annual Meeting (Phoenix, AZ)** 10/2024
Predictors of Discontinuation of Angiotensin Converting Enzyme Inhibitors Use Among Medicare Beneficiaries Using Sodium-Glucose Cotransporter 2 Inhibitors.
- **2024 UC San Diego Public Health Research Day (San Diego, CA)** 05/2024
Solitude's Shadow: The Mental Health Maze in COVID – Effects of Social Isolation During the COVID-19 Pandemic on Mental Health.

AD HOC PEER REVIEWER

JOURNAL REVIEWER

Diabetes, Obesity and Metabolism (19)

Since 01/2025

	Qian, Hongjie (Harry) Curriculum Vitae	
<i>The BMJ</i> (1)	Since 07/2025	
<i>PLOS One</i> (3)	Since 07/2025	
<i>Journal of Diabetes Research</i> (2)	Since 10/2025	
<i>Pharmacoepidemiology and Drug Safety</i> (3)	Since 10/2025	
<i>Journal of Medical Internet Research</i> (3)	Since 11/2025	
<i>Annals of Epidemiology</i> (1)	Since 01/2026	
ABSTRACT REVIEWER		
<i>ISPOR Annual Meeting 2026, Philadelphia, PA</i>		02/2026

HONORS & AWARDS

Fellowships & Scholarships

Buckingham Mountain Student Fellowship , Buckingham Mountain Foundation (\$105)	02/2026
GenScript Life Sciences Fellowship , GenScript Biotech & China Pharmaceutical University (¥8,000)	06/2023

Conference Travel Awards

Wertheim Endowment MS Student Travel Award , UC San Diego (\$310)	03/2025
Graduate Travel Grant , Graduate & Professional Student Association, UC San Diego (\$300)	07/2024

Competition Awards & Honors

1st Prize , Scholarship for Exploring the World, China Pharmaceutical University	06/2022
Gold Medal , International Genetically Engineered Machine (iGEM)	11/2021
Best Target Molecule Award , International Directed Evolution Competition (iDEC)	10/2021
3rd Prize , China Undergraduate Mathematical Contest in Modeling (CUMCM)	10/2021
Meritorious , Mathematical/Interdisciplinary Contest in Modeling (MCM/ICM), COMAP	05/2021

EXTRA-CURRICULAR CERTIFICATES

Clinical Pharmacy/Pharmacology, Pharmacoepidemiology & Regulatory Sciences

Drug Discovery, Development, & Regulation , 2024 UCSF-Stanford CERSI	11/2024
Statistical Reasoning and Algorithms in Pharmacovigilance , Uppsala Monitoring Center	07/2022
Principles of Clinical Pharmacology , National Institutes of Health	07/2021
Non-compartmental Analysis Using Open-Source R , Project Dontabhaktuni	11/2023
Monolix – Non-compartmental Analysis, Bioequivalence and Beyond , Simulations Plus	07/2023

Research Compliance

HIPAA Research Privacy & Good Clinical Practice , CITI Program	02/2024
---	---------

MENTORING AND ADVISING

RESEARCH MENTORING AND SUPERVISION

Master of Science Students

Tran, Adam (Cohort 2024, MS in Biostatistics, '2026, UC San Diego) <i>Peer Mentor, Graduate Student Peer Mentoring Program</i>	2024 – 2025
Wang, Yuehuan (Jessie) (MS in Biostatistics, '2026, UC San Diego) <i>Peer Mentor, Graduate Student Peer Mentoring Program</i>	2024 – 2025

LONG-TERM INFORMAL MENTORING AND CAREER DEVELOPMENT

Doctor of Philosophy Students

Yu, Zeshui (Dominic) (University of Illinois Chicago) <i>PhD in Pharmacy (Pharmacy Systems, Outcomes, and Policy), Pharmacoepidemiology track, '2030</i>	2025 – Present
Wang, Yumeng (University of Southern California) <i>PhD in Clinical and Experimental Therapeutics, Pharmacoepidemiology track, '2030</i>	2025 – Present

PROFESSIONAL MEMBERSHIPS

Member, <i>Society for Epidemiologic Research (SER)</i>	02/2026 – Present
Member, <i>International Society for Pharmacoconomics & Outcomes Research (ISPOR)</i> <i>Member of the Real World Evidence Special Interest Group (SIG).</i>	10/2025 – Present

	Qian, Hongjie (Harry) Curriculum Vitae
Member, <i>International Society for Pharmacoepidemiology (ISPE)</i> <i>Member of the Drug-Drug Interaction & Geriatric Pharmacoepidemiology Special Interest Groups (SIGs).</i>	03/2025 – Present
Member, <i>American College of Clinical Pharmacology (ACCP)</i>	08/2024 – Present
Member, <i>American College of Clinical Pharmacy (ACCP)</i> <i>Member of the Health Outcomes Practice and Research Network (PRN).</i>	06/2024 – Present
Member, <i>American Statistical Association (ASA) San Diego Chapter</i>	09/2023 – 06/2025