

# HONGJIE (HARRY) QIAN

New Brunswick, NJ

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## EDUCATION

<b>Doctor of Philosophy in Public Health - Pharmacopidemiology</b> Rutgers, The State University of New Jersey, New Brunswick, NJ	<b>09/2025 - Present</b> GPA: 4.0/4.0
<b>Master of Science in Biostatistics</b> University of California San Diego, La Jolla, CA	<b>09/2023 - 06/2025</b> GPA: 3.9/4.0
<b>Bachelor of Science in Pharmacy</b> China Pharmaceutical University, Nanjing, PR China	<b>09/2019 - 06/2023</b> GPA: 3.8/4.0
<b>Bachelor of Science (Hons) in Biochemistry and Pharmacology</b> University of Strathclyde, Glasgow, Scotland	<b>09/2019 - 06/2023</b> GPA: 3.7/4.0

## INDUSTRY EXPERIENCE

<b>Artificial Intelligence &amp; Automation in Clinical Pharmacology</b> Research Intern, Clinical Pharmacology, Arcus Biosciences	<b>06/2025 - 08/2025</b>
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- Developed an R-based, GitHub-integrated, automated pipeline 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 structured literature review on AI/ML in clinical pharmacology/pharmacometrics and regulatory submissions (NDA/BLA), highlighting dose optimization and model-informed drug development.

<b>ICD-10 Code Disease Severity Modeling</b> Research Intern, Data Science & Digital Science - Global Development, Johnson & Johnson Innovative Medicine	<b>06/2024 - 09/2024</b>
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- 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

<b>Patient-Reported Outcomes of VeNS in PTSD-Related Insomnia</b> Research Analyst. Supervised by Dr Xin Tu & Dr Peter Colvonen, UC San Diego Psychiatry & VA San Diego	<b>11/2024 - 06/2025</b>
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- Led statistical modeling for a randomized, double-blinded, sham-controlled trial assessing the safety and efficacy of vestibular nerve stimulation (VeNS) in reducing insomnia among veterans with PTSD.
- Analyzed patient-reported outcomes, SF-36, with a structural equation model for sleep latency and quality improvements in 94 participants from Hong Kong, China, and 52 participants from Northern Ireland.
- Validated VeNS as an alternative low-risk treatment for insomnia via data integrity and time-of-day effects.

<b>DDI Assessment in Medicare AFib Patients Using SSRIs &amp; Anticoagulants</b> Research Assistant. Supervised by Dr Inmaculada Hernandez, Division of Clinical Pharmacy, UC San Diego	<b>07/2024 - 06/2025</b>
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- Designed a nested case-control study with Medicare data (2012-2021) to examine bleeding risks from SSRIs combined with warfarin or DOACs in atrial fibrillation (AFib) patients.
- Defined drug exposure based on a 30-day hazard period, using conditional Logistic regression for analysis.
- Aiming to fill evidence gaps in drug safety related to potential drug-drug interaction (DDI), enhancing AFib management strategies through RWD insights.

<b>ACEi Discontinuation Pattern in Medicare SGLT2i Users</b> Research Assistant. Supervised by Dr Inmaculada Hernandez, Division of Clinical Pharmacy, UC San Diego	<b>01/2024 - 06/2025</b>
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- Conducted a retrospective cohort study using Medicare data in over 2M users (2012-2020) to examine ACEi use and discontinuation among type 2 diabetes patients initiating SGLT2i.
- Discovered ACEi discontinuation was significantly associated with certain demographics and comorbidities, emphasizing the impact of chronic conditions and variation by races on medication adherence.
- Highlighted synergistic effects of SGLT2i & ACEi co-medication on renal protection and health outcomes.

## **Doxorubicin & Trastuzumab Cardiotoxicity QSP-PBPK-TD Platform** **04/2022 - 08/2023**

Research Assistant. Supervised by Dr Hua He, Center of DMPK, China Pharmaceutical University

- Developed an *in silico* platform integrating QSP-PBPK modeling and hiPSC-CM data to predict cardiotoxicity risk of anti-tumor co-medication, conducting simulations to evaluate effects on cardiac function.
- Validated predictions against virtual patients, adjusted for clinical relevance & reliability.
- Guided safer combination therapies and informed clinical cardiotoxicity reduction in patient outcomes.

## **PUBLICATIONS**

- **Qian, H.**, Hernandez, I., Yang, L., (2025). Predictors of Discontinuation of Angiotensin Converting Enzyme Inhibitors Use Among Medicare Beneficiaries Using Sodium-Glucose Cotransporter 2 Inhibitors. *Pharmaciepidemiology and Drug Safety* (Under Revision).
- Sang, L., Zhou, Z., Luo, S., **Qian, H.**, Zhou, Y., He, H. and 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), pp.247-262.

## **CONFERENCE PRESENTATIONS**

- **2025 Arcus Biosciences Internship Research Presentation** **08/2025**  
An Automated, GitHub-Compatible, and Regulated Tool for Clinical Pharmacology Data Difference Changelog (DDC).
- **2024 American College of Clinical Pharmacy Annual Meeting** **10/2024**  
Predictors of Discontinuation of Angiotensin Converting Enzyme Inhibitors Use Among Medicare Beneficiaries Using Sodium-Glucose Cotransporter 2 Inhibitors.
- **2024 Janssen Oncology Intern Research Symposium** **08/2024**  
Identifying & Modifying Toxic Events at the ICD-10 Level in JJIM Clinical Studio.
- **2024 UC San Diego Public Health Research Day** **05/2024**  
Solitude's Shadow: The Mental Health Maze in COVID - Effects of Social Isolation During the COVID-19 Pandemic on Mental Health.

## **SKILLS**

<b>Programming</b>	R, SAS, SQL, Python, HTML/CSS, MATLAB, Mathematica, NONMEM
<b>Data Viz</b>	Tableau, ggplot2, RShiny, matplotlib, GraphPad, PowerBI
<b>Data Tools</b>	AWS, PostgreSQL, Pandas, Scipy, Numpy, PyTorch, TensorFlow, JSON API
<b>Software</b>	Monolix, PK-Sim, SnapGene, MEGA, BLAST, PyMOL, ImageJ, Berkeley Madonna
<b>Databases</b>	Medicare FFS, Optum Clinformatics, Flatiron, SEER-Medicare, MarketScan, FAERS, CPRD

## **AWARDS & SCHOLARSHIPS**

<b>Wertheim Endowment Master of Science Student Travel Award</b> , UC San Diego	<b>03/2025</b>
<b>Graduate Travel Grant</b> , Graduate & Professional Student Association, UC San Diego	<b>07/2024</b>
<b>GenScript Life Sciences Fellowship</b> , GenScript Biotech & China Pharmaceutical University	<b>06/2023</b>
<b>1<sup>st</sup> Prize</b> , Scholarship of Exploring World, China Pharmaceutical University	<b>06/2022</b>
<b>Gold Medal</b> , International Genetically Engineered Machine (iGEM)	<b>11/2021</b>
<b>Best Target Molecule Award</b> , International Directed Evolution Competition (iDEC)	<b>10/2021</b>
<b>3<sup>rd</sup> Prize</b> , China Undergraduate Mathematical Contest in Modeling (CUMCM)	<b>10/2021</b>

<b>Meritorious, Mathematical/Interdisciplinary Contest in Modeling (MCM/ICM), COMAP</b>	<b>05/2021</b>
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## **EXTRA-CURRICULUM CERTIFICATES**

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<b>Drug Discovery, Development, &amp; Regulation, 2024 UCSF-Stanford CERSI</b>	<b>11/2024</b>
<b>Non-compartmental Analysis Using Open Source R, Project Dontabhaktuni</b>	<b>11/2023</b>
<b>Monolix - Non-compartmental Analysis, Bio-equivalence and Beyond, Simulations Plus</b>	<b>07/2023</b>
<b>HIPAA Research Privacy &amp; Good Clinical Practice, CITI Program</b>	<b>02/2024</b>
<b>Statistical Reasoning and Algorithms in Pharmacovigilance, Uppsala Monitoring Center</b>	<b>07/2022</b>
<b>Principles of Clinical Pharmacology, National Institutes of Health</b>	<b>07/2021</b>

## **PEER REVIEWER**

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- *Diabetes, Obesity and Metabolism*. Since **01/2025**.
- *The BMJ*. Since **07/2025**.

## **ACTIVITIES**

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<b>Member</b> , International Society for Pharmacoepidemiology (ISPE)	<b>03/2025 – Present</b>
Member of the Drug-Drug Interaction & Geriatric Pharmacoepidemiology Special Interest Groups (SIGs).	
<b>Member</b> , American College of Clinical Pharmacology (ACCP)	<b>08/2024 – Present</b>
<b>Member</b> , American College of Clinical Pharmacy (ACCP)	<b>06/2024 – Present</b>
Member of the Health Outcomes Practice and Research Network (PRN).	
<b>Member</b> , American Statistical Association (ASA) San Diego Chapter	<b>09/2023 – 06/2025</b>
Extensively and intensively involved in and communicated with the statistical community in San Diego, CA.	
<b>Head</b> , Department of Sino-UK Student Affairs, China Pharmaceutical University	<b>09/2019 – 06/2022</b>
Aided communication between students and teachers in the CPU Sino-UK specialty.	
<b>Member</b> , College Students Art Troupe, China Pharmaceutical University	<b>09/2019 – 06/2020</b>
Organized activities and community service activities within the CPU College Students Art Troupe.	