

HONGJIE (HARRY) QIAN

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EDUCATION

Master of Science in Biostatistics

University of California San Diego, La Jolla, CA

Sept 2023 - Jun 2025

GPA: 4.0/4.0

Bachelor of Science in Pharmacy

China Pharmaceutical University, Nanjing, PR China

Sept 2019 - Jun 2023

GPA: 3.8/4.0

Bachelor of Science (Hons) in Biochemistry and Pharmacology

University of Strathclyde, Glasgow, Scotland

Sept 2019 - Jun 2023

GPA: 3.7/4.0

RESEARCH EXPERIENCE

Patient-Reported Outcomes of VeNS in PTSD-Related Insomnia

Nov 2024–Present

Research Analyst. Supervised by Dr Xin Tu & Dr Peter Colvonen, UC San Diego Psychiatry & VA San Diego

- Conducted a randomized, double-blinded, sham-controlled trial of vestibular nerve stimulation (VeNS) for efficacy investigation in reducing moderate-to-severe insomnia symptoms 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.

DDI Assessment in Medicare AFib Patients Using SSRIs & Anticoagulants

Jul 2024–Present

Research Assistant. Supervised by Dr Inmaculada Hernandez, Division of Clinical Pharmacy, UC San Diego

- 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 real-world data (RWD) insights.

ICD-10 Code Disease Severity Modeling

Jun 2024 - Sept 2024

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

- 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 our reference set of severe disease indicators with RWD and identified impacts of social determinants on trial site selection with explainable AI models, promoting DEI in trials.

ACEi Discontinuation Pattern in Medicare SGLT2i Users

Jan 2024 - Aug 2024

Research Assistant. Supervised by Dr Inmaculada Hernandez, Division of Clinical Pharmacy, UC San Diego

- 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 racial disparities on medication adherence.
- Highlighted synergistic effects of SGLT2i & ACEi co-medication on renal protection and health outcomes.

Doxorubicin & Trastuzumab Cardiotoxicity QSP-PBPK-TD Platform

Apr 2022 - Aug 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., (2024). Predictors of Discontinuation of Angiotensin Converting Enzyme Inhibitors Use Among Medicare Beneficiaries Using Sodium-Glucose Cotransporter 2 Inhibitors. *Diabetes, Obesity and Metabolism (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

- **2024 American College of Clinical Pharmacy Annual Meeting** **Oct 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** **Aug 2024**
Identifying & Modifying Toxic Events at the ICD-10 Level in JJIM Clinical Studio.
- **2024 UC San Diego Public Health Research Day** **May 2024**
Solitude's Shadow: The Mental Health Maze in COVID - Effects of Social Isolation During the COVID-19 Pandemic on Mental Health.

SKILLS

Programming R, SAS, SQL, Python, HTML/CSS, MATLAB, Mathematica
Software Monolix, PK-Sim, SnapGene, MEGA, BLAST, PyMOL, ImageJ, Berkeley Madonna
Data Viz Tableau, ggplot2, RShiny, matplotlib, GraphPad, PowerBI
Data Tools AWS, PostgreSQL, Pandas, Scipy, Numpy, PyTorch, TensorFlow, JSON API

AWARDS & SCHOLARSHIPS

Graduate Travel Grant, Graduate & Professional Student Association, UC San Diego **Jul 2024**
GenScript Life Sciences Fellowship, GenScript Biotech & China Pharmaceutical University **Jun 2023**
1st Prize, Scholarship of Exploring World, China Pharmaceutical University **Jun 2022**
Gold Medal, International Genetically Engineered Machine (iGEM) **Nov 2021**
Best Target Molecule Award, International Directed Evolution Competition (iDEC) **Oct 2021**
3rd Prize, China Undergraduate Mathematical Contest in Modeling (CUMCM) **Oct 2021**
Meritorious, Mathematical/Interdisciplinary Contest in Modeling (MCM/ICM), COMAP **May 2021**

EXTRA-CURRICULUM CERTIFICATES

Drug Discovery, Development, & Regulation, 2024 UCSF-Stanford CERSI **Nov 2024**
HIPAA Research Privacy & Good Clinical Practice, CITI Program **Feb 2024**
Statistical Reasoning and Algorithms in Pharmacovigilance, Uppsala Monitoring Center **Jul 2022**
Principles of Clinical Pharmacology, National Institutes of Health **Jul 2021**

ACTIVITIES

Member, American College of Clinical Pharmacy (ACCP) **Jun 2024 – Present**
Engaging in academic social activities and Health Outcomes Practice and Research Network (PRN) member.

Member, American Statistical Association (ASA) San Diego Chapter **Sept 2023 – Present**
Extensively and intensively involved in and communicated with the statistical community in San Diego, CA.

Member, WikiProject Olympics **Aug 2021 – Present**
Up-to-date editions of Olympics-topic articles in both Chinese and English Wikipedian communities.