

LI XINNONG

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Education

The State University of New York at Buffalo

Buffalo, NY, United States

PhD of Pharmaceutical Sciences

Aug 2023 - Present

Current GPA: 3.97/4.0

Master of Pharmacometrics and Personalized Pharmacotherapy

Aug 2021 - May 2023

GPA: 4.0/4.0

Main Courses: Advanced Pharmacokinetics, Population PK/PD Modeling, Computational Basis of Pharmacometrics

Shenyang Pharmaceutical University

Shenyang, Liaoning, China

Bachelor of Pharmacy

Sep 2016 - Jul 2020

GPA: 3.66/4.0

Main Courses: Pharmacology, Pharmaceutics, Statistics

Research & Work Experiences

The State University of New York at Buffalo

Buffalo, NY, United States

PhD Student of Pharmaceutical Sciences at Dr. Robert Bies Lab

Sep 2022 - Present

Female Reproductive Tract PBPK Model Project

- Developed and expanded the female reproductive tract PBPK model platform using R mrgSolve package
- Participated in the development and optimization R Shiny App for the female reproductive tract PBPK model

Machine Learning Enhanced Nonlinear Mixed-effect Model Selection Project

- Participated in the test, application and optimization of pyDarwin toolbox in automated nonlinear mixed-effect model building

Drug Release Kinetic Model of Long-acting IUD

- Established *in vitro* drug release kinetic model of Levonorgestrel IUD (Mirena, Kyleena, Skyla) using python

Master Student of Pharmacometrics at Dr. Robert Bies Lab

HPTN 083 Population PK Model Project

Jan 2022 – Aug 2022

- Estimated Cabotegravir long-acting response in preventing HIV by calculating AUC, PAIC timeframe based on population pharmacokinetic model

Rilpivirine PBPK Model Project

- Collaborated with senior researcher to establish the Rilpivirine PBPK model which is applied to predict the maternal pharmacokinetics

University of Minnesota

Minneapolis, MN, United States

Student Intern at Dr. Karunya Kandimalla Lab

Jan 2020 - June 2020

- Established a four-compartment pharmacokinetic model to evaluate the effect of A β 40 exposure on Blood- Brain glucose transfer in Alzheimer's Disease

Center for Quantitative Clinical Pharmacology

Shenyang, Liaoning, China

Research Assistant

May 2019 - Jan 2020

- Conducted literature review to summarize data and equations, established Azithromycin PBPK model using PK-Sim and MoBi, and wrote the manuscript

Publication

- pyDarwin Machine Learning Algorithms Application and Comparison in Nonlinear Mixed-effect Model Selection and Optimization. Li X, Sale M, Nieforth K, Craig J, Wang F, Solit D, Feng K, Hu M, Bies R, Zhao L. (2024, JPKPD)

- pyDarwin: A Machine Learning Enhanced Automated Nonlinear Mixed-Effect Model Selection Toolbox. **Li X**, Sale M, Nieforth K, Bigos KL, Craig J, Wang F, Feng K, Hu M, Bies R, Zhao L. (2024, Clinical Pharmacology & Therapeutics)
- PERFORMANCE OF MACHINE LEARNING ALGORITHM FOR MODEL SELECTION. **Li X**, Sale M, Nieforth K, Craig J, Wang F, Solit D, Feng K, Hu M, Bies R, Zhao L. (2024, PAGE Poster)
- PHYSIOLOGICALLY BASED PHARMACOKINETIC MODEL OF DRUG DELIVERY IN THE FEMALE REPRODUCTIVE TRACT [ASCPT Poster]. **X. Li**, T. Straubinger, G. Valicheria, Z. Zhang, S. Achilles, M. Donnelly, L. Zhao, E. Tsakalozou, B. Chen, L. Rohan, R. Bies (2023, ASCPT Presidential Trainee Poster)
- DEVELOPMENT OF GRAPHICAL INTERFACE IN R SHINY FOR PBPK MODEL-BASED PREDICTION AND SIMULATION OF DRUG DELIVERY IN THE FEMALE REPRODUCTIVE TRACT. T. Straubinger, **X. Li**, G. Valicheria, Z. Zhang, S. Achilles, M. Donnelly, L. Zhao, E. Tsakalozou, B. Chen, L. Rohan, R. Bies. (2023, ASCPT Poster)
- PBPK MODEL PREDICTION OF LONG-ACTING CAB AND RPV CONCENTRATIONS IN PREGNANCY. Y. Yu, A. Bekker, **X. Li**, R. Bies, R. Scott. (2023, CROI Poster)

Scholarships

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| • Presidential Trainee Award of ASCPT 2024 | Mar 2024 |
| • Marilyn Morris Excellence in Pharmaceutical Sciences Fellowship Award | Nov 2023 |
| • Liaoning Provincial Government Scholarship | Nov 2019 |
| • China National Scholarship | Nov 2018 |

Teaching

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| • FDA Female Reproductive Tract PBPK Shiny App Tutorial | April 2024 |
| • PyDarwin Toolbox Application in Population PK Modeling, Buffalo, PHC610 | April 2024 |

Skills & Interests

- **Technical:** R, Python, C++, Matlab
- **Modeling Tools:** ADAPT5, Phoenix WinNonLin, NONMEM
- **Interest:** Writing Novels, Playing Softball, BJJ, Snowboarding