Eunjeong (Elena) Shin, M.Sc.

Ph.D. Student
Email: eshin@ufl.edu, Phone: +1 404 793 9554

Education:

2014: B.Sc. in Pharmacy, Kyung Hee University, Republic of Korea
2016: M.Sc. in Pharmacy, Kyung Hee University, Republic of Korea
2017 to 2018: Ph.D. Student, Institute of Biomedical Science. Georgia State University

Positions:

2016 to 2017: Researcher, Kyung Hee University, Republic of Korea.
Since 1/2019: Ph.D. Student, College of Pharmacy, University of Florida

Research:

Ms. Shin seeks to the target receptor occupancy patterns of β-lactam antibiotics that elicit synergistic bacterial killing of gram-negative bacteria. Ms. Shin employed latest quantitative and systems pharmacology (QSP) models to identify optimized combination dosing regimen to combat bacteria. Ms. Shin established mass balance kinetic equations for receptor binding of β-lactam antibiotics in QSP models. To identify optimal sets of PBPs whose inactivation by β-lactams yields synergistic killing, the time-course of bacterial morphological changes were characterized via flow cytometry and confocal microscopy. In addition, novel whole-cell PBP binding assay and latest LC-MS/MS based permeability assay were combined to confirm the unique PBP inactivation sets to yield dramatical bacterial killing. Moreover, Ms. Shin is validating combination dosing strategies by dynamic in vitro hollow fiber infection model.

Ms. Shin received her M.S. from College of Pharmacy at Kyung Hee University of Republic of Korea in 02/2016. Her master's thesis was entitled "Pharmacokinetic drug interaction study between atorvastatin and metformin and photodegradation study of montelukast." After graduation, Ms. Shin had been working as a Researcher in Kyung Hee University, which focuses on pharmacokinetic drug interaction of atorvastatin and metformin in developing of a therapeutic agent to reduce the risk of cardiovascular disease for type 2 diabetes. Before joining the University of Florida and the Center for Pharmacometrics & Systems Pharmacology, Ms. Shin had been studying as a Ph.D. student at the Georgia State University for 1 year focusing on developing cross-protective vaccines against influenza A virus and studying about the mechanism of Lactobacillus casei to enhance innate immunity to confer broad protection against influenza A virus.

Publications *(as of 03/29/2021)*	**Published**	**In review**
Peer-reviewed research papers	5	
All papers	5	
International conference abstracts	8	

Grant funding *(as of 03/29/2021)*
ACCP grant as main investigator

PubMed Bibliography:
https://www.ncbi.nlm.nih.gov/myncbi/1-CcenI_55CoPo/bibliography/public/

Google Scholar Citations:
https://scholar.google.com/citations?user=Td2IYPgAAAAJ&hl=en