

DRUG METABOLISM DISCUSSION GROUP

Register

Wednesday, March 27th, 2019

Sanofi

153 2nd Ave, Waltham, MA 02451

This Meeting is Sponsored by:



Biomere, Worcester, MA USA

Entitled

A SWATH proteomics approach to characterize the effect of diabetes and Non-Alcoholic Fatty Liver Disease (NAFLD) on drug disposition

Speaker

Fatemeh Akhlaghi

Professor and Ernest Mario Distinguished Chair in Pharmaceutics,
Department of Biomedical and Pharmaceutical Sciences, College of
Pharmacy, University of Rhode Island
Kingston, RI

Non-Alcoholic Fatty Liver Disease (NAFLD) is characterized by the excess buildup of fat in hepatocyte in people who drink little or no alcohol. The main goal of this research is to develop a physiologically based pharmacokinetic (PBPK) model for the prediction of drug disposition in patients with NAFLD, diabetes mellitus or both. We have established a unique and comprehensively-characterized repository of human liver histologically graded for NASH and fibrosis. Moreover, we are using a validated cell culture model (HepaRG) to recapitulate the effect of diabetes and NAFLD on the expression/activity of DMEs. Utilizing an innovative mass spectrometry-based proteomics technique, with Sequential Windowed Acquisition of All Theoretical Fragment Ion Mass Spectra (SWATH-MS), we have quantified the relative expression of hepatic DME and xenobiotic transporters. The PBPK modeling approach utilizing the protein expression data from diseased tissue will be helpful for the ongoing drug development in the area of NAFLD and diabetes.

Biography: Dr. Fatemeh Akhlaghi has completed a 6-year Doctor of Pharmacy (PharmD) degree in the University of Mashhad, Iran and a Ph.D. degree in Pharmaceutical Sciences in the School of Pharmacy, University of Sydney, Australia. After the completion of a postdoc at Sydney and a three years senior clinical scientist position at the University of Cambridge, UK, she has joined the College of Pharmacy at University of Rhode Island (URI) in 2001 as a tenure-track assistant professor. The URI College of Pharmacy currently ranks 11th in federal research funding in the United States (among >130 colleges of pharmacy) and is home to one of the oldest graduate programs in pharmaceutics. At URI, she has established the "Clinical Pharmacokinetics Research Laboratory" and has been promoted to full professor in 2011 and the Ernest Mario Distinguished Chair of Pharmaceutics in 2014. She is also an adjunct professor of medicine at Brown University Medical School. Dr. Akhlaghi teaches clinical pharmacokinetics to Doctor of Pharmacy Students and graduate level pharmacokinetic and drug metabolism courses. Her laboratory that is funded by the National Institutes of Health (NIH) and various pharmaceutical companies specializes in understanding the effect of diabetes and Non-Alcoholic Fatty Liver Disease (NAFLD) on drug disposition and drug development for the treatment of Alcohol Use Disorder

The cocktail hour will begin at 5:30 PM, dinner at 6:30 PM and the presentation at 7:30 PM.

If you need a 'Special Food Request' contact:

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The deadline for reservations or cancellations is 4pm, March 24th, 2019

*****NO WALK-IN OR LATE REGISTRATION ACCEPTED*****

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