DRUG METABOLISM, TRANSPORTERS AND TOXICOLOGY

18th September 2019, Wednesday,

at JN Tata Auditorium, IISc., Bangalore

Organizing Committee Members: Sagnik Chatterjee and Nilesh Gaud

Topic	Time
Introduction to Metabolism: Phase I, II reactions (focused on reaction mechanisms) ***Dr. Krishna Iyer*** *Professor of Pharmaceutical Chemistry* *Bombay College of Pharmacy, Mumbai*	09:00 - 10:30
Tea Break (15 min)	
Drug Drug Interactions - Basic Concepts and Assessment ***Dr. Mike Sinz,*** *Bristol-Myers Squibb.* *Princeton, USA*	10:45 - 12:15
Lunch (1 hour)	
Introduction to Drug Transporters and their Role in Drug Disposition ***Dr. Bhagwat Prasad,*** *Washington State University, USA*	13:15 - 14:45
Tea Break (15 min)	
Basic Concepts of Toxicology ***Dr. Myrtle Davis,*** *Bristol-Myers Squibb.* *Princeton, USA*	15:00 - 16:30

MICROSAMPLING AND MASS SPECTROMETRY WORKSHOP

18th September 2019, Wednesday,

at Prof. Utpal Tatu's Lab, IISc., Bangalore

Organizing Committee Members: Priyadeep Bhutani, Prashant Kole and Mallikarjun

Scope:
Workshop will provide practical training on;

a) application of mass spectrometry in field of DMPK. It includes basics of mass spectrometry, training on sample preparation, method development and data analysis
b) know-hows of microsampling methodologies and Dried Matrix Sample bioanalysis in pre-clinical PK/TK/efficacy studies

Topic	Time
Inauguration	09:45 -10:00
A lecture on Serial microsampling in rodent species: Serial sampling sites, procedures, sampling volumes, sample handling, Sample collection cards, spotting technique, sample storage and transfer ***Dr. Prashant Kole,*** *BBRC, Syngene International Ltd, India*	10:00 - 11:15
Tea Break (15 min)	
Understanding on Hardware and Software (Data acquisition and processing) of Mass Spectrometry ***Mallikarjun,*** *IISc.*	11:30 - 12:30
Lunch (1 hour)	
Calibration, Sample Preparation and Method Development ***Mallikarjun,*** *IISc.*	13:30 - 14:30
Data Analysis and Interpretation ***Mallikarjun,*** *IISc.*	14:30 - 15:30
Demonstration of Nanotemper products ***Dr. Sivaramaiah Nallapeta,*** *NanoTemper*	15:30 - 16:00
Question & Answers	16:00 - 16:30

Venue: Prof. Utpal Tatu's lab
FB-03, Department of Biochemistry, New Biological Science Building,
Indian Institute of Science, Bangalore, 560012

PHARMACEUTICAL MODELING AND SIMULATION (PUMAS) SOFTWARE

18th September 2019, Wednesday,

at JN Tata Auditorium, IISc., Bangalore

By: Dr. Vijay Ivaturi, University of Maryland, USA

Organizing Committee Members: Devang Shah and Vishwanath KM

Abstract:

Pharmacometrics is the practice of using mathematical models for decision making in drug development and clinical therapeutics. In this day-long workshop, participants will be introduced to PuMaS (Pharmaceutical Modeling and Simulation).

PuMaS is a domain-specific extension of the Julia differential equation solver libraries for performing analyses of pharmacometric models. We will start by showing users how to implement PK/PD models with complex dosing schedules and incorporating population models. Then we will turn to the process of estimating population parameters from data. Next, the capability of PuMaS to perform common pre-clinical and clinical data analytics workflows such as Non-compartmental analysis (NCA), In vitro- in vivo correlation (IVIVC), Bioequivalence (BE) and Clinical Trial Design (CTS) will be introduced.

This workshop will be a mix of demonstration and hands-on work where participants will be able to download the PuMaS software and perform the analysis in real-time. At the end of the workshop, participants will have an overview of the PuMaS toolkit and its utility in modern age computing.

Topic	Time
Registration	09:00 - 09:30
Introduction	09:30 - 11:00
Tea Break (15 min)	
PuMaS software	11:15 - 13:00
Lunch (1 hour)	
PuMaS software (Contd…)	14:00 - 15:30
Tea Break (15 min)	
PuMaS software (Contd…)	15:45 - 17:00

Note: All attendees will be responsible for bringing their own laptop