

ADVANCED POPULATION PHARMACOKINETIC/ PHARMACODYNAMIC MODELLING:

Antimicrobials and Immunosuppressants

Venue: Innes Room, Union College, University of Queensland, St Lucia

Date: Thursday 13 September- Saturday 15 September 2018

Faculty & Tutors

- A/Prof Michael Neely, The University of Southern California, USA
- Dr Catherine Byrne, Health Products Regulatory Authority, Ireland
- Dr Christina Koenig, The University Medical Centre Hamburg, Germany
- Dr Fekade Sime, The University of Queensland, Australia
- Mr Clement Boidin, Claude Bernard University, France
- Dr Suzanne Parker, The University of Queensland, Australia
- Prof Jason Roberts, The University of Queensland, Australia

Course Objectives

- Define PK and PK/PD structural models that can be solved analytically and models that require differential equations.
- Analyse PK and PK/PD datasets.
- Perform basic Monte Carlo simulations for PK and PK/PD analysis.
- Optimise dosing for an individual patient using dosing software.

Suitable for health care practitioners involved in complex drug dosing including clinical pharmacists, infectious diseases physicians, intensive care physicians, transplant physicians and clinical pharmacologists. Also suitable for basic researchers including pharmacologists and translational scientists.

Workshop Program

DAY 1 – Pharmacokinetic modelling		
08:00-08:25	Registrations	
08:25- 08:35	Welcome	Prof. Jason Roberts
08:35-09:00	Introduction to Pharmacometrics	A/Prof. Michael Neely
09:00-10:00	Review of pre-workshop tutorial	Dr. Christina Koenig
10:00-10:30	Morning Tea	
10:30-12:30	Fitting data to models in Pmetrics	Dr. Catherine Byrne
12:30-13:30	Lunch	
13:30-15:00	Details and plotting of Pmetrics objects	Mr. Clement Boidin
15:00-15:30	Afternoon Tea	
15:30-17:30	Pmetrics modelling exercises*	Tutors
18:30- 21:30	Networking Dinner	Boatshed Restaurant
DAY 2 – Pharmacokinetic simulations / Pharmacodynamic modelling		
9:00 – 10:30	Simulating and probability of target attainment with Pmetrics	Dr. Catherine Byrne
10:30-11:00	Morning Tea	
11:00-12:30	Simulation exercises*	Tutors
12:30-13:30	Lunch	
13:30-14:30	Pharmacodynamic principles	Dr. Fekade Sime
14:30-15:30	Building pharmacodynamic models	A/Prof. Michael Neely
15:30-16:00	Afternoon Tea	
16:00-17:30	Pharmacodynamic modelling exercises*	Tutors
Day 3- Software-based dose optimization		
9:00 – 10:30	Using BestDose	A/Prof. Michael Neely
10:30-11:00	Morning Tea	
11:00-12:30	BestDose Exercises *	Tutors
12:30- 13:30	Lunch	
13:30-14:00	CLOSING	Prof. Jason Roberts
14:00-16:00	Work on your own data with Faculty available for questions	

*tutorial exercises

