

# 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	





Work on your own data with Faculty available for questions	
	Work on your own data with Faculty available for questions

\*tutorial exercises



