CRE REDUCE **CENTRE OF RESEARCH EXCELLENCE**
Redefining Antimicrobial Use To Reduce Resistance

LAPKB
Laboratory of Applied
Pharmacokinetics &
Bioinformatics

MSD

POPULATION PK MODELLING AND DOSE OPTIMISATION OF ANTIMICROBIALS:
PMETRICS/BESTDOSE WORKSHOP

13 - 15th October 2016, Brisbane, Australia

Innes Room, Union College, 38 Upland Road, St Lucia Q 4067

The University of Queensland, Brisbane, Australia

Faculty members:

Prof Michael Neely
The University of Southern California

Prof William Hope
The University of Liverpool, UK,

Prof Jason Roberts
The University of Queensland

Dr Claire Roger
The Nimes University Hospital,
France and The University of
Queensland, Australia

Dr Fekade Sime
The University of Queensland

Dr Suzanne Parker
The University of Queensland

Mr Danny Tsai
Alice Springs Hospital Intensive
Care Unit

Dr Cathy Byrne
Royal College of Surgeons,
Dublin, Ireland.

Course objectives:

- Define PK structural models that can be solved analytically and models that require differential equations

- Create PK datasets appropriate for population analysis

- Fit models to data to estimate population and individual distributions of model parameter values

- Make and customize pharmacometric plots, including but not limited to model parameter joint densities, model diagnostics, and individual or population observations and predictions

- Perform basic and Monte Carlo simulations for PK-PD analysis of antimicrobials in relevant software packages

- Optimize dosing for an individual patient using nonparametric, multiple-model Bayesian adaptive control

apc ACCREDITED CPD

Accreditation number:
S2016/77

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COURSE PROGRAM

Day 1: 13/10	Pmetrics
09:00-9:30	Introduction to Pharmacometrics – Prof Michael Neely
09:30-10:30	Review of pre-workshop tutorial – Prof William Hope
10:30-12:00	Fitting data to models in Pmetrics – Prof Jason Roberts
12:00-13:30	**Lunch**
13:30-15:00	Plotting of Pmetrics objects – Dr Cathy Byrne
15:00-17:00	Pmetrics modeling exercises*
Day 2: 14/10	**Pmetrics/BestDose**
09:00 -10:30	Monte Carlo simulations with Pmetrics – Dr Claire Roger
10:30-12:00	Simulation exercises*
12:00-13:30	**Lunch**
13:30-14:30	Introduction to BestDose – Prof Michael Neely
14:30-17:00	Using BestDose stand-alone – Prof Michael Neely
Day 3: 15/10	**BestDose/Projects**
09:00 -10:30	Using BestDose in R and on the web – Prof Michael Neely
10:30-12:00	BestDose server exercises*
12:00-13:30	**Lunch**
13:30-14:00	Closing and certificates of attendance
> 14:00	Staff available for questions

* Exercises with tutors

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