

DMDG past Open and Joint meeting programmes

DMDG Open Meeting 2019

18 - 20 September 2019 - Robinson College, UK

Wednesday 18 September 2019

- 10.00 - 11.25 **Delegates Arrive, Registration/Tea & Coffee/put up posters** (CWB – Foyer & Plenary)
- 11.30 - 11.45 **DMDG Chair opening address. Becky Scott, GSK** (Auditorium)
- 11.45 - 12.45 **Keynote Speaker. Auditorium**
Creating the future of drug development (and use)
Dr Richard Peck, Global Head, Clinical Pharmacology, F Hoffmann la Roche Ltd
- 12.50 - 13.45 **Lunch, Posters and Exhibition** (CWB – Foyer & Plenary)
- 13.50 - 15.20 **Session 1. Biologics biotransformation. The new frontier in metabolite ID** (Auditorium)
Chair. Kevin Brady, UCB
Speakers.
1.1 Metabolite Identification for Peptides and Larger Biologics. an Innovative Semi-Quantitative Mixed Approach
Marcella Petrone, AstraZeneca and Nick White, AstraZeneca
1.2 In vitro strategy to evaluate therapeutic protein biotransformation during pre-clinical development. Opportunities and remaining challenges
Simon Hauri, Roche
1.3 Biologic Biotransformation Studies in Action at GSK
Scott Summerfield, GSK
- 15.25 - 16.00 **Tea/Coffee & room key collection** (CWB – Foyer & Plenary)
- 16.05 - 17.35 **Session 2. The forgotten organ – The gut microbiome** (Auditorium)
Chair. Ian Wilson, Imperial College
Speakers.
2.1 What did the gut microbiota ever do for us?
Ian Wilson, Imperial College
2.2 The influence of the microbiome on pharmacokinetics – fact or myth?
Edna Choo, Genentech Inc
2.3 Gut microbiota biotransformation of some AstraZeneca oncology drugs and metabolites
Graeme Scarfe, AstraZeneca
- 17.45 - 18.45 **Session 3. Student Poster Blitz** (Auditorium)
Chairs. Claire Henson, Pharmaron UK & Lilly Collins, Sygnature Discovery
- 19.00 - 20.30 **Dinner** (Dining Hall)
- 20.00 - 22.00 **Poster Session, Exhibition, Drinks Reception** (CWB – Foyer & Plenary)

Thursday 19 September 2019

- 08.30 - 10.00 **Session 4. PEGylated proteins** (Auditorium)
Chair. Jesper Kammergaard Christensen, NovoNordisk
Speakers.
4.1 Current view on the safety of PEGylated biologics
Andreas Baumann, Bayer
4.2 Rat PEG distribution data and how it was used in relation to human clinical safety of a PEGylated protein
Ola Sternebring, NovoNordisk
4.3 Quantitation of total PEG in biological matrices by NMR
Davindera Sanghera, Intertek
- 10.05 - 10.35 **Tea/Coffee, Posters and Exhibition** (CWB – Foyer & Plenary)
- 10.40 - 12.10 **Session 5. AI in DMPK** (Auditorium)
Chair. John Overington, Medicines Discovery Catapult
Speakers.
5.1 Artificial Intelligence and Machine Learning in Toxicology – what is currently realistic, what is not?
Andreas Bender, University of Cambridge

5.2 Back to the future of AI in DMPK

Nigel Green, AstraZeneca

5.3 Combining Quantum Mechanics and Machine Learning to Predict Drug Metabolism

Matt Segal, Optibrium Ltd

12.15 - 13.15 **Lunch, Posters and Exhibition (CWB – Foyer & Plenary)**

12.40 - 13.10 **DMDG ABM (CWB – Syndicate)**

13.20 - 14.50 **Session 6. Drug discovery in the 'Beyond rule of 5' space (Auditorium)**

Chair. Matthias Wittwer, Roche

Speakers.

6.1 The Targeted Protein Degradator Gold Rush. "It's ADME Jim, but not as we know it"

Caroline Rynn, Roche

6.2 Novel approach towards protein binding measurement of challenging bRo5 compounds

Abhishek Srivastara, AstraZeneca

6.3 Modelling cell permeability beyond the Rule-of-5

Pär Matsson, Sahlgrenska Academy, University of Gothenburg

14.55 - 15.25 **Tea/Coffee, Posters and Exhibition (CWB – Foyer & Plenary)**

15.30 - 17.00 **Session 7. Free communications (Auditorium)**

Chair. Andrew McEwen, Reviresco Solutions

Speakers.

7.1 Evaluating the role of solubility in oral absorption using physiologically based pharmacokinetic (PBPK) modeling

Sheila-Annie Peters, Merck

7.2 What every DMPK scientist should know about paracetamol metabolism in the pig

Ian Wilson, Imperial College

7.3 Quantitative Prediction of Drug-Drug Interactions with Common Statin Co-meds. A framework for decision-making within Drug Discovery/Development

Hayley Atkinson, Cyprotex

17.10 - 18.40 **Session 8. Debate. Bioimaging – which modality is best? (Auditorium)**

Chair. Steve Hood, GSK

1. For Mass Spec Imaging

Andy West, GSK

2. For Optical Imaging

Pete Watson, Cardiff University

3. For Radioactive Imaging

Claire Henson, Pharmaron UK

19.30 - 20.00 **Drinks Reception (Bar)**

20.00 - late **Conference Dinner (Dining Hall) & Entertainment (Bar)**

Friday 20 September 2019

08.50 - 10.20 **Session 9. Orally dosed biologicals (Auditorium)**

Chair. Jaap Wieling, BiosanaPharma

Speakers.

9.1 Oral delivery. Overcoming the hurdles of stability and poor intestinal permeability for macromolecules

David Brayden, University College Dublin

9.2 Oral administration of a GLP-1 analogue

Stephen Buckley, NovoNordisk

9.3 Exploring carrier peptides for oral delivery of therapeutic peptides

Hanne Mørck Nielsen, University of Copenhagen

10.20 - 10.50 **Tea/Coffee and Exhibition (CWB – Foyer & Plenary)**

10.50 - 12.30 **Session 10. Quantitative systems pharmacology and physiologically based pharmacokinetic modelling approaches (Auditorium)**

Chair. Venkatesh Pilla Reddy, AstraZeneca

Speakers.

10.1 Simulation of cellular drug responses within a whole-body context

Lars Kuepfer, RWTH Aachen

10.2 PBPK modelling to guide affinity optimisation of an antibody-drug conjugate in the presence of tumour target shedding

Kathryn Ball, AstraZeneca

10.3 Regulatory thoughts on PBPK and QSP models in patients

Catriona Baker, MHRA

10.4 Quantifying the right system correctly to obtain intrinsic drug data for scaling from *in vitro* to *in vivo* within PBPK modelling

Sibylle Neuhoff, Certara

- 12.30 - 12.45 **Dr Mira Doig – the life and times of a DMDG course organiser** (*Auditorium*)
12.45 - 13.00 **Closing Remarks – incoming DMDG Chair. Mark Seymour, Covance** (*Auditorium*)
13.00 - 14.00 **Lunch and delegates depart** (*CWB – Foyer & Plenary*)