


Hosted by: Freie Universität Berlin, Institute of Pharmacy, Dept. Clinical Pharmacy & Biochemistry

07 September 2022 – Development

08:45 to 12:30		Pre-conference course [Institute of Pharmacy, Seminar Room 3] “Clinical Microdialysis Metabolic Monitoring in Peripheral Tissues” (organised by M Dialysis and Charité-Universitätsmedizin Berlin)
Chairs:		Katarina Åsberg (M Dialysis AB, Sweden) and Michael Boschmann (Charité Universitätsmedizin Berlin, Germany)
09:00-09:30	Coffee, registration and welcome	 
09:30-10:00	History & principles of clinical microdialysis	
10:00-11:15	Physiological and pharmacological applications.	
11:15-12:15	Practical demonstrations in smaller groups: - Implantation of microdialysis catheters in adipose tissue - Demonstration of ISCUSflex microdialysis analyzers	
12:15-13:15	General discussion and sandwiches	
12:30 – 13:45 (Desk open until 14:30)	Registration to IMS2022	[Institute of Pharmacy]
13:45 to 14:00	Welcome and Opening	[Lecture Hall Zoology]
		Charlotte Kloft (Freie Universität Berlin, Germany)
14:00 to 15:30		Session 1 [Lecture Hall Zoology] “Characterisation and optimisation of microdialysis techniques”
Chairs:		Sandrine Marchand (Université de Poitiers, France) and Robin Michelet (Freie Universität Berlin, Germany)
14:00 - 14:30	Coupling microdialysis to electrophoresis	Speaker Susan Lunte (University of Kansas, KS, USA)
14:30 - 15:00	Two-Photon lithography method to create 3D printed microdialysis probes	Julie Stenken (University of Arkansas, AR, USA)
15:00 - 15:30	Abstract talk: Continuous cortisol monitoring by combining microdialysis with Biosensing by Particle Mobility	Laura van Smeden (Eindhoven University of Technology, the Netherlands)
15:30 - 16:30	Coffee break with poster walk and exhibition	[Institute of Pharmacy]

16:30 to 18:00 Session 2		[Lecture Hall Zoology]
“Development and optimisation of microdialysis during the disease state”		
Chairs: Teresa Dalla Costa (Federal University of Rio Grande do Sul, Brazil) and Philipp Simon (Augsburg University, Germany)		
16:30 - 17:00	Anti-Infectives drug distribution on infected animals	Speaker Bibiana Verlindo de Araújo (Federal University of Rio Grande do Sul, Brazil)
17:00 - 17:30	Antimicrobials distribution in infected animals and humans	Sandrine Marchand (Université de Poitiers, France)
17:30 - 18:00	Abstract talk: A piglet model of pediatric sepsis to investigate tissue penetration of antibiotics in children: a microdialysis study on piperacillin-tazobactam	Eline Hermans (Ghent University, Belgium)
18:00 - 19:00	Break	
19:00 - 23:00	Welcome Reception at Alter Krug	

Lecture Hall Zoology, Königin-Luise-Straße 1-3, 14195 Berlin
 Institute of Pharmacy, Königin-Luise-Straße 2-4, 14195 Berlin
 Alter Krug, Königin-Luise-Straße 52, 14195 Berlin

08 September 2022 – Translation

08:30 to 10:00 Session 3		[Lecture Hall Zoology]
“Application of microdialysis in highly perfused organs”		
Chairs: Elizabeth de Lange (Leiden University, The Netherlands) and Michael Boschmann (Charité-Universitätsmedizin Berlin, Germany)		
08:30 - 09:10	Keynote: Microdialysis of the brain	Speaker Margareta Hammarlund-Udenaes (Uppsala University, Sweden)
09:10 - 09:35	<i>Ex vivo</i> microdialysis of meropenem in patients’ lung undergoing lung transplantation	Christina Scharf (Ludwig-Maximilians-University of Munich, Germany)
09:35 - 10:00	Abstract talk: Continuous real time monitoring of cerebral metabolites using microdialysis-spectroscopic sensor in traumatic brain injury (TBI)	Chisomo Zimphango (University of Cambridge, UK)
10:00 - 11:00	Coffee break with poster walk and exhibition	[Institute of Pharmacy]

11:00 to 12:30 Session 4		[Lecture Hall Zoology]
“Quantifying target site concentrations in peripheral tissues”		
Chairs: Nathalie Heuzé-Vourc’h (Institut National de la Santé et de la Recherche Médicale (Inserm), France) and Susan Lunte (University of Kansas, KS/USA)		
		Speaker
11:00 - 11:30	Clinical microdialysis for monitoring interactions of hemodynamic, metabolic and neuroendocrine responses in peripheral tissues on healthy volunteers and patients	Michael Boschmann (Charité, Germany)
11:30 - 12:00	Application of hollow microneedles for skin ISF harvesting in models of allergy and chronic urticaria	Nana Shi (Charité/Fraunhofer Institute for Translational Medicine and Pharmacology, Germany)
12:00 - 12:30	Abstract talk: Semi-mechanistic model-based analysis of plasma and target-site cefazolin pharmacokinetics and protein binding in obese and nonobese patients to evaluate current dosing regimens adequacy	Davide Bindellini (Freie Universität Berlin, Germany)
12:30 - 13:30	Lunch	[Institute of Pharmacy]
13:30 to 15:00 Session 5		[Lecture Hall Zoology]
“State of the art applications of microdialysis”		
Chairs: Julie Stenken (University of Arkansas, AR/USA) and Margareta Hammarlund-Udenaes (Uppsala University, Sweden)		
		Speaker
13:30 - 14:10	Keynote: Exploring the fate of inhaled therapeutic proteins in the lungs by microdialysis	Nathalie Heuzé-Vourc’h (Institut National de la Santé et de la Recherche Médicale (Inserm), France)
14:10 - 14:35	A window to the brain: on-line measurement of biologics concentrations and target engagement using microdialysis and cerebral open-flow microperfusion	Florie Le Priault (AbbVie, Germany)
14:35 - 15:00	Abstract talk: Proteomic study of brain microdialysis samples from subarachnoid haemorrhage patients with and without cerebral vasospasm	Alex Tingskull (Linköping University Hospital, Sweden)
15:00 - 16:00	Coffee break with poster walk and exhibition	[Institute of Pharmacy]

16:00 to 17:30 Session 6		[Lecture Hall Zoology]
“Microdialysis in a clinical setting”		
Chairs: Markus Zeitlinger (Medical University of Vienna, Austria) and Michael Boschmann (Charité-Universitätsmedizin Berlin, Germany)		
		Speaker
16:00 - 16:30	Microdialysis in the obese: Leipzig study	Philipp Simon (Augsburg University, Germany)
16:30 - 17:00	Lung microdialysis during cardiothoracic surgery	Maximilian Edlinger-Stanger (Medical University of Vienna, Austria)
17:00 - 17:30	Abstract talk: Lefamulin exposure in soft tissues: population pharmacokinetics and pharmacokinetic/pharmacodynamic target attainment	Wisse van Os (Medical University of Vienna, Austria)
17:30-17:40	Voting: best young investigator presentations	
17:40 - 19:00	Break	
19:00 - 23:00	Conference dinner at Harnack Haus	

Lecture Hall Zoology, Königin-Luise-Straße 1-3, 14195 Berlin
 Institute of Pharmacy, Königin-Luise-Straße 2-4, 14195 Berlin
 Harnack Haus, Ihnestr. 16-20, 14195 Berlin

09 September 2022 – Integration

09:00 to 10:30 Session 7		[Lecture Hall Zoology]
“Modelling and simulation of microdialysis data”		
Chairs: William Couet (Université de Poitiers, France) and Linda Aulin (Freie Universität Berlin, Germany)		
		Speaker
9:00 – 9:40	Keynote: Modelling and simulation of microdialysis data	Elizabeth De Lange (Leiden University, the Netherlands)
9:40 - 10:05	Minimal PBPK modeling of antibiotics CNS distribution	Alexia Chauzy (Université de Poitiers, France)
10:05 - 10:30	Model-based integration of target-site drug exposure is key for antibiotic dose-individualisation in obese patients	David Busse (Freie Universität Berlin, Germany)
10:30 - 11:00	Coffee break with posters and exhibition	[Institute of Pharmacy]

11:00 to 12:45 Session 8		[Lecture Hall Zoology]
“Regulatory acceptability and future direction of microdialysis”		
Chairs: Charlotte Kloft (Freie Universität Berlin, Germany) and Elizabeth de Lange (Leiden University, The Netherlands)		
		Speaker
11:00 - 11:30	Microdialysis in translational brain exposure and distribution	Mariette Heins (Charles River, the Netherlands)
11:30 - 12:00	Acceptability of microdialysis data for registration agencies	Markus Zeitlinger (Medical University of Vienna, Austria)
12:00 - 12:45	Panel Discussion	
12:45 – 12:55	Award ceremony best young investigator presentations	
12:55-13:00	Wrap-up and closure	

Lecture Hall Zoology, Königin-Luise-Straße 1-3, 14195 Berlin
Institute of Pharmacy, Königin-Luise-Straße 2-4, 14195 Berlin