

Day 1: Hepatocyte transporters

- Why this conference ?
- 31 speakers
- Presentation of recent discoveries
- Multidisciplinary Symposium
- Networking opportunities
- Future of the research topic



Day 1: Hepatocyte transporters

- Presentations are organised in three topics
- Day 1. Basic knowledge on hepatocyte transporters
- Day 2. Transporters and liver disease
- Day 3. Drug-induced liver toxicity

Day 1: Hepatocyte transporters

09:00 to 10:15	Basic investigations
10:15 to 10:45	Coffee break
10:45 to 11:45	Hepatocyte concentrations
11:45 to 13:00	Lunch
13:00 to 17:45	Easy walk or Glacier 3000, or
17:45 to 18:00	Coffee
18:00 to 19:00	Investigating transporter function
19:00	Drink and dinner

Session 1. Basic investigations

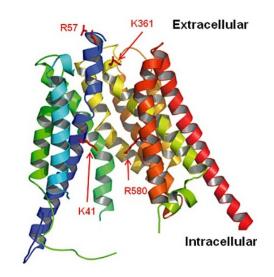


Research topic Drug transport in hepatocytes

- New insights into the sinusoidal transporters
- Hepatocyte Transporter Network

Bruno Hagenbuch

- PhD at the Federal Institute of Technology, Zürich, CH
- Pharmacology, Toxicology, and Therapeutics, University of Kansas



OATP1B1 from within lipid bilayer

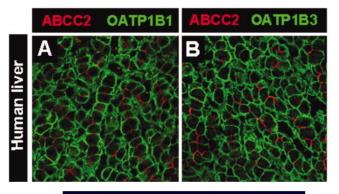


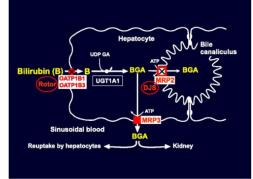
Research topic Molecular analysis of hepatocyte transporters

- Interactions between canalicular and sinusoidal transporters
- Hepatocyte Transporter Network

Dietrich Keppler

- Professor Emeritus of Biochemistry
- German Cancer Research Center, Heidelberg



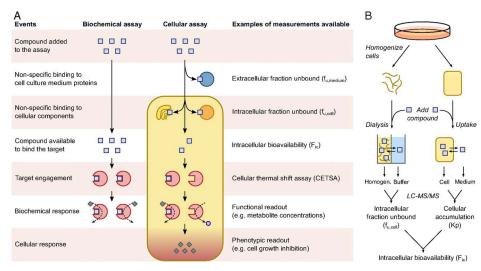




Per Artursson

- Drug delivery group, Department of Pharmacy
- Uppsala University

- Research topic Drug intracellular concentrations
- Characterization of hepatocyte subpopulations by global proteomics
- Hepatocyte Transporter Network



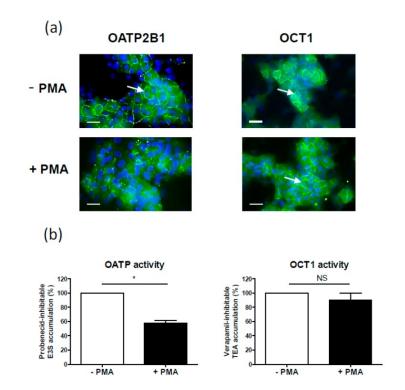


Research topic Environmental toxicology and cellular transporters

- Regulation of hepatocyte transporters by environmental chemicals
- Hepatocyte Transporter Network

Olivier Fardel

INSERM Institute in environmental toxicology, Rennes, France



10:15 Coffee break

Session 2. Hepatocyte concentrations

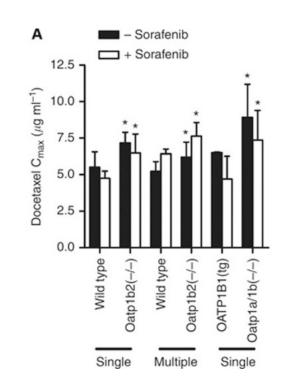


Pharmaceutics and Pharmaceutical Chemistry, Ohio State University

Shuiying Hu

Sharyn Baker and Alex Sparreboom

- Research topic Kinase inhibitors and transporters
- Kinase inhibitors as modulators of SLC transport function
- Hepatocyte Transporter Network

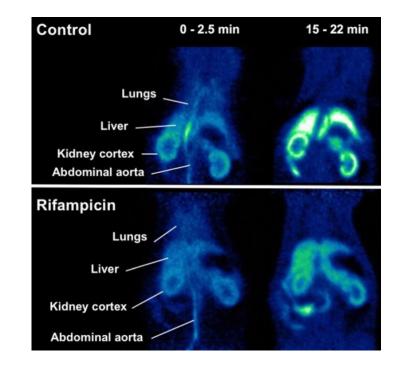




Nicolas Tournier

- Translational imaging and pharmacology
- Paris-Saclay University

- Research topic Tissue distribution of drugs
- Imaging techniques to study drug transport function in vivo
- Hepatocyte Transporter Network

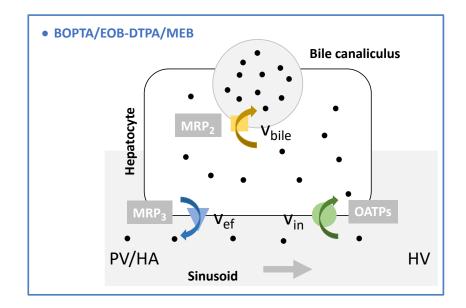




- Research topic Hepatocyte concentrations of hepatobiliary MR and SPECT agents
- Hepatocyte concentrations in IPRL
- Hepatocyte Transporter Network

Catherine M Pastor

- Former specialist in Anaesthesia and Intensive Care
- Geneva University Hospital and University of Paris
- Collaboration with Bernard Van Beers

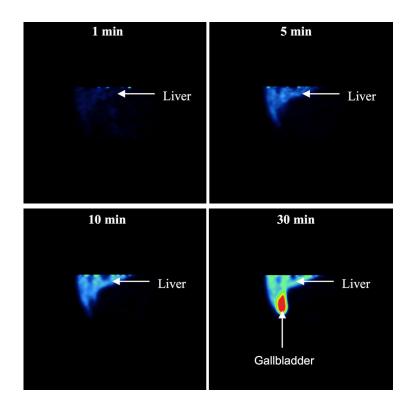




Jash Unadkat

- Department of Pharmaceutics
- University of Washington, Seattle

- Research topic Impact of transporters on tissue concentrations
- Predicting intracellular hepatic concentrations of drugs using proteomic data and PET imaging
- Hepatocyte Transporter Network



11:45: Lunch

To go to the Glacier 3000

Voucher available at the desk or Catherine 64 CHF instead of 80 CHF 40 CHF with Swiss half pass



13:29 or 14:29
"Parc des sports"
near the hotel

10 min

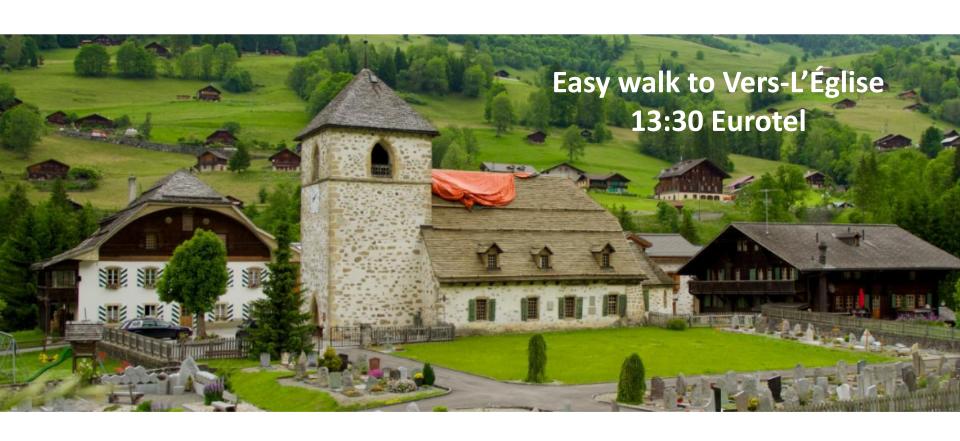
Free with your Free Access card

16:10 or 17:10 Last bus !



10 min





17:45 Coffee

Session 3. Investigating transporter function



Research topic PBPK and transporters

- Endogenous biomarkers for transporter DDIs
- Hepatocyte Transporter Network

Aleksandra Galetin

 Centre for Applied Pharmacokinetic Research, University of Manchester

Preliminary analysis of 20 endogenous molecules

- Calculation of AUCR and f_T on two rifampicin occasions*
- · Inter- and intra-individual variability of plasma T₀

Selection criteria for endogenous molecules

Weighted AUCR >2 and f_T >50%
 Consideration of plasma T_o variability

Further analysis for selected endogenous biomarkers (EB) (6/20)

- Correlation between EB AUCR and rosuvastatin AUCR*, CPI AUCR and rifampicin unbound C_{max}
- Correlation between combined EB AUCR and rosuvastatin AUCR
- EB baseline plasma AUC_{0.24h} stability
- · Reproducibility of interaction
- Sensitivity of EB to inhibitor PK case example

Final selection of EBs suitable for the assessment of OATP1B interactions alongside CPI

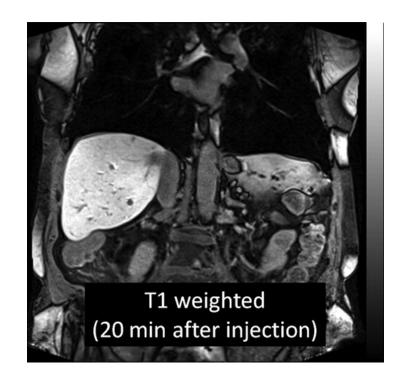




Steven Sourbron

- Department of biomedical imaging
- University of Leeds
- Member of the <u>TRISTAN Consortium</u>

- Research topic Imaging biomarkers
- Tracer kinetic modelling of dynamic Gadoxetate-enhanced MRI
- Hepatocyte Transporter Network



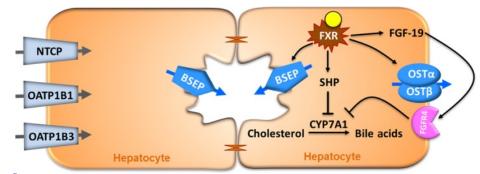


Kenneth Brouwer

Director of ADME



- Research topic ADME-Tox research
- Prediction of cholestatic hepatotoxicity: integration of transporter regulation and adaptive response



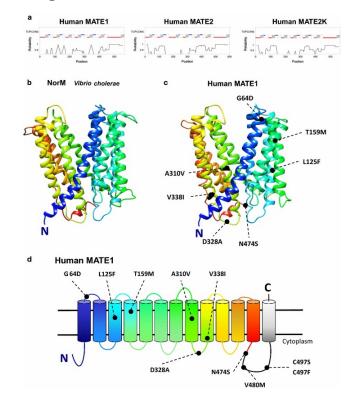
Hepatocyte Transporter Network

Anne Nies



- Research topic Biology of drug transporters
- Comprehensive drug uptake transporter proteomics and metabolomic profiling of human liver
- Hepatocyte Transporter Network

- Institute of Clinical Pharmacology
- Stuttgart

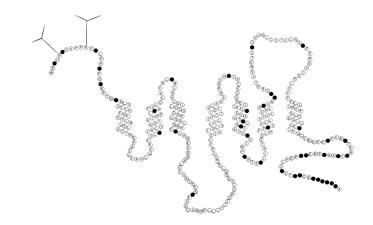




- Research topic Transporters and hepatobiliary physiology, drug safety, and liver disease
- Hepatocyte Transporter Network

Peter Meier-Abt

- Founding director of the Centre for Clinical Research, University of Zürich
- Vice-rector for research and talent promotion, University of Basel
- Former president of the Swiss Academy of Medical Sciences



Molecular cloning, chromosomal localization, and functional characterization of a human liver Na+/bile acid cotransporter. B Hagenbuch, PJ Meier, JCI, 1994

19.00 Drink and dinner

Swiss menu on Tuesday evening!



Please contact the desk is you do not want to eat cheese! Last delay: Monday evening!