

**International Transporter Consortium Workshop 4 (ITCW4) Virtual Meeting
April 19-21, 2021**

AGENDA

All Times Shown are USA Eastern Daylight Savings Time

Day 1 – Monday, April 19, 2021

9:00 – 9:05 am **Welcome and Opening Remarks**

Session 1: Breakthrough Topics in Transporters

Moderators: Kathy Giacomini (UCSF) and Xiaoyan Chu (Merck)

9:05 – 9:25 am **RESOLUTE: Accelerating research in Solute Carriers, SLCs, an untapped source of drug targets**
Giulio Superti-Furga (Austrian Academy of Sciences)

9:25 – 9:45 am **Precision medicine goes microscopic: interactions between the microbiome and intestinal drug transporters**
Peter Turnbaugh (UCSF)

9:45 – 10:05 am **Novel insights into transporter mechanisms**
Hassane Mchaourab (Vanderbilt)

10:05 – 10:35 am **Panel Discussion**

10:35 – 11:00 am **Break**

Session 2: New and Emerging Transporters

Moderators: Maciej Zamek-Glisczynski (GlaxoSmithKline) and Lei Zhang (Silver Spring, MD)

11:00 – 11:20 am **Emerging importance of hepatic and renal OAT2: can we substantiate clinical relevance in drug pharmacokinetics and DDIs?**
Hong Shen (Bristol-Myers Squibb)

11:20 – 11:40 am **Folate transport pathways: What do we know of their roles in drug interactions and toxicity?**
Reina Bendayan (University of Toronto)

11:40 – 12:00 pm **Revisit of previous ITC recommendations on OATP2B1 and MRPs**
Maciej Zamek-Glisczynski (GlaxoSmithKline)

12:00 – 12:30 pm **Panel Discussion**

Moderators: Xinning Yang (U.S. FDA) and Xiaomin Liang (Gilead)

12:30 – 1:30 pm **Poster Walk 1**

1:30 – 2:00 pm **Interactive Poster Q&A**

Day 2 – Tuesday, April 20, 2021

9:00 – 9:05 am **Welcome and Opening Remarks**

Session 3: New Implications for Transporters in Clinical Pharmacology

Moderators: Aleksandra Galetin (University of Manchester) and Xinning Yang (FDA)

9:05 – 9:25 am **Ontogeny of *SLCO1B1* expression and function: Implications for statin disposition in children**

J. Steven Leeder (Children's Mercy Hospital, Kansas City)

9:25 – 9:45 am **Transporter endogenous biomarkers in clinical drug development**

Kenta Yoshida (Genentech)

9:45 – 10:05 am **Modelling of creatinine-drug interaction in chronic kidney disease population**

Aleksandra Galetin (University of Manchester)

10:05 – 10:35 am **Panel Discussion**

10:35 – 11:00 am **Break**

Session 4: Transporters and Regulatory Science

Moderators: Donald Tweedie (Independent) and Shiew-Mei Huang (FDA)

11:00 – 11:30 am **A regulatory perspective for transporter-mediated DDIs: current status and challenges**

Xinning Yang (US FDA)

11:30 – 12:00 pm **Transporter-mediated drug drug interactions - European regulatory perspectives**

Carolien Versantvoort (Medicines Evaluation Board, The Netherlands)

12:00 – 12:30 pm **Panel Discussion to include ITC Members**

Moderators: Kenta Yoshida (Genentech) and Noora Sjöstedt (University of Helsinki)

12:30 – 1:30 pm **Poster Walk 2**

1:30 – 2:00 pm **Interactive Poster Q&A**

Day 3 – Wednesday, April 21, 2021

9:00 – 9:05 am **Welcome and Opening Remarks**

Session 5: Transcriptional and Post-Transcriptional Regulation of Transporters: From the Bench to the Bedside

Moderators: Kim Brouwer (UNC) and Raymond Evers (J&J, Janssen Pharmaceuticals)

9:05 – 9:15 am **Transcriptional and post-transcriptional regulation of organic anion transporting polypeptides**
Henriette E. Meyer zu Schwabedissen (University of Basel)

9:15 – 9:25 am **Post-translational regulation of OATP1B1 and OATP1B3: Association with clinically significant polymorphism and implications in drug-drug interactions**
Wei Yue (University of Oklahoma Health Sciences Center)

9:25 – 9:35 am **Transcriptional and post-transcriptional regulation of transporters in the human intestine**
Stefan Oswald (Rostock University Medical Center)

9:35 – 10:05 am **Panel Discussion**

10:05 – 10:30 am **Break**

Session 6: Transporters and Toxicology

Moderators: Michael Hafey (Merck) and Yurong Lai (Gilead)

10:30 – 10:40 am **Overview of metal/metalloid transporters and toxicity**
Elaine Leslie (University of Alberta)

10:40 – 10:50 am **Solute carriers and chemotherapeutic induced toxicity**
Alex Sparreboom (Ohio State)

10:50 – 11:00 am **Placental transport and environmental chemical exposures**
Lauren Aleksunes (Rutgers)

11:00 – 11:30 am **Panel Discussion**

Session 7: Emerging Technologies for Transporter Studies

Moderators: Pär Matsson (University of Gothenburg) and YingYing Guo (Eli Lilly)

11:30 – 11:40 am **CRISPR/Cas9 models for drug transporters**
Per Artursson (Uppsala University)

11:40 – 11:50 am **Intravital microscopy for studying transport processes – potential and limitations**
Kenneth Dunn (Indiana University)

11:50 – 12:00 pm **Dissecting transport barriers in cancer using intravital microscopy of single-cell pharmacology**
Miles Miller (Harvard Medical School)

12:00 – 12:30 pm **Panel Discussion**

12:30 – 1:30 pm **Breakout Sessions for Whitepapers**