

PROGRAM

Day1: November 16th, 2020

- 13:00-13:10 Opening remarks
Kazuya Maeda (The University of Tokyo, Japan / RIKEN)
- Chair: Shinji Yamashita (Setsunan University, Japan)
- 13:10-13:45 **【Keynote Lecture 1】 Web**
IVIVE: Evaluating the Boundary Conditions.
Leslie Z. Benet (University of California, San Francisco, U.S.A.)
- Chair: Ken-ichi Inui (Kyoto University, Japan)
- 13:45-14:20 **【Keynote Lecture 2】 Web**
Deorphaning Transporters in the SLC22 Family: Implications for interindividual variation in drug response.
Kathleen M. Giacomini (University of California, San Francisco, U.S.A.)
- Chair: Ikumi Tamai (Kanazawa University, Japan)
- 14:20-14:45 Advances in the endogenous biomarkers for transporter-mediated drug drug interaction risk assessment.
Hiroyuki Kusuhara (The University of Tokyo, Japan / RIKEN)
- Chair: Kouichi Yoshinari (University of Shizuoka, Japan)
- 14:45-15:10 **Web**
Shedding light on in vivo target occupancy via PBPK Modeling with saturable target binding: the cases of small-molecule drugs with high-affinity targets.
Woojin Lee (Seoul National University, Korea / RIKEN)
- 15:10-15:35 Coffee break
- Chair: Yoshiyuki Shirasaka (Kanazawa University, Japan)
- 15:35-16:00 Characterization of the intestinal transport of drugs with human-derived tissue samples.
Kazuya Maeda (The University of Tokyo, Japan / RIKEN)
- Chair: Mitsuru Hashida (Kyoto University, Japan)
- 16:00-16:35 **【Keynote Lecture 3】 Web**
Reflections on clearance.
Malcolm Rowland (University of Manchester, UK)
- Chair: Hiroshi Suzuki (The University of Tokyo Hospital, Japan)
- 16:35-17:10 **【Keynote Lecture 4】 Web**
Liquid Biopsy Enables Quantification of Hepatic Capacity for Drug Metabolism and Disposition beyond the Impact of Genetics.
Amin Rostami-Hodjegan (University of Manchester, UK)
- 17:10-17:15 Closing remarks
Kazuya Maeda (The University of Tokyo, Japan / RIKEN)

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Day2: November 17th, 2020

Chair: Kiyomi Ito (Musashino University, Japan / RIKEN)

9:30-9:55 Progress and perspectives in my research over the past 8 years
~ Endeavors continue from the UOT, RIKEN, to JIU ~
Yuichi Sugiyama (Sugiyama Laboratory, RIKEN, Japan)

Chair: Yoshiro Saito (National Institute of Health Sciences, Japan)

9:55-10:30 **【Keynote Lecture 5】 Web**
Regulatory perspective on clinical pharmacology strategy for drug development.
Shiew-Mei Huang (U.S. Food and Drug Administration, U.S.A.)

Chair: Yasushi Yamazoe (Tohoku University, Japan)

10:30-11:05 **【Keynote Lecture 6】 Web**
Meeting the challenges in quantitating individual clearance pathways by reaction phenotyping.
R. Scott Obach (Pfizer Inc., U.S.A.)

Chair: Hiroshi Yamazaki (Showa Pharmaceutical University, Japan)

11:05-11:30 **Web**
Evaluation of a clinical microdose cocktail to study transporter and CYP3A-mediated DDIs: from healthy subjects to renal impaired patients.
Xiaoyan Chu (Merck Sharp & Dohme Corp., U.S.A.)

Chair: Akihiro Hisaka (Chiba University, Japan / RIKEN)

11:30-11:55 **Web**
Use of transporter endogenous biomarker to elucidate the mechanisms of complex DDIs and to support concomitant medication recommendations.
Kenta Yoshida (Genentech, Inc., U.S.A.)

11:55-12:50 Lunch

Chair: Tappei Takada (The University of Tokyo Hospital, Japan)

12:50-13:15 **Web**
Contribution of Xenobiotic Transporters to Clinical Pharmacokinetics
Jasminder Sahi (Sanofi K.K., China)

Chair: Takashi Kuwabara (Yokohama University of Pharmacy, Japan)

13:15-13:40 Comprehensive PBPK Model of Rifampicin for Predicting Complex Drug-drug Interactions: Induction and Inhibition Effects for Metabolic Enzymes and Transporters.
Ryuta Asaumi (Ono Pharmaceutical Co., Ltd., Japan)

Chair: Katsuhisa Inoue (Tokyo University of Pharmacy and Life Sciences, Japan / RIKEN)

13:40-14:05 Demonstration of the mechanism underlying the time-dependent inhibition of Cyclosporin A on OATP1B1, and development of the PBPK model of CsA incorporating the time-dependent inhibition.
Saki Izumi (Eisai Co., Ltd., Japan)

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Chair: Kousei Ito (Chiba University, Japan / RIKEN)

14:05-14:30 Multiple parameter optimization of PBPK and QSP models using Cluster Gauss-Newton method.

Kota Toshimoto (Astellas Pharma Inc., Japan / RIKEN)

14:30-14:50 Coffee break

Chair: Yoshiharu Deguchi (Teikyo University, Japan)

14:50-15:15 Prediction of unbound brain and CSF drug concentrations in animals and human -Theoretical and empirical approaches for species differences in P-gp and BCRP-

Hideki Hirabayashi (Takeda Pharmaceutical Company Limited, Japan)

Chair: Yoshihisa Shitara (Sanofi K.K., Japan)

15:15-15:40 Prediction of renal clearance and plasma pharmacokinetics of opioids using a microphysiological system.

Tomoki Imaoka (DAIICHI SANKYO COMPANY, LIMITED, Japan)

Chair: Koji Chiba (Yokohama University of Pharmacy, Japan / RIKEN)

15:40-16:05 To what extent can the albumin-mediated transport mechanism bridge the gap of hepatic uptake parameters between in vitro and in vivo?

Seiji Miyauchi (Toho University, Japan / RIKEN)

Chair: Masatoshi Tomi (Keio University, Japan)

16:05-16:30 Quantitative proteomics for transporters.

Sumio Ohtsuki (Kumamoto University, Japan / RIKEN)

Chair: Masanobu Sato (MSD K.K., Japan)

16:30-16:55 Transporter-mediated drug disposition in non-injured organs in diseased condition.

Yukio Kato (Kanazawa University, Japan / RIKEN)

16:55-17:10 Closing remarks

Takashi Yoshikado (Yokohama University of Pharmacy, Japan)