Saturday, October 18, 2014

1:00 p.m. – 6:30 p.m. | West Lounge
Meeting Registration Open

4:00 p.m. – 4:30 p.m. | Imperial Ballroom
JSSX Council Meeting

4:30 p.m. – 5:45 p.m. | Imperial Ballroom
JSSX General Session and Awards Session

6:00 p.m. – 8:00 p.m. | CityScape Room, 46th Floor
JSSX Reception

Sunday, October 19, 2014

8:00 a.m. – 7:00 p.m. | West Lounge
Meeting Registration Open

8:00 a.m. – 9:00 a.m. | Imperial and Yosemite
Breakfast for Morning Short Course Registrants

9:00 a.m. – 12:00 p.m. | Imperial Ballroom
Short Course I: Prediction of Drug-drug Interactions and Regulatory Recommendations for Assessment
Co-Chairs: Shiew-Mei Huang, Food and Drug Administration (FDA), Silver Spring, MD, USA and Takashi Izumi, Daiichi-Sankyo Co. Ltd., Tokyo, Japan
9:00 – 9:40 | SC1.1 | SYSTEMATIC CLASSIFICATION OF DRUGS INVOLVED IN DRUG-DRUG INTERACTIONS TO SEAMLESSLY AVOID SERIOUS EVENTS
Akihiro Hisaka, Chiba University, Chiba, Japan
9:40 – 10:20 | SC1.2 | UTILITY AND IMPACT OF PHYSIOLOGICALLY-BASED PHARMACOKINETIC MODELING TO PREDICT AND INTERPRET DRUG-DRUG INTERACTIONS: CASES OF ASTELLAS PHARMA INC.
Tsuyoshi Minematsu, Astellas Pharma Inc., Osaka, Japan
10:20 – 11:00 | SC1.3 | CLINICAL IMPACT OF DURG-DRUG INTERACTIONS: CONSIDERATION OF ETHNIC AND OTHER PATIENT FACTORS
Shiew-Mei Huang, Food and Drug Administration (FDA), Silver Spring, MD, USA
11:00 – 11:40 | SC1.4 | COMPARISON OF THE EMA, FDA AND PMDA DRUG INTERACTION GUIDANCES
Eva Gil Berglund, Medical Products Agency, Uppsala, Sweden
11:40 – 12:00 | PANEL DISCUSSION

9:00 a.m. – 12:00 p.m. | Yosemite Ballroom
Short Course II: Metabolite Biosynthesis and Quantitation by NMR Spectroscopy
Co-Chairs: R. Scott Obach, Pfizer Global Research and Development, Groton, CT, USA and Swapan Chowdhury, Takeda Pharmaceutical Co., International, Cambridge, MA, USA
9:00 – 9:35 | SC2.1 | PART 1: AN INTRODUCTION TO MIST CONCEPTS AND THE IMPORTANCE OF DRUG METABOLITES
Swapan Chowdhury, Takeda Pharmaceutical Company, International, Cambridge, MA, USA
9:35 – 10:10 | SC2.2 | PART 2: BIOSYNTHESIS OF METABOLITES USING MAMMALIAN IN VITRO SYSTEMS AND TECHNICAL TRICKS IN ISOLATION
R. Scott Obach, Pfizer Inc., Groton, CT, USA
10:10 – 10:45 | SC2.3 | PART 3: USE OF MICROBIAL SYSTEMS TO BIOSYNTHESIZE METABOLITES
Jonathan Steele, Hypha Discovery Ltd., Middlesex, UK
10:45 – 11:20 | SC2.4 | PART 4: AN INTRODUCTION TO NMR SPECTROSCOPY AS APPLIED TO DRUG METABOLITES
Gregory Walker, Pfizer, Groton, CT, USA
11:20 – 12:00 | SC2.5 | PART 5: QUANTITATIVE NMR SPECTROSCOPY – PRINCIPLES AND PRACTICE
Gregory Walker, Pfizer Inc., Groton, CT, USA

12:00 p.m. – 1:00 p.m. | Imperial and Yosemite
Lunch for Afternoon Short Course Registrants

1:00 p.m. – 4:00 p.m. | Imperial Ballroom
Short Course III: Non-CYP Metabolism in Drug Discovery
Co-Chairs: Jeff Jones, Washington State University, Pullman, WA, USA and Teruko Imai, Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto, Japan
1:00 – 1:45 | SC3.1 | NEW STRATEGY TO IDENTIFY UNKNOWN DRUG-METABOLIZING ENZYMES BY PROTEOMICS
Kazuishi Kubota, Daiichi Sankyo RD Novare Co., Ltd., Tokyo, Japan
1:45 – 2:30 | SC3.2 | INVESTIGATION OF DRUG METABOLISM BY NON-CYTOCHROME P450 ENZYMES (11Β-HYDROXYSTEROID DEHYDROGENASE/UGT2B15) AND ITS CLINICAL RELEVANCE
Mitsuhiro Nishihara, Takeda Pharmaceutical Company Ltd., Fujisawa, Japan
2:30 – 3:15 | SC3.3 | DETERMINING THE ROLE OF MOLYBDENUM OXIDASES IN DRUG METABOLISM
Jeff Jones, Washington State University, Pullman, WA, USA
Scientific Program

3:15 – 4:00 | SC3.4 | THE IMPACT OF CHEMISTRY ON THE ADME OF ANTIBODY DRUG CONJUGATES
Dan Rock, Amgen Inc., Seattle, WA, USA

1:00 p.m. – 4:00 p.m. | Yosemite Ballroom
Short Course IV: How to Maximize the Use of DMPK and Drug-Drug Interaction Data Available in the Literature and Regulatory Reviews During Clinical Development of New Chemical Entities
Co-Chairs: Nina Isoherranen, University of Washington, Seattle, WA, USA and Yoshiyuki Shirasaka, Kanazawa University, Kanazawa, Japan

1:00 – 1:45 | SC4.1 | QUANTITATIVE PREDICTIONS AND PHYSIOLOGICALLY BASED PHARMACOKINETIC MODELING OF DRUG-DRUG INTERACTIONS BASED ON RETROSPECTIVE LITERATURE DATA
Ping Zhao, Food and Drug Administration (FDA), Silver Spring, MD, USA

1:45 – 2:30 | SC4.2 | CLINICAL IMPORTANCE OF TRANSPORTER-MEDIATED DRUG-DRUG INTERACTIONS: BASICS AND APPLICATIONS OF EVIDENCE-BASED DECISION MAKING
Kazuya Maeda, The University of Tokyo, Tokyo, Japan

2:30 – 3:15 | SC4.3 | STRATEGIES AND RETROSPECTIVE DATA ANALYSIS IN HEPATIC IMPAIRMENT STUDIES
Rob Foti, Amgen Inc., Seattle, WA, USA

7:00 p.m. – 9:00 p.m. | Grand Ballroom AB
Opening Welcome Reception/Meet the Exhibitors

Monday, October 20, 2014

7:30 a.m. – 5:00 p.m. | West Lounge
Meeting Registration Open

9:00 a.m. – 11:30 a.m. | Continental Ballroom
Symposium 1: Humanized and Knockout Animal Models in PK Studies
Co-Chairs: Hiroshi Yamazaki, Showa Pharmaceutical University, Tokyo, Japan and Robert Tukey, University of California, San Diego, La Jolla, CA, USA

4:15 p.m. – 4:45 p.m. | Continental Ballroom
Opening Session
Kan Chiba, President, Japanese Society for the Study of Xenobiotics and John Miners, President, International Society for the Study of Xenobiotics
Meeting Co-Chairs: Tetsuya Terasaki and Eric Johnson
Meeting Dedicatee: Yuichi Sugiyama

4:45 p.m. – 6:45 p.m. | Continental Ballroom
Opening Plenary Lectures
4:45 – 5:45 | S1 | MECHANISTIC MODELING OF BILE ACID-MEDIATED DRUG-INDUCED LIVER INJURY
Kim Brouwer, University of North Carolina, Chapel Hill, NC, USA

5:45 – 6:45 | S2 | CONTRIBUTIONS OF THE HUMAN GUT MICROBIOME TO DRUG METABOLISM
Peter Turnbaugh, University of California San Francisco, San Francisco, CA, USA

9:00 – 9:30 | S3 | REACTIVE METABOLITE FORMATION OF DRUGS BY HUMAN P450S IN CHIMERIC MICE WITH HUMANIZED LIVER
Hiroshi Yamazaki, Showa Pharmaceutical University, Tokyo, Japan

5:45 – 6:45 | S4 | APPLICATION OF MOUSE MODELS TARGETING P450 REDUCTASE AND THE CYP2ABFGS GENE CLUSTER
Xinxin Ding, SUNY College of Nanoscale Science & Engineering, Albany, NY, USA

10:00 – 10:30 | S5 | IMPORTANCE OF INTESTINAL GLUCURONIDATION IN BILIRUBIN METABOLISM. USE OF HUMANIZED AND TARGETED GENE KNOCKOUT MOUSE MODELS
Robert Tukey, University of California, San Diego, La Jolla, CA, USA

11:00 – 11:15 | P99 | IS THE CHIMERIC HUMANIZED LIVER MOUSE MODEL READY TO PREDICT HUMAN DRUG METABOLISM IN VIVO?
Edwin C.Y. Chow, University of Toronto, Toronto, Canada

11:15 – 11:30 | P428 | PRELIMINARY CHARACTERIZATION OF A SUITE OF NUCLEAR RECEPTOR KNOCKOUT RATS
Kevin P. Forbes, Sage Labs, Inc., Saint Louis, MO, USA
9:00 a.m. – 11:30 a.m. | Imperial Ballroom
Symposium 2: Cancer Biomarker Discovery
Co-Chairs: Sumio Ohtsuki, Kumamoto University, Kumamoto, Japan and Frank J. Gonzalez, National Cancer Institute, Bethesda, MD, USA
9:00 – 9:30 | S7 | QUANTITATIVE PROTEOMICS FOR ACCELERATING CANCER BIOMARKER RESEARCH
Sumio Ohtsuki, Kumamoto University, Kumamoto, Japan
9:30 – 10:00 | S8 | COLON AND LUNG CANCER BIOMARKERS
Frank J. Gonzalez, National Cancer Institute, Bethesda, MD, USA
10:00 – 10:30 | S9 | DISCOVERY AND VALIDATION OF AN EARLY-DIAGNOSTIC LUNG CANCER MARKER IN BLOOD PLASMA BY METABOLOMICS
Oliver Fiehn, University of California, Davis, CA, USA
10:30 – 11:00 | S10 | METABOLOMICS ANALYSIS FOR MEDICAL RESEARCH
Masaru Yoshida, Kobe University, Kobe, Japan
11:00 – 11:15 | P256 | MALDI-MS/MS-BASED HIGH-THROUGHPUT BIOMARKER PROTEIN QUANTIFICATION WITH A NEW INTERNAL STANDARD METHOD
Toshihiro Yoneyama, Tohoku University, Sendai, Japan
11:15 – 11:30 | P231 | STABLE ISOTOPE RESOLVED METABOLOMICS OF ERLOTINIB AND GEFITINIB RESISTANT NON SMALL-CELL LUNG CANCER (NSCLC) CELL LINES
Walter Jaeger, University of Vienna, Vienna, Austria
11:30 a.m. – 2:00 p.m. | Grand Ballroom AB
Meet with Exhibitors / Lunch on Own
11:30 a.m. – 12:30 p.m. | East Lounge
Graduate/Pre-Doctoral Poster Finalist Poster Presentations
A1 – A6 Poster Presentations
12:30 p.m. – 2:00 p.m. | Grand Ballroom
Poster Session 1: Analytical – Differences in Metabolism
P1 – P104 Poster Presentations
12:30 – 1:15 | Odd Numbered Posters
1:15 – 2:00 | Even Numbered Posters

2:00 p.m. – 4:30 p.m. | Continental Ballroom
Symposium 3: Chronopharmacological Strategy for Drug Discovery and Evolution
Co-Chairs: Shigehiro Ohdo, Kyushu University, Fukuoka, Japan and Damjana Rozman, Centre for Functional Genomics and Bio-Chips, Ljubljana, Slovenia
2:00 – 2:30 | S11 | CHRONO-DRUG AND DELIVERY SYSTEM: RHYTHM MONITORING, DISRUPTION AND MANIPULATION
Shigehiro Ohdo, Kyushu University, Fukuoka, Japan
2:30 – 3:00 | S12 | MOLECULAR CLOCK MECHANISMS UNDERLYING CIRCADIAN RHYTHM OF TRANSPORTERS AND/OR CYPS
Satoru Koyanagi, Kyushu University, Fukuoka, Japan
3:00 – 3:30 | S13 | COMMON TRANSCRIPTIONAL NODES OF CHOLESTEROL HOMEOSTASIS, DRUG METABOLISM AND THE LIVER CLOCK
Damjana Rozman, Centre for Functional Genomics and Bio-Chips, Ljubljana, Slovenia
3:30 – 4:00 | S14 | REGULATION OF CIRCADIAN BEHAVIOR AND METABOLISM BY SYNTHETIC REV-ERB AGONISTS
Garret A. FitzGerald, Institute for Translational Medicine and Therapeutics, Philadelphia, PA, USA
4:00 – 4:15 | P308 | IMPACT OF GENDER, AGE AND FED/FASTED STATE OF RATS ON THEIR SERUM HYDROPHILIC METABOLITES
Keiko Maekawa, National Institute of Health Sciences, Tokyo, Japan
4:15 – 4:30 | P103 | AGE-RELATED CHANGES IN EXPRESSION AND ACTIVITY OF HUMAN MITOCHONDRIAL GLUTATHIONE TRANSFERASE ZETA1
Guo Zhong, University of Florida, Gainesville, FL, USA

2:00 p.m. – 4:30 p.m. | Imperial Ballroom
Symposium 4: Metabolomics in Drug Development and Drug Safety
Co-Chairs: Yoshiro Saito, National Institute of Health Sciences, Tokyo, Japan and Xiaochao Ma, University of Pittsburgh, Pittsburgh, PA, USA
2:00 – 2:30 | S15 | METABOLOMICS – QUALITY ASSURANCE AND PATHWAY IDENTIFICATION FOR THE HUMAN TOXOME PROJECT
Thomas Hartung, The Johns Hopkins University, Baltimore, MD, USA
2:30 – 3:00 | S16 | METABOLOMICS-BASED ANALYSES ON DILATED CARDIOMYOPATHY AND ALZHEIMER'S DISEASE
Yoshiro Saito, National Institute of Health Sciences, Tokyo, Japan
Scientific Program

3:00 – 3:30 | S17 | THE OPPORTUNITIES AND CHALLENGES OF METABOLOMICS IN DRUG SAFETY EVALUATION
Xiaochao Ma, University of Pittsburgh, Pittsburgh, PA, USA
3:30 – 4:00 | S18 | METABOLOMICS/LIPIDOMICS FOR DRUG DEVELOPMENT IN A PHARMACEUTICAL COMPANY
Yoshinori Satomi, Takeda Pharmaceutical Company, Kanagawa, Japan
4:00 – 4:15 | P249 | COMPARATIVE ANALYSIS OF HUMAN FETAL AND ADULT HEPATOCYTES BY METABOLOMICS AND GENOMICS
Seiichi Ishida, National Institute of Health Sciences, Tokyo, Japan
4:15 – 4:30 | P230 | COMPARISON OF PLASMA LIPIDOMIC PROFILE OF HUMANS WITH PRECLINICAL ANIMALS
Kosuke Saito, National Institute of Health Sciences, Tokyo, Japan

4:30 p.m. – 6:00 p.m. | Grand Ballroom
Poster Session 2: Disposition – Extrahepatic Metabolism
P105 – P215 Poster Presentations
4:30 – 5:15 | Odd Numbered Posters
5:15 – 6:00 | Even Numbered Posters

6:00 p.m. – 8:00 p.m. | Vista Lounge
Young Investigator’s Reception

7:00 p.m. – 9:00 p.m. | Kuleto’s
JSSX and ISSX Presidents’ Reception (by invitation)

Tuesday, October 21, 2014

7:30 a.m. – 5:00 p.m. | West Lounge
Meeting Registration Open

9:00 a.m. – 11:30 a.m. | Continental Ballroom
Symposium 5: Is Systems Biology a Powerful Tool to Explore/Understand the Mechanism of Action, Especially for Toxicity?
Co-Chairs: Hiroshi Suzuki, The University of Tokyo, Tokyo, Japan and Ivan Rusyn, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

9:00 – 9:30 | S19 | MECHANISM OF ACTION-BASED PREDICTIVE MODELING OF POTENTIAL ADVERSE EFFECTS OF DRUGS USING A LARGE-SCALE TOXICOGENOMICS DATABASE
Takeki Uehara, Shionogi & Co., Ltd., Osaka, Japan
9:30 – 10:00 | S20 | UTILIZATION OF SYSTEMS-BIOLOGY IN ANALYZING AND PREDICTING THE TOXICITY OF MOLECULAR TARGET DRUGS
Hiroshi Suzuki, The University of Tokyo Hospital, Tokyo, Japan

10:00 – 10:30 | S21 | TEMPORAL AND DOSE-RESPONSE PATHWAY ANALYSIS FOR PREDICTING CHRONIC CHEMICAL TOXICITY
Russell S. Thomas, US Environmental Protection Agency, Research Triangle Park, NC, USA

10:30 – 11:00 | S22 | SYSTEMS BIOLOGY ANALYSIS OF GENETIC AND ENVIRONMENTAL DETERMINANTS OF TOXICITY
Ivan Rusyn, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

11:00 – 11:15 | A12 | QUANTIFICATION OF HEPATOBILIARY TRANSPORTER EXPRESSION IN HUMAN, RAT, DOG, AND MONKEY BY LC-MS/MS USING SURROGATE PEPTIDES
Li Wang, University of Washington, Seattle, WA

9:00 a.m. – 11:30 a.m. | Imperial Ballroom
Symposium 6: From Understanding to Prediction: Opportunities and Challenges in Modeling Xenobiotic Metabolism and Disposition
Co-Chairs: Yasushi Yamazoe, Food Safety Commission, Cabinet Office, Government of Japan, Tokyo, Japan and Paul Ortiz de Montellano, University of California-San Francisco, San Francisco, CA, USA

9:00 – 9:30 | S23 | PREDICTIVE SAR OF CYP1A2 ENZYME
Yasushi Yamazoe, Food Safety Commission, Cabinet Office, Government of Japan, Tokyo, Japan
9:30 – 10:00 | S24 | BIOMOLECULAR SIMULATIONS OF CYTOCHROME P450 ENZYMES
Chris Oostenbrink, University of Natural Resources and Life Sciences, Vienna, Austria

10:00 – 10:30 | S25 | BRIDGING ADME AND PK MODELING FOR XENOBIOTICS: TOWARDS A MULTI-SCALE MODEL OF THE BLOOD-BRAIN BARRIER
Matthew Jacobson, University of California San Francisco, San Francisco, CA, USA

10:30 – 11:00 | S26 | LIGAND DISCOVERY FOR MEMBRANE TRANSPORTERS
Andrej Sali, University of California San Francisco, San Francisco, CA, USA

11:00 – 11:15 | P258 | MODELING THE REACTIVITY OF DRUG METABOLITES
S. Joshua Swamidass, Washington University in Saint Louis, Saint Louis, MO, USA
11:15 – 11:30 | P361 | INHIBITION OF ALDEHYDE OXIDASE ACTIVITY BY NATURAL PRODUCT CONSTITUENTS: ASSESSING CLINICAL RELEVANCE AND IDENTIFYING KEY ENZYME-LIGAND INTERACTIONS
John T. Barr, Washington State University, Spokane, WA, USA

11:30 a.m. – 2:00 p.m. | Grand Ballroom AB
Meet with Exhibitors / Lunch on Own

11:30 a.m. – 12:30 p.m. | East Lounge
Post-Doctoral Poster Finalist Poster Presentations
A7 – A12 Poster Presentations

12:30 p.m. – 2:00 p.m. | Grand Ballroom
Poster Session 3: Gene Expression and Regulation – Metabolic Profiling
P216 – P318 Poster Presentations
12:30 – 1:15 | Odd Numbered Posters
1:15 – 2:00 | Even Numbered Posters

2:00 p.m. – 3:00 p.m. | Continental Ballroom
ISSX Awards Session
Chair: Geoff Tucker, ISSX President-Elect/Secretary and ISSX Awards Committee Chair

METABOLIC ACTIVATION AND DRUG-INDUCED TOXICITY – WHERE DO WE GO FROM HERE
Thomas A. Baillie, North American Scientific Achievement Award in Honor of Ronald Estabrook, Sponsored by Xenotech

VITAMIN A AND RETINOIC ACID HOMEOSTASIS IN HEALTH AND DISEASE: THE ROLE OF ALDH1A AND CYP26 ENZYMES
Nina Isoherranen, North American New Investigator Award in Honor of James R. Gillette

3:00 p.m. – 5:30 p.m. | Continental Ballroom
Symposium 7: New Strategies in the Human CNS Barriers Research: The Development of New CNS Drugs and Therapies for the CNS Disorders
Co-Chairs: Hiroyuki Kusuhara, The University of Tokyo, Tokyo, Japan and Xingrong Liu, Genentech, Inc., South San Francisco, CA, USA

3:00 – 3:30 | S27 | PLASTICITY AND ROBUSTNESS OF THE BLOOD-BRAIN BARRIER TRANSPORTERS, CHANNELS, AND RECEPTORS: A STUDY OF ADVANCED QUANTITATIVE TARGETED PROTEOMICS
Tachikawa Masanori, Tohoku University, Sendai, Japan

3:30 – 4:00 | S28 | QUANTITATIVE ANALYSIS OF THE RECEPTOR OCCUPANCY BY CNS ACTING DRUGS IN HUMAN BRAIN
Hiroyuki Kusuhara, The University of Tokyo, Tokyo, Japan

4:00 – 4:30 | S29 | DRUG DELIVERY FACTORS THAT INFLUENCE THE TREATMENT OF PRIMARY AND SECONDARY BRAIN TUMORS
William F. Elmquist, University of Minnesota, Minneapolis MN, USA

4:30 – 5:00 | S30 | PROGRESS IN ASSESSING BBB IN DRUG DISCOVERY AND DEVELOPMENT
Xingrong Liu, Genentech, Inc., South San Francisco, CA, USA

5:00 – 5:15 | P526 | IN VIVO AND IN VITRO TRANSPORT OF APOMORPHINE ENANTIOMERS ACROSS THE BLOOD-BRAIN BARRIER
Takashi Okura, Teikyo University, Tokyo, Japan

5:15 – 5:30 | P461 | IMPACT OF SATURATION OF EFFLUX TRANSPORTERS AT THE BBB AND IMPLICATIONS FOR DRUG DISCOVERY
Jamie Henshall, UCB, Slough, UK

3:00 p.m. – 5:30 p.m. | Imperial Ballroom
Symposium 8: Solving ADME/Tox Challenges in Drug Discovery
Co-Chairs: Toshiya Moriwaki, Takeda Pharmaceutical Company Limited, Kanagawa, Japan and Cyrus Khajasteh, Genentech, Inc., South San Francisco, CA, USA

3:00 – 3:30 | S31 | EARLY ESTIMATION OF HUMAN EFFECTIVE AND MAXIMUM TOLERATED DOSE FROM PRECLINICAL RESULTS IN ONCOLOGY DRUG DEVELOPMENT: APPLICATION TO COMPOUND PROGRESSION AND RISK ASSESSMENTS
Robert J Griffin, Takeda Pharmaceuticals International Company Ltd., Cambridge, MA, USA

3:30 – 4:00 | S32 | CHALLENGES FOR OVERCOMING ADMET ISSUES IN A DRUG DISCOVERY PROGRAM; THE USE OF SANDWICH-CULTURED HEPATOcyTES
Kazuhiro Tetsuka, Astellas Pharma Inc, Ibaraki, Japan

4:00 – 4:30 | S33 | OVERLAP BETWEEN DRUG AND ENDOGENOUS SUBSTRATES OF CYTOCHROME P450 ENZYMES
F. Peter Guengerich, Vanderbilt University, Nashville, TN, USA

4:30 – 5:00 | S34 | BEYOND STRUCTURAL ALERTS: IDENTIFICATION OF AN UNANTICIPATED BIOACTIVATION PATHWAY ON ARYLOXYPIPERIDINE MOTIF IN A CARDIOVASCULAR DRUG CANDIDATE
Amit S. Kalgutkar, Pfizer Inc., Cambridge, MA, USA

5:00 – 5:15 | P432 | MODULATING THE STRENGTH OF HYDROGEN-BOND ACCEPTORS TO ACHIEVE LOW CACO2 EFFLUX FOR ORAL BIOAVAILABILITY OF POTENT PARP6 INHIBITORS
Chungang Gu, AstraZeneca Pharmaceuticals, Waltham, MA, USA
5:15 – 5:30 | P29 | DEVELOPMENT OF A RELAY ASSAY WITH PLATED HUMAN HEPATOCYTES FOR THE EVALUATION OF SLOWLY METABOLIZED COMPOUNDS
Utkarsh Doshi, In Vitro ADMET, Columbia, MD, USA

5:30 p.m. – 7:00 p.m. | Grand Ballroom AB
Poster Session 4: Metabolism - Receptors/nuclear Receptors
P319 – P429 Poster Presentations
  5:30 – 6:15 | Odd Numbered Posters
  6:15 – 7:00 | Even Numbered Posters

Wednesday, October 22, 2014

7:30 a.m. – 5:00 p.m. | West Lounge
Meeting Registration Open

9:00 a.m. – 11:30 a.m. | Continental Ballroom
Symposium 9: Drug-drug Interactions: Novel Mechanisms and Advances in Prediction
Co-Chairs: Ikumi Tamai, Kanazawa University, Kanazawa, Japan and Jane Kenny, Genentech Inc., South San Francisco, CA, USA

9:00 – 9:30 | S35 | CHALLENGES AND ADVANCES IN PREDICTING CYTOCHROME P450 MEDIATED DRUG-DRUG INTERACTIONS IN PHARMACEUTICAL RESEARCH AND DEVELOPMENT
R. Scott Obach, Pfizer Inc., Groton, CT, USA

9:30 – 10:00 | S36 | MULTIPLE MECHANISMS OF JUICE EFFECT ON INTESTINAL UPTAKE TRANSPORTERS
Ikumi Tamai, Kanazawa University, Kanazawa, Japan

10:00 – 10:30 | S37 | EARLY RISK ASSESSMENT: INVESTIGATION OF ENDOGENOUS PROBE FOR RENAL TRANSPORTER-RELATED DDI
Yuichiro Imamura, Daiichi Sankyo Co., Ltd., Tokyo, Japan

10:30 – 11:00 | S38 | TRANSPARENT MODEL OF METABOLISM-TRANSPORTER INTERPLAY AND DRUG-DRUG INTERACTIONS
Aleksandra Galetin, The University of Manchester, Manchester, UK

11:00 – 11:15 | P162 | A ‘HUMAN FIRST’ APPROACH TO ASSESS FRACTION METABOLISED (FM) AND INFORM VICTIM DRUG INTERACTIONS
Jackie Bloomer, GlaxoSmithKline, Ware, UK

11:15 – 11:30 | P287 | IMPACT OF CYP3A5 GENETIC POLYMORPHISM ON MECHANISM-BASED INACTIVATION BY LAPATINIB
James Chun Yip Chan, National University of Singapore, Singapore

9:00 a.m. – 11:30 a.m. | Imperial Ballroom
Symposium 10: Translational PKPD Modeling & Simulation in Front Line of Drug Development
Co-Chairs: Koji Chiba, Yokohama College of Pharmacy, Kanagawa, Japan and Shinji Yamazaki, Pfizer Inc., San Diego, CA, USA

9:00 – 9:30 | S39 | PROJECTION OF EFFICACIOUS CONCENTRATIONS FOR ANTICANCER DRUGS BY PHARMACOKINETIC-PHARMACODYNAMIC MODELING: A CASE STUDY OF MULTIPLE TYROSINE KINASE INHIBITOR, CRIZOTINIB
Shinji Yamazaki, Pfizer Inc., San Diego, CA, USA

9:30 – 10:00 | S40 | TRANSLATIONAL PHARMACOKINETIC-PHARMACODYNAMIC MODELING OF RITUXIMAB AND OFATUMUMAB IN CHRONIC LYMPHOCYTIC LEUKEMIA
Takashi Ito, Daiichi Sankyo Co., Ltd., Tokyo, Japan

10:00 – 10:30 | S41 | IN VITRO - IN VIVO EXTRAPOLATION FOR DRUGS' PRO-ARRHYTHMIC POTENCY ASSESSMENT WITH USE OF MODELLING AND SIMULATION APPROACH
Sebastian Polak, Simcyp Limited (a Certara Company), Sheffield, UK

10:30 – 11:00 | S42 | THE APPLICATION OF QUANTITATIVE SYSTEM PHARMACOLOGY MODELING TO TRANSLATIONAL RESEARCH
Ananth Kadambi, Rosa & Co, LLC, San Mateo, CA, USA

11:00 – 11:15 | P406 | PRECLINICAL TO CLINICAL PKPD TRANSLATION OF LYMPHOCYTE CIRCULATION INHIBITION BY ABT-413, A S1P1 INHIBITOR
Ting Ting Zhang, AbbVie, North Chicago, IL, USA

11:15 – 11:30 | P396 | A CLINICAL PK/PD ANALYSIS OF VX-770 (KALYDECOTM) AND ITS ACTIVE METABOLITE M1
Jason LaButti, Pfizer, Inc., Cambridge, MA, USA

11:30 a.m. – 2:00 p.m. | Grand Ballroom AB
Meet with Exhibitors / Lunch on Own

12:30 p.m. – 2:00 p.m. | Grand Ballroom AB
Poster Session 5: Transporters
P430 – P543 Poster Presentations
  12:30 – 1:15 | Odd Numbered Posters
  1:15 – 2:00 | Even Numbered Posters
2:00 p.m. – 4:00 p.m. | Continental Ballroom
JSSX Awards Session

2:00 – 3:00 | 2014 JSSX Award
Hiroshi Yamazaki, Showa Pharmaceutical University
METABOLIC ACTIVATION AND FATE OF XENOBIOTICS DETERMINED BY POLYMORPHIC DRUG-METABOLIZING ENZYMES
Chair: Kan Chiba, Chiba University

3:00 – 3:20 | 2014 JSSX Award for Young Industrial Scientists
Shintaro Nakayama, Daiichi Sankyo Co., Ltd.
RISK ASSESSMENT OF THE CHEMICALLY REACTIVE METABOLITES AND IDIOSYNCRATIC DRUG TOXICITY IN DRUG DEVELOPMENT
Chair: Takashi Izumi, Daiichi Sankyo Co., Ltd.

3:20 – 3:40 | 2014 JSSX Award for Young Scientists
Hiroshi Watanabe, Kumamoto University
MOLECULAR PHARMACOKINETIC MECHANISMS OF OXIDATIVE STRESS-INDUCED TISSUE DAMAGE IN CHRONIC KIDNEY DISEASE FOR MEDICAL DEVELOPMENT AND THERAPEUTIC APPLICATION
Chair: Masaki Otagiri, Sojo University

3:40 – 4:00 | 2014 JSSX Award for Young Scientists
Satomi Onoue, University of Shizuoka
STRATEGIC DEVELOPMENT OF NANO-DRUG DELIVERY SYSTEM FOR PHARMACOKINETIC CONTROL
Chair: Shizuo Yamada, University of Shizuoka

4:00 p.m. – 5:00 p.m. | Continental Ballroom
Graduate/Pre-Doctoral Poster Awards Competition Finalists Short Oral Presentations

4:00 – 4:10 | A1 | SUPPRESSION OF CYTOCHROME P450 3A4 ACTIVITY BY UDP-GLUCURONOSYLTRANSFERASE (UGT) 2B7: THE ROLE OF CHARGED RESIDUE(S) IN THE CYTOSOLIC TAIL OF UGT2B7
Yuu Miyazaki, Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan

4:10 – 4:20 | A2 | HIGHER CYP2C19 FUNCTIONAL ACTIVITY IN CHILDREN IS NOT ENTIRELY EXPLAINED BY HIGHER GENE OR PROTEIN EXPRESSION
Nicole R. Zane, UNC Eshelman School of Pharmacy, Chapel Hill, NC, USA

4:20 – 4:30 | A3 | ALTERED HNF4α ACTIVITY CONTRIBUTES TO CYP2D40 INDUCTION DURING PREGNANCY IN MICE
Miaoran Ning, University of Illinois at Chicago, Chicago, IL, USA

4:30 – 4:40 | A4 | PROTEIN GLUTATHIONYLATION: THE HIDDEN HAND IN ACETAMINOPHEN TOXICITY
James Chun Yip Chan, National University of Singapore, Singapore

4:40 – 4:50 | A5 | THE GUT MICROBIOME: IMPLICATIONS IN TACRINE-INDUCED TRANSAMINITIS
Lian Yee Yip, National University of Singapore, Singapore

4:50 – 5:00 | A6 | HEPATIC ORGATIC CATION TRANSPORTER 1 (OCT1) REGULATES THE HEPATIC CLEARANCE OF TRIPTANS, BUT NOT BETA-BLOCKERS
Xuan Zhang, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan

4:00 p.m. – 5:00 p.m. | Imperial Ballroom
Post-Doctoral Poster Awards Competition Finalists Short Oral Presentations

4:00 – 4:10 | A7 | THE MECHANISM OF THE CARBON-CARBON BOND CLEAVAGE STEP OF THE CYTOCHROME P450 19A1 AROMATASE REACTION
Francis Yoshimoto, Vanderbilt University School of Medicine, Nashville, TN, USA

4:10 – 4:20 | A8 | IMPACT OF NEONATAL DRUG EXPOSURE ON INTERINDIVIDUAL VARIATIONS OF P450-MEDIATED DRUG METABOLISM
Yun-Chen Tien, School of Pharmacy, University of Connecticut, Storrs, CT, USA

4:20 – 4:30 | A9 | KINETIC ANALYSIS OF STEROID 21-HYDROXYLASE IN HUMAN CYTOCHROME P450 21A2 FUNCTIONAL VARIANTS
Chunxue Wang, Vanderbilt University, Nashville, TN, USA

Please note: This lecture was cancelled and will be available for review at JSSX web site in the member’s account on October 22.

2014 JSSX Award for Young Industrial Scientists
Hiroshi Kodaira, Kyowa Hakko Kirin Co., Ltd.
DEVELOPMENT OF PREDICTIVE METHOD OF UNBOUND BRAIN CONCENTRATION OF CENTRAL NERVOUS SYSTEM DRUGS FOR DRUG DISCOVERY

Please note: This lecture was cancelled and will be available for review at JSSX web site in the member’s account on October 22.

2014 JSSX Award for Young Industrial Scientists
Takafumi Akabane, Astellas Pharma Inc.
WHAT I LEARNED FROM DRUG DISCOVERY ADME RESEARCH

Please note: This lecture was cancelled and will be available for review at JSSX web site in the member’s account on October 22.
4:30 – 4:40 | A10 | CARBON MONOXIDE BOUND RED BLOOD CELLS PROTECT THE FUNCTION OF HEPATIC CYTOCHROME P450 AFTER RESUSCITATION FROM HEMORRHAGIC SHOCK VIA SUPPRESSION OF TOLL-LIKE RECEPTOR-4 EXPRESSION ON THE KUPFFER CELLS
Shigeru Ogaki, Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto, Japan

4:40 – 4:50 | A11 | 'MATE1 TRANSPORTER CONTRIBUTES TO LAMIVUDINE ELIMINATION AND INDINAVIR ALTERS THE PHARMACOKINETICS OF LAMIVUDINE
Qing Li, School of Pharmacy, University of Maryland, Baltimore, MD, USA

4:50 – 5:00 | A12 | QUANTIFICATION OF HEPATOBILIARY TRANSPORTER EXPRESSION IN HUMAN, RAT, DOG, AND MONKEY BY LC-MS/MS USING SURROGATE PEPTIDES
Li Wang, Department of Pharmaceutics, University of Washington, Seattle, WA, USA

5:00 p.m. – 5:15 p.m. | Continental Ballroom
Presentation of Poster Awards Competition Awards

6:00 p.m. – 10:00 p.m.
Dinner Cruise on San Francisco Bay
This is a ticketed event.

Thursday, October 23, 2014

7:30 a.m. – 3:30 p.m. | West Lounge
Meeting Registration Open

9:00 a.m. – 11:30 a.m. | Continental Ballroom
Symposium 11: Personalized Drug Therapy: Promise and Challenge of a Genomics Approach
Co-Chairs: Miki Nakajima, Kanazawa University, Kanazawa, Japan and Wolfgang Sadee, The Ohio State University, Columbus, OH, USA

9:00 – 9:30 | S43 | CURRENT STATUS AND PERSPECTIVE OF PERSONALIZED MEDICINE IN DRUG DEVELOPMENT
Akira Nagumo, Merck Sharp and Dohme, Tokyo, Japan

9:30 – 10:00 | S44 | MICRORNA-RELATED POLYMORPHISMS TO PREDICT DRUG RESPONSE
Miki Nakajima, Kanazawa University, Kanazawa, Japan

10:00 – 10:30 | S45 | GENETICS OF GENE EXPRESSION AND RNA BIOLOGY IN DRUG METABOLISM AND DISPOSITION
Wolfgang Sadee, The Ohio State University, Columbus, OH, USA

10:30 – 11:00 | S46 | GENOMIC CHARACTERIZATION OF PHARMACOGENE REGULATORY ELEMENTS
Nadav Ahituv, University of California San Francisco, San Francisco, CA, USA

11:00 – 11:15 | P371 | GENES ASSOCIATED WITH PLASMA ANASTROZOLE, AN AROMATASE INHIBITOR, AND HYDROXYANASTROZOLE GLUCORONIDE CONCENTRATIONS IN POSTMENOPAUSAL WOMEN WITH ESTROGEN RECEPTOR POSITIVE (ER+) BREAST CANCER
Tanda M. Dudenkov, Mayo Clinic, Rochester, MN, USA

11:15 – 11:30 | P96 | EFFECT OF AGE AND GENOTYPE ON CYP2D6 ACTIVITY IN CHILDREN AND ADOLESCENTS
Andrea Gaedigk, Children’s Mercy Hospital, Kansas City, MO, USA

9:00 a.m. – 11:30 a.m. | Imperial Ballroom
Symposium 12: Frontier of Antibody Engineering for Next-generation Therapeutics, Including ADCs: Opportunities and Challenges
Co-Chairs: Masaki Ishigai, Chugai Pharmaceutical Co., Ltd., Shizuoka, Japan and Mauricio Leal, Pfizer, Pearl River, NY, USA

9:00 – 9:30 | S47 | DISCOVERY OF NOVEL ANTIBODY DRUG CONJUGATE TECHNOLOGY
Yuki Abe, Daiichi Sankyo Co., Ltd., Tokyo, Japan

9:30 – 10:00 | S48 | ENGINEERED ANTIBODY TO SWEEP ANTIGEN BY PH-DEPENDENT ANTIGEN BINDING AND INCREASED FCRN BINDING
Tatsuhiko Tachibana, Chugai Pharmaceutical Co., Ltd, Singapore

10:00 – 10:30 | S49 | ADME OF ANTIBODY-AURISTATIN CONJUGATES FOR CANCER THERAPY
Steve Alley, Seattle Genetics, Bothell, WA, USA

10:30 – 11:00 | S50 | PRECLINICAL/CLINICAL MAB IMAGING IN SUPPORT OF ADC BIOLOGY
Simon Williams, Genentech Inc., South San Francisco, CA, USA

11:00 – 11:15 | P313 | IN VITRO METABOLISM OF THE MAYTANSINOID PAYLOADS USED FOR ANTIBODY DRUG CONJUGATES
John A. Davis, Amgen Inc., Seattle, WA, USA

11:15 – 11:30 | P321 | THE USE OF RADIOLABELS IN STUDYING ADME PROPERTIES OF BIOTHERAPEUTIC PROTEINS: EFFECT OF LABELLING ON PHYSICAL PROPERTIES OF PROTEINS
Andrew McEwen, Quotient Bioresearch Limited, Rushden, UK

11:30 a.m. – 12:30 p.m.
Lunch on Own
12:30 p.m. – 3:00 p.m. | Continental Ballroom
Symposium 13: Advances in PBPK Modeling and Simulation for Special Populations
Co-Chairs: Shinichi Inoue, Daiichi Sankyo Co., Ltd., Tokyo, Japan and Steve Leeder, Children's Mercy Hospital and Clinics, Kansas City, MO, USA

12:30 – 1:00 | S51 | MODELING & SIMULATION FOR CLINICAL DEVELOPMENT OF NEW DRUGS
Takahiko Tanigawa, Bayer Pharma AG, Berlin, Germany

1:00 – 1:30 | S52 | POPULATION PHYSIOLOGICALLY-BASED PHARMACOKINETIC MODELING AND SIMULATION OF INTERETHNIC DIFFERENCES IN PHARMACOKINETICS
Shinichi Inoue, Daiichi Sankyo Co., Ltd., Tokyo, Japan

1:30 – 2:00 | S53 | INCORPORATING CYP2D6 PHARMACOGENETICS INTO PEDIATRIC PBPK MODELS
Nina Isoherranen, University of Washington, Seattle, WA, USA and Steve Leeder, Children's Mercy Hospital and Clinics, Kansas City, MO, USA

2:00 – 2:30 | S54 | DEVELOPMENT AND APPLICATION OF PBPK MODELS OF DRUG DISPOSITION DURING PREGNANCY
Jashvant Unadkat, University of Washington, Seattle, WA, USA

2:30 – 2:45 | P380 | APPLICATION OF ANTIBIOTIC PHARMACOKINETIC MODELS CONSTRUCTED FOR CAUCASIANS TO A JAPANESE POPULATION
Koji Chiba, Yokohama College of Pharmacy, Kanagawa, Japan

2:45 – 3:00 | P444 | ROLE OF N-TERMINAL MOTIFS OF ORGANIC ANION TRANSPORTING POLYPEPTIDE 1B3 (OATP1B3) IN REGULATING ITS EXPRESSION LEVELS AND SURFACE MEMBRANE TRAFFICKING
Nilay Thakkar, University of Kentucky, Lexington, KY, USA

12:30 p.m. – 3:00 p.m. | Imperial Ballroom
Symposium 14: Post-Translational and Transcriptional Regulation of Transporters and Metabolism
Co-Chairs: Ichiro Ieiri, Kyushu University, Fukuoka, Japan and Xiaobo Zhong, University of Connecticut School of Pharmacy, Storrs, CT, USA

12:30 – 1:00 | S55 | miRNA-328 ON BCRP EXPRESSION – TRANSCRIPTIONAL REGULATION AND CLINICAL APPLICATION
Takeshi Hirota, Kyushu University, Fukuoka, Japan

1:00 – 1:30 | S56 | UTILITY OF IPS CELLS FOR DRUG METABOLIZING ENZYME EXPRESSION: HISTONE DEACETYLASE INHIBITOR PROMOTES THE DIFFERENTIATION OF HUMAN INDUCED PLURIPOTENT STEM CELLS INTO HEPATOCYTE-LIKE CELLS
Tamihide Matsunaga, Nagoya City University, Nagoya, Japan

3:00 p.m. – 3:30 p.m. | Imperial Ballroom
Closing Session / Meeting Adjourns