

EXPERIMENTAL BIOLOGY 2010

April 24-28, 2010

Anaheim, CA

ASPET Preliminary Program

Friday & Saturday, April 23-24

The Behavioral Pharmacology Society Meeting

Saturday, April 24 Afternoon Sessions

2010 Teaching Institute: Simulation in Pharmacology Education: Going Beyond Mannequins

Chair: L.M. Crespo, University of Central Florida

Anaheim Convention Center, Room 209

12:30 PM – 3:00 PM

Diversity Committee Workshop: Traditional and Alternative Career Paths in Rough Economic Times

Chairs: M. Davila-Garcia, Howard University and Marcus Delatte, FDA

Anaheim Convention Center, Room 210AB

12:30 PM – 3:00 PM

Speakers:

K.A. Albert, Louisiana State University

P.A. Ardayfio, Eli Lilly & Co.

L. Stewart, Caterpillar, Inc

Graduate Student/Postdoc Colloquium: Leadership: Skills, Styles and Self Awareness

Anaheim Convention Center, Room 208

Chairs: S.B. Bausch and M. Sridharan

3:15 pm – 5:45 pm

ASPET Business Meeting

Anaheim Hilton, Pacific Ballroom A

6:00 pm – 7:30 PM

Sunday, April 25 Morning Sessions

9:30 – 12:00 noon (unless otherwise noted)

WIP Into Shape Networking Walk

Meet at the Anaheim Hilton Concierge Desk at 7:15 am

7:00 am – 8:30 am

Diversity Mentoring Breakfast

Anaheim Hilton, Monterey Room

7:30 am – 9:30 am

Regenerative Pharmacology and Stem Cell Research for Tissue and Organ Repair: State-of-the-Art

Anaheim Convention Center, Room 209

Sponsored by the Divisions for Integrative Systems, Translational & Clinical Pharmacology; Cardiovascular Pharmacology; Drug Discovery, Drug Development & Regulatory Affairs; and Neuropharmacology

Chairs: D.C. Marshall, Ferring Pharmaceuticals, Inc. and G.J. Christ, Wake Forest Institute for Regenerative Medicine

Stem and Progenitor Cells for Vascular and Muscle Tissue Engineering: Regenerative Pharmacology and Enabling Technologies Required for Clinical Translation

G.J. Christ, Wake Forest Institute for Regenerative Medicine

Pharmacological Modification of the hematopoietic Stem Cell Interaction with its Niche

G. Adams, University of Southern California Keck School of Medicine.

Orphan Cytochrome P450 and Other Drug Metabolizing Enzymes

Anaheim Convention Center, Room 210C

Sponsored by the Divisions for Drug Metabolism; Integrative Systems, Translational & Clinical Pharmacology; and Toxicology

Chair: F.P. Guengerich, Vanderbilt University School of Medicine

Overview: The General Problem of Characterizing Proteins of Unknown

F.P. Guengerich, Vanderbilt University School of Medicine

Function Transgenic Mouse Approaches to P450 Function

F. J. Gonzalez, NIH, National Cancer Institute

Use of Humanized Mice in the Study of the Function of Human UGT Enzymes

J.C. Stevens, Pfizer, Inc.

In Vitro LC-MS Approaches to Deorphanization of Cytochrome P450 Enzymes

Z. Tang, Vanderbilt University School of Medicine

When the Smoke Clears, There's More to Neuronal Nicotinic Acetylcholine Receptors

Anaheim Convention Center, Room 210D

Sponsored by the Divisions for Behavioral Pharmacology; Drug Discovery, Development & Regulatory Affairs; Molecular Pharmacology; and Neuropharmacology

Chairs: M. Picciotto, Yale University School of Medicine and L. McMahon, University of Texas Health Science Center at San Antonio

Electrophysiological perspectives on the therapeutic use of nicotinic partial agonists

R. Papke, University of Florida

Nicotinic Chemistry and Drug Discovery

H. Rollema, Pfizer, Inc.

Nicotine Addiction and Depression: Rodent Studies

M. Picciotto, Yale University School of Medicine

Nicotine Addiction and Depression: Human Studies

T. George, University of Toronto

Behavioral and Physiological Effects of Novel nAChR Ligands in Rodents.

E. Jutkiewicz, University of Michigan

Behavioral Effects of Novel nAChR Ligands: Pre-clinical Studies

L. McMahon, University of Texas Health Science Center at San Antonio

Spatial and Temporal Organization of Cell Signaling

Anaheim Convention Center, Room 208

Sponsored by the Division for Molecular Pharmacology and the American Society for Biochemistry & Molecular Biology

Chair: J.D. Scott, University of Washington School of Medicine Howard Hughes Medical Institute

Synaptic Organization of Neuronal Signaling

M. Dell'Acqua, University of Colorado Denver School of Medicine

Anchored PKA and Immune Function

K. Taske'n, University of Oslo

AKAPs and Adenylyl Cyclases

C.W. Dessauer, University of Texas Medical School

Cell Signaling in Space and Time

J.D. Scott, University of Washington School of Medicine Howard Hughes Medical Institute

New Therapeutic Approaches to Combat Arterial Thrombosis

Anaheim Convention Center, Room 210AB

Sponsored by the Divisions for Cardiovascular Pharmacology; Drug Discovery, Development & Regulatory Affairs; and Integrative Systems, Translational & Clinical Pharmacology

Chairs: J. Kermode, University of Mississippi Medical Center and Z.M. Ruggeri, The Scripps Research Institute

Arterial Thrombosis: How it Occurs and How to Combat It

Z. M. Ruggeri, Scripps Research Institute

Metabolism as a Determinant of the Activation of Clopidogrel and Prasugrel and their Subsequent Inhibitory Effects on P2Y₁₂ and Platelet Function

J.A. Jakubowski, Eli Lilly & Company

Protease-Activated Receptor-1 (PAR-1) on the Platelet as a Novel Target for Antithrombotic Drugs

L.K. Jennings, University of Tennessee Health Science Center

"Thrombin Sponge": A Potent Nanoparticle Approach to Inhibiting Coagulation in Acute Thrombosis.

J.W. Myerson, Washington University

Upcoming and Future Targets on the Platelet for Antithrombotic Drugs

J. Kermode, University of Mississippi Medical Center

Applying Web 2.0 Technologies in Teaching Pharmacology: Developing the Tool Box

Anaheim Hilton, Room TBA

Sponsored by the Divisions for Pharmacology Education and Integrative Systems, Translational & Clinical Pharmacology

Chairs: W.B. Jeffries, University of Vermont College of Medicine and J.L. Szarek, The Commonwealth Medical College

Creative Use of Web 2.0 Technologies for Medical Education: Specific Examples

W.B. Jeffries, University of Vermont College of Medicine

Rethinking Education for the Net-Geners

J.L. Szarek, The Commonwealth Medical College

Sunday, April 25 Afternoon Sessions

3:00 pm – 5:30 pm (unless otherwise noted)

Applications of Stem Cell Therapies in Clinical Development and Regenerative Pharmacology in Organ Repair

Anaheim Convention Center, Room 209

Sponsored by the Divisions for Integrative Systems, Translational & Clinical Pharmacology; Cardiovascular Pharmacology; Drug Discovery, Development & Regulatory Affairs; and Neuropharmacology

Chairs: C. Felder, Eli Lilly & Co. and A. Chen, University of Pittsburgh School of Medicine

Title TBD

M. Boehm, NHLBI-NIH

Vascular/Endothelial Progenitor Cells: Applied Pharmacology with Clinical Outcomes

A. Chen, University of Pittsburgh School of Medicine

Title TBD

E. Morrisey, University of Pennsylvania

Title TBD

I. Domian, Massachusetts General Hospital

Industrial Academic Partnerships: A New Era (Workshop)

Anaheim Convention Center, Room 210D

Sponsored by the Divisions for Drug Metabolism; Behavioral Pharmacology; Drug Discovery, Development & Regulatory Affairs; Pharmacology Education; and Integrative Systems, Translational & Clinical Pharmacology

Chair: L. Wienkers, Amgen, Inc.

Insights on Joint Academic-Industrial Research Collaborations

K. Seibert, Pfizer Global Research and Development

The Consortium Model for Strengthening Industrial/Academic Relations

T.A. Baillie, University of Washington

The Academic Sabbatical in the Pharmaceutical Industry: Opportunity to Enhance Both Missions

T. Tracy, University of Minnesota College of Pharmacy
Knowledge request and transfer: an academic's Perspective of what works and what does not work.

R. Kim, University of Western Ontario.

Stimulus-Bias in an Allosteric World: Relevance to CNS Drug Target Validation

Anaheim Convention Center, Room 210AB

Sponsored by the Divisions for Neuropharmacology and Drug Discovery, Development & Regulatory Affairs

Chairs: A. Christopoulos, Monash University and C. Felder, Eli Lilly & Company

Importance of Stimulus Bias in Discovery and Utility of Allosteric Modulators of GPCR's as Therapeutic Agents

P.J. Conn, Vanderbilt University Medical Center

Quantifying Functional Bias at 7TM Receptors

T. Kenakin, GlaxoSmithKline

Allosteric Modulator-Engendered Stimulus Trafficking: Implications for Drug Discovery

A. Christopoulos, Monash University

Deciphering the Complexity of Allosteric Modulation from In Vitro Pharmacology through In Vivo Behavioral Assessment

C. Felder, Eli Lilly & Company

Receptor-Independent Activators of G-Protein Signaling in the Nervous System

Anaheim Convention Center, Room 208

Sponsored by the Divisions for Drug Discovery, Development & Regulatory Affairs and Molecular Pharmacology

Chair: S.M. Lanier, Medical University of South Carolina

AGS3 and AGS4 in G-Protein Signaling

J. B. Blumer, Medical University of South Carolina

GIV/Girdin, a Non-Receptor GEF for Gai, is Required for Cell Migration

M.G. Farquhar, University of California, San Diego

The Role of AGS3 in Craving, Alcoholism and Addiction

I. Diamond, University of California, San Francisco

Tctex1 (AGS2) and Neural Stem Cell Maintenance

D. Kaplan, University of Toronto

Regulation of G-Protein Signaling and Expression by the Non-Receptor GEFs Ric-8A and Ric-8B

G. Tall, University of Rochester

P. B. Dews Award Lecture in Behavioral Pharmacology: Staying on Schedule

Speaker: D. E. MacMillan, University of Arkansas for Medical Sciences (ret)

Anaheim Convention Center, Room 210C

2:00 pm – 2:50 pm

In Vivo Animal Modeling in Drug Discovery and Development: Multiple Approaches to Predict Clinical Efficacy in CNS Disorders

Anaheim Convention Center, Room 210C

Sponsored by the Divisions for Behavioral Pharmacology; Integrative Systems, Translational & Clinical Pharmacology; and Neuropharmacology

Chair: S. Rosenzweig-Lipson, Wyeth Research

Use of Transgenic Animal Models in the Discovery of Drugs for Neurological Disorders

R. Paylor, Baylor Medical College

Cognition in NHP's: Utility of Translation into the Clinic

D.M. Hutcheson, Maccine Pte, Ltd.

Behavior-Driven Approach to Drug Discovery

P. McGonagall, PsychoGenics, Inc.

Animal Models in Psychiatry, Tried and True vs. Disease-Based, What's the Advantage?

K.L. Marquis, Wyeth Research

Monday, April 26 Morning Sessions

9:00 am – 12:00 noon (unless otherwise noted)

Julius Axelrod Lecture: Structure Based Drug Design in the Nervous System

Speaker: P.W. Taylor, University of California, San Diego

Anaheim Convention Center, Room 209

8:30 am – 9:20 am

Julius Axelrod Symposium: Instilling Structure and Mechanism in Drug Design: Prospects for Academic-Industry Partnerships

Anaheim Convention Center, Room 209

Chair: P. W. Taylor, University of California, San Diego

Structure and Mechanism in Nicotinic Receptor Activation: Implications for Partial Agonism and Congenital Myasthenia

S. Sine, Mayo Medical College

Using G Protein-coupled Receptor Structural Information to Create Novel Probes and Candidate Medications for Neuropsychiatric Disease.

B. Roth, University of North Carolina Chapel Hill.

Structural Genomics of Human G Protein Coupled Receptors

R. Stevens, Scripps Research Institute

Allosteric Modulation of G Protein Coupled Receptors as a Novel Approach to treatment of CNS disorders

P.J. Conn, Vanderbilt University

Freeze-frame, Click Chemistry: Using the Very Target of Drug Action as the Synthetic Template for Synthesis of Agonists and Antagonists

P. Taylor, Skaggs School of Pharmacy & Pharmaceutical Sciences

Extracellular Matrix Proteins of the CCN Family as Therapeutic Targets

Anaheim Convention Center 210D

Sponsored by the Divisions for Drug Discovery, Development & Regulatory Affairs and Molecular Pharmacology

Chairs: J. Heller Brown, University of California, San Diego and L.J. Lau, University of Illinois at Chicago

Introduction to the Biology and GPCR Regulation of CCN Proteins

J. Heller-Brown, University of California, San Diego

CCN Proteins and Inflammation

L.F. Lau, University of Illinois at Chicago

CCN1/CYR61 in Breast Cancer

R. Lupu, Mayo Clinic

CCN2/CCTGF in Liver Fibrosis

D. Brigstock, The Research Institute at Nationwide Children's Hospital

Introduction of Drug Safety (Pharmacovigilance) Into Curricula

Anaheim Convention Center, Room 210C

Sponsored by the Divisions for Pharmacology Education; Behavioral Pharmacology; Cardiovascular Pharmacology; Drug Discovery, Development & Regulatory Affairs; Drug Metabolism; Integrative Systems, Translational & Clinical Pharmacology; Molecular Pharmacology; Neuropharmacology; and Toxicology

Chairs: G. Dunaway, Southern Illinois University and J. Strandhoy, Wake Forest University

Pharmacokinetics and Pharmacodynamic Mechanisms for the Most Common and Important Adverse Drug Reactions

J. Strandhoy, Wake Forest University

Role of the FDA in Drug Safety Education

C. Furberg, Wake Forest University

Models for Introduction of Pharmacovigilance into the Pharmacology Curriculum

C. Feingold, Southern Illinois University School of Medicine

Careers in Drug Safety

S. W. Mittelstadt, Abbot Laboratories

Recent Advances in the Neuropharmacology of Anxiety: Implications for Novel Therapeutics

Anaheim Convention Center, Room 210AB

Sponsored by the Divisions for Integrative Systems, Translational & Clinical Pharmacology and Neuropharmacology

Chair: B. Greenwood-Van Meerveld, University of Oklahoma Center for Neuroscience

Overview of Anxiety: Current and Future Treatment Approaches

B. Greenwood-Van Meerveld, University of Oklahoma Center for Neuroscience

GABA-A Receptors and Therapeutics: Beyond Benzodiazepines

L. Gerak, University of Texas Health Science Center

Visceral Pain Related Anxiety: Role of Glucocorticoids

B. Meyers, University of Oklahoma Health Sciences Center

Pathophysiology of Panic Disorder: Neuroimaging Studies of Monoaminergic Neurotransmitter Systems

W. Drevets, NIH, National Institute of Mental Health

Molecular Pharmacology of Anxiety: Role of Orphan FX/Nociceptin

Kelly Standifer, University of Oklahoma Health Sciences Center

Wnt Signaling and Development: Conventional and Unconventional GPCR's Mechanisms

Anaheim Convention Center, Room 208

Sponsored by the Divisions for Molecular Pharmacology and Neuropharmacology

Chair: C.C. Malbon, State University of New York at Stony Brook

Wnt-Frizzled Signaling: The Non-G-Protein-Coupled Mechanisms

R. Van Amerongen, Stanford University

Wnt-Frizzled Signaling: The G-Protein-Coupled Mechanisms and Targets

L. Katanaev, University of Konstanz

Wnt-Frizzled Signaling and the Function of β -Arrestins

G. Schulte, Karolinska Institute

Wnt-Frizzled Signaling and LRP5/6

X. He, Children's Hospital and Harvard Medical School

Wnt-Frizzled Signaling and Protein Domains

H. Wang, State University of New York at Stony Brook

Monday April 26th Afternoon Sessions

3:00 pm – 5:30 pm (unless otherwise noted)

Division for Neuropharmacology Post Doctoral Award Finalists

Anaheim Convention Center, Room 209

B.B Brodie Award Lecture in Drug Metabolism: Structure and Function of Cytochromes P450

2B and 3A: From Mechanism-based Inactivators to X-ray Crystal Structures and Back

Speaker: J. R. Halpert, University of California, San Diego

Anaheim Convention Center, Room 208

2:00 pm – 2:50 pm

Division for Drug Metabolism and James Gillette Best Paper Award Platform Session

Anaheim Convention Center, Room 208

Chairs: S. Leeder, Children's Mercy Hospital and Clinics and J.C. Stevens, Pfizer, Inc

Division for Behavioral Pharmacology Symposium: Stress, Cognitive Function, and Monoaminergic Mechanisms in Psychiatric Disorders

Anaheim Convention Center, Room 210D

Chairs: D. Morilak, University of Texas Health Science Center at San Antonio and A. Frazer, University of Texas Health Science Center at San Antonio

Catecholaminergic Regulation of Impulse Control

J. D. Jentsch, University of California, Los Angeles

Role of the Medial Prefrontal Cortex in Stress Resilience and Vulnerability

S. Maier, University of Colorado
*Molecular Mechanisms Underlying Stress-induced Prefrontal Cortical Dysfunction:
Relevance to Mental Illness*

A. Arnsten, Yale University School of Medicine
*Monoaminergic Mechanisms Linking Stress, Cognitive Dysfunction and its Treatment in
Depression and Anxiety Disorders*

D. Morilak, University of Texas Health Science Center

Division for Cardiovascular Pharmacology Trainee Showcase

2:00 pm – 4:30 pm

Anaheim Convention Center, Room 210AB

**Paul Vanhoutte Award Lecture in Cardiovascular Pharmacology: Arachidonic Acid
Metabolites as Endothelium-derived Hyperpolarizing Factors**

Speaker: W.B. Campbell, Medical College of Wisconsin

Anaheim Convention Center, Room 210AB

4:30 – 5:30 pm

**Division for Pharmacology Education Symposium: Making Medical Pharmacology More
Clinically Relevant**

Anaheim Convention Center, Room 210C

Organizers: K.K. McMahon and A. Wilson-Delfosse

Tuesday, April 27 Morning Sessions

9:00 am – 12:00 noon (unless otherwise noted)

**Ray Fuller Lecture in the Neurosciences: Transcriptional and Epigenetic Mechanisms of Drug
Addiction**

8:30 am– 8:50 am

Anaheim Convention Center, Room 209

Speaker: E.J. Nestler, Mt. Sinai School of Medicine

Ray Fuller Symposium: Epigenetic Mechanisms of Learning and Memory

Anaheim Convention Center, Room 209

Chair: E. J. Nestler, Mt. Sinai School of Medicine

DNA and Histone Methylation in Learning and Memory

D. Sweatt, University of Alabama, Birmingham

Role of CBP in Long-Term Memory

T. Abel, University of Pennsylvania

Histone Acetylation in Hippocampus in Long-Term Memory Storage in Health and Disease

L-H. Tsai, MIT

Role of Histone Deacetylases in Memory Formation and Retrieval

M. Wood, University of California, Irvine

Regulating the Regulators: Redox Regulation, Stress Response Proteins and Apoptosis
Anaheim Convention Center, Room 210C

Sponsored by the Divisions for Toxicology and Drug Metabolism

Chair: D. St. Clair, University of Kentucky

Introduction to the Connections Between Cellular Redox Status and Transcription Response

D. St. Clair, University of Kentucky

ROS and p53 Modulators in Cancer Specific Apoptosis

S. Lee, Harvard Medical School

p53 Regulates Mitochondrial Function

P.M. Hwang, NIH, National Heart, Lung, and Blood Institute

SIRT3 is a Mitochondrial Tumor Suppressor Gene Required for Maintenance of Mitochondrial Integrity and Oxidative Metabolism During Stress

D. Gius, NIH, National Cancer Institute

Mitochondria: Novel Regulators of the Keap1/Nrf-2 Antioxidant Pathway

A. Landar, University of Alabama, Birmingham

The Bi-directional Role of p53 on MnSOD Expression

S. Dhar, University of Kentucky

New Insights About an "Old" Second Messenger, cAMP: Implications for Cardiovascular Pharmacology

Anaheim Convention Center, Room 210D

Sponsored by the Divisions for Cardiovascular Pharmacology and Molecular Pharmacology

Chair: P.A. Insel, University of California, San Diego

Cyclic AMP: New Discoveries, Insights, and Therapeutic Opportunities

P.A. Insel, University of California, San Diego

Plasma Membrane Efflux: An Unappreciated Determinant of cAMP Signaling in Vascular Cells

J. Hulot, Inserm U621

Choreographing the Adenylyl Cyclase Signalosome: Sorting out the Partners and the Steps

R. Feldman, Robarts Research Institute

Epacs: cAMP Effectors that Link to Low Molecular Weight G-Proteins

M. Schmidt, University of Groningen

High-Resolution Structural Approaches to Understanding GPCR Activation

Anaheim Convention Center, Room 208

Sponsored by the Division for Molecular Pharmacology and the American Society for Biochemistry & Molecular Biology

Chair: B. Kobilka, Stanford University

Long Time-Scale Molecular Dynamics Simulations of G-Protein Coupled Receptors

R. Dror, D.E. Shaw Research

The Structure of a Constitutively Active Mutant of Rhodopsin: Implications for the Activation of GPCRs

G. Schertler, MRC Centre Laboratory of Molecular Biology

Allsteric Regulation on Ligand Binding by G-Proteins

R. Sunahara, University of Michigan Medical School

Mechanism of Receptor G-Protein Interaction

H. Hamm, Vanderbilt University

Integrating Genetics, Genomics and Pharmacology: How the Pharmacogenomics Knowledge Base Catalyzes Pharmacogenomic Research and Translational Medicine

Anaheim Convention Center, Room 210AB

Sponsored by the Divisions for Integrative Systems, Translational & Clinical Pharmacology; Behavioral Pharmacology; Cardiovascular Pharmacology; Drug Discovery, Development & Regulatory Affairs; Drug Metabolism; Pharmacology Education; Molecular Pharmacology; Neuropharmacology; and Toxicology

Chairs: R. Altman, Stanford University and A. Gaedigk, Children's Mercy Hospital & Clinics

Genome-Wide Association Studies in Pharmacogenomics

E. Dolan, University of Chicago

Pharmacogenomics and Membrane Transporters: A Critical Component of Pharmacokinetics

D. Kroetz, University of California, San Francisco

The PharmGKB database and the Pharmacogenetics Research Network: What it Can Do for Your Research

R. Altman, Stanford University

Knowledge Base Catalyzed Pharmacogenomic Research and Translational Medicine

Curation Process at Pharm GKB

L. Gong, Stanford University

Tues April 27th Afternoon Sessions

3:00 pm – 5:30 pm

Epigenetic Regulation: Concepts and Applications in Psychiatric, Neurological and Substance Abuse Disorders

Anaheim Convention Center, Room 209

Sponsored by the Divisions for Behavioral Pharmacology; Drug Discovery, Development & Regulatory Affairs; Integrative Systems, Translational & Clinical Pharmacology; and Neuropharmacology

Chairs: J.E. Barrett, Drexel University College of Medicine and M.A. Nader, Wake Forest University School of Medicine

Epigenetic Principles and Mechanisms Underlying Nervous System Function in Health and Disease States

M.F. Mehler, Albert Einstein College of Medicine

Therapeutic Application of Histone Deacetylase Inhibitors for CNS Disorders

A.G. Kazantsev, Harvard Medical School

Studies of Schizophrenia Through the Prism of Epigenetics

S. Akbarian, University of Massachusetts Medical Center

Epigenetic Alterations of miRNA in Neuropathic Pain Reveal Novel Regulatory Mechanisms

S. Ajit, Wyeth Research

Epigenetic Mechanisms in Drug Addiction

S.J. Russo, Mount Sinai School of Medicine

Division for Drug Discovery, Development & Regulatory Affairs Symposium: Protease-Activated Receptors: New Roles and Regulatory Mechanisms

Anaheim Convention Center, Room 210D

Chair: J. Trejo, University of California, San Diego

Dysregulation of Protease-Activated Receptor Signaling in Cancer

J. Trejo, University of California, San Diego

The Role of PAR1 in Neuronal Function and CNS Disease

S. F. Traynelis, Emory University

β -arrestins as Mediators of PAR-2 Induced Inflammation

K. DeFea, University of California, Riverside

Proteinase-Mediated Signaling and Inflammation: Tissue Kallikreins (KLKs) and More

M. D. Hollenberg, University of Calgary

Division for Integrative Systems, Translational & Clinical Pharmacology Award Session

Anaheim Convention Center, Room 210AB

Chair: A. Gaedigk, Children's Mercy Hospital & Clinics

Division for Toxicology Symposium: ABC Transporters, Their Role in Physiology, Toxicology and Cancer

Anaheim Convention Center, Room 210C

Chair: J. Schuetz, St. Jude's Children's Research

Regulation of ABC Transporters at the Blood-Brain Barrier: New Targets for CNS Therapy

B. Bauer, University of Minnesota College of Pharmacy

Applying Principles Derived from Laboratory Studies to Multidrug Resistance in Human Cancers

M.M. Gottesman, NIH, National Cancer Institute

The Contribution of ABC Transporters to Drug Resistance in a Realistic Mouse Mammary Tumor Model

P. Borst, University of Amsterdam
Transcriptional Regulation of Hepatobiliary Transporters
C.D. Klaassen, University of Kansas Medical Center

Division for Molecular Pharmacology Postdoctoral Award Finalists
Anaheim Convention Center, Room 208

Wednesday, April 28 Morning Sessions Only
9:00 am – 12:00 noon

Protein-Protein Interactions and Modulation of Drug Metabolism

Anaheim Convention Center, Room 210AB

Sponsored by the Divisions for Drug Metabolism; Integrative Systems, Translational & Clinical Pharmacology; and Toxicology

Chair: T. Tracy, University of Minnesota College of Pharmacy

Microsomal Monooxygenase as a Multienzyme System: Exploring Protein-Protein Interactions of Cytochromes P450

D. Davydov, University of California, San Diego

UGT-CYP Protein Interactions: Role of Conjugating Enzymes in Modulating Oxidative Enzyme Activity

Y. Ishii, Kyushu University

Effect of P450-P450 Complex Formation on Monooxygenase Function

W. L. Backes, Louisiana State University School of Medicine

Role of Mitochondria in Drug Hepatotoxicity: A Tale of Stress

Anaheim Convention Center, Room 210C

Sponsored by the Divisions for Toxicology; Drug Metabolism; and Integrative Systems, Translational & Clinical Pharmacology

Chair: N. Kaplowitz, University of Southern California

Mitochondrial Permeability Transition - Target and Executioner in DILI

J. Le Masters, Medical University of South Carolina

Compartmentation of Oxidative Stress Defense in Mitochondria: Implications of Drug Toxicity

D. Jones, Emory University School of Medicine

Threshold for Mitochondrial Participation in Idiosyncratic DILI

U. Boelsterli, University of Connecticut

Interplay of Signal Transduction and Mitochondria in the Acetaminophen Model

D. Han, University of Southern California

Sphingosine 1-Phosphate Signaling as a Therapeutic Target

Anaheim Convention Center, Room 208

Sponsored by the Divisions for Molecular Pharmacology, Drug Discovery, Development & Regulatory Affairs;
Integrative Systems, Translational & Clinical Pharmacology; and Neuropharmacology

Chair: K.R. Lynch, University of Virginia

Shingomab in Oncology and Macular Degeneration

R.A. Sabbadini, Lpath Therapeutics, Inc

Fingolimod: Experience with Autoimmune Disease

V. Brinkmann, Novartis Pharma AG

Sphingosine 1-Phosphate Drug Discovery

K.R. Lynch, University of Virginia

S1P and Pain

S.P. Welch, Virginia Commonwealth University