

Modern Therapeutics 2012:
Advances in Physiology, Pharmacology and Pharmaceutical Sciences
Preliminary Program (last rev: May 7, 2012)

Tuesday June 12	
08:00-16:30	<p>PRE-CONFERENCE WORKSHOP: "Drug Product Development: A QbD Approach" Presented by CSPS (Registration fees extra, not included in conference registration) Program details available at www.cspscanada.org.</p>
12:00-17:00	<p>TRAINEE WORKSHOP: TECHNICAL SKILLS OF SUCCESSFUL SCIENTISTS (light refreshments provided)</p> <p>Small Molecule Binding can Interfere with Helix-helix Interactions and Modulate Amyloid Generation Gerhard Multhaup (McGill University)</p> <p>AFM-Based Force Sensing on Individual Cells; Applications in Pharmacology Michel Grandbois (Université de Sherbrooke)</p> <p>Drug Safety: Completing Clinical Trials with Real World Experience David Juurlink (ICES)</p> <p>Centre for Clinical Investigation & Therapeutics: Enabling Technologies for Patient Oriented Research in the 21st Century Richard Kim (University of Western Ontario)</p> <p>Multidisciplinary Approaches Towards Understanding Ion Channel Function in the Nervous System Gerald Zamponi (University of Calgary)</p> <p>Applications of Computer Aided Drug Design to High Throughput Screening and Rational Discovery Strategies Donald Weaver (Dalhousie University)</p> <p>Model Systems for Biophotonic Imaging of Brain Responses to Injury and Therapies Jasna Kriz (Laval University)</p>
TBA	Registration
17:00-20:00	CSPT Executive Board Meeting
17:00-19:00	CSPT Publication Committee Meeting
17:15-19:00	Trainee Social - O'Grady's Pub, College Street
18:30	CSPS Board of Directors Meeting (Delta Chelsea Hotel)

Wednesday June 13

07:00-	Registration opens and continental breakfast		
08:15-08:30	Welcome		
08:30-09:30	Plenary 1: PHARMACOLOGICAL NEUROPHYSIOLOGY (MacLeod Auditorium) Chair: <u>Fiona Parkinson</u> All Roads to Psychosis Pass Through Dopamine Supersensitivity and Elevated D2High States Philip Seeman (University of Toronto)		
09:30-10:00	Nutrition BREAK and Poster Viewing		
10:00-12:15	Plenary 2: CLINICAL PRACTICE GUIDELINES FOR PHARMACOGENETIC TESTING: THE FIRST SIX DRUGS Chairs: <u>Shinya Ito and Bruce Carleton</u> Overview of Workshop Shinya Ito (Hospital for Sick Children) CSPT/CSPS State of the Art Lecture MapQuest for Pharmacogenetic Tests: How to Arrive at Improved Clinical Outcomes Larry Lesko (University of Florida) CPG Development Process Bruce Carleton (University of British Columbia) Guideline for Pharmacogenetic Testing: Carbamazepine Ursula Amstutz (University of British Columbia) Recommendations: Codeine Parvaz Madadi (Hospital for Sick Children) Recommendations: Cisplatin Colin Ross (University of British Columbia) Recommendations: Tamoxifen Ricardo Jimenez (University of British Columbia) Recommendations: Anthracyclines Colin Ross (University of British Columbia) Recommendations: Warfarin Kaitlyn Shaw (University of British Columbia) Next Steps, Distribution of CPG Materials Bruce Carleton (University of British Columbia)		
12:30-13:30	LUNCH and Poster Viewing		
13:30-16:00	ALZHEIMER'S DISEASE Chairs: <u>Claudio Cuello, Zhong-Ping Feng</u> The Role of AMPAR Trafficking in Memory Deficits Observed in Mouse Models AD Sheena Josselyn (University of Toronto) Molecular Mechanisms Regulating the Abeta Amyloid Production Weihong Song, (UBC)	CANCER STEM CELLS: NEW POTENTIAL CLINICAL TARGETS Chair: <u>Feridoun Karimi-Busheri</u> Basic and Translational Biology of Cancer Stem Cells William Matsui (Johns Hopkins University) Targeting Cancer Stem Cell-Specific Molecular Pathways Markus Frank (Harvard Medical School)	QUALITY, SAFETY AND EFFICACY REQUIREMENTS: REGULATORY AND PHARMACEUTICAL INDUSTRY ISSUES Chairs: <u>Isadore Kanfer and Raimar Loebenberg</u> 3 Speakers TBA + Panel Discussion

	<p>Caspases as Causative Agents in Alzheimer's Disease Andrea Leblanc (McGill University)</p> <p>Neurotrophin Regulation and Cognitive Impairment in Alzheimer's Disease Margaret Fahnstock (McMaster University)</p> <p>Early Inflammation and NGF Deregulation in Alzheimer's and MCI Claudio Cuello (McGill University)</p>	<p>Targeting Cancer Stem Cells: Promises and Challenges Ahead Feridoun Karimi-Busheri (NovaRx & University of Alberta)</p> <p>Panel Discussion</p>	
16:00-18:00	Poster Session 1		
16:00-16:30	<p>Senior Investigator Award Lecture From Drugs to Patients: Personalizing Care, not Medicines Bruce Carleton (University of British Columbia)</p>		
18:00-20:00	Joint opening reception (Faculty Club)		
Thursday June 14			
07:00	Registration opens with continental breakfast		
08:00-10:00	<p>FOOD INTAKE AND REWARD <u>Chair: Stephanie Borgland</u></p> <p>Effects of Insulin on VTA Dopamine Neurons Stephanie Borgland (University of British Columbia)</p> <p>Negative Emotional States and Neurobehavioral Adaptations in Brain Reward Circuitry Induced by Chronic High-fat Feeding Stephanie Fulton (Université de Montréal)</p> <p>Ghrelin Modulation of Dopamine Neurotransmission Alfonso Abizaid, (Carleton University)</p> <p>Co-sensitivity to the Incentive Properties of Palatable Food and Cocaine in Rats; Implications for Comorbid Addictions Francesco Leri (University of Guelph)</p>	<p>08:00-09:00 AWARD LECTURES <u>Chair: Dion Brocks</u></p> <p>GlaxoSmithKline/CSPS Early Career Award Lecture Ildiko Badea (University of Saskatchewan)</p> <p>CSPS Award of Leadership in Canadian Pharmaceutical Sciences Lecture</p> <hr/> <p>09:00-10:00 <u>Chair: Reina Bendayan</u></p> <p>Advances in Research of Drug Transporters and Metabolic Enzymes: Implications in Drug Development Yuichi Sugiyama (University of Tokyo)</p>	ORAL PRESENTATIONS

	<p>A Psychogenetic Study of Food Addiction in Adult Men and Women Caroline Davis (York University)</p>		
10:00-10:30	Nutrition BREAK and Poster Viewing		
10:30-12:30	<p>CHALLENGING REAL PATIENT PHARMACOLOGY/ TOXICOLOGY CASES PRESENTING AT CANADIAN HOSPITALS Chair: <u>George Dresser</u></p>	<p>NANOTECHNOLOGY IN CANCER THERAPEUTICS: FROM DETECTION TO ERADICATION Sponsored by Purdue Pharma Chairs: <u>Shirley Wu and Marianna Foldvari</u> Nanoparticle Delivery of siRNA & Chemotherapy to Tumors Leaf Huang (University of N. Carolina Chapel Hill) Nanotechnology Tools for Cancer Diagnosis Shana Kelley (University of Toronto) Lipid Nanoparticle Formulations of siRNA for Gene Silencing in the Liver Pieter Cullis (UBC) Nanoscale Delivery of Drug Combinations for Overcoming Multidrug Resistance in Cancer Shirley Wu (University of Toronto)</p>	<p>NEUROSCIENCE SYMPOSIUM Chairs: <u>Melanie Wooding and Zhong-Ping Feng</u> Presynaptic Vesicle Recycling Mechanisms and Information Transfer Dr. Katalin Toth (Université Laval) New Molecules Enhancing Axonal Outgrowth and Regeneration Zhong-Ping Feng (University of Toronto) Electrical Microstimulation: Modifying Neural Circuits that are Linked to Cognitive Function Erik Cook (McGill University) Treatment of Stroke using PSD-95 Inhibitors Michael Tymianski (Toronto Western Research Institute)</p>
12:30-14:00	LUNCH and Annual General Meetings for each Society and Poster Viewing		
14:00-16:30	<p>14:00-16:00 TRAINEE ORAL PRESENTATIONS</p> <p>Distinguished Service and Education Award Lecture</p> <p>The Challenges of Pharmacology in the New Millennium Patrick du Souich (Université du Montreal)</p>	<p>ADVANCES IN LIPID-BASED NANOPARTICULATE SYSTEMS FOR DRUG AND VACCINE DELIVERY Sponsored by Tilak Technologies Chairs: <u>Kishor Wasan and Panayiotis Constantinides</u> Parenteral and Oral Lipid Nanodispersions for Small Molecule and Macromolecule Delivery: Biopharmaceutical Considerations and Case Studies</p>	<p>CONDUCTING BE STUDIES AND OTHER CLINICAL TRIALS IN CANADA AND FOREIGN COUNTRIES Chairs: <u>Lorelei Lutter and Fethi Trabelsi</u> Canadian Sponsor Perspectives: Challenges and Opportunities in Outsourcing Bioequivalence Studies Manon Belisle (Teva Canada) BE Study Conduct in Canada, Pakistan, Poland</p>

		<p>Panayiotis Constantinides (Biopharmaceutical & Drug Delivery Consulting)</p> <p>Lipid Nanocarriers for Targeting Cells in the Immune System Mansoor Amiji (Northeastern University)</p> <p>Transcutaneous DNA Immunization: From Nanoparticles to Hair Follicles and Back to Nanoparticles Zhengrong Cui (University of Texas at Austin)</p> <p>BCS Class IV Compound Case Study: Development and Evaluation of a Novel Oral Amphotericin B Formulation for the Treatment of Systemic Fungal Infections and Drug-Resistant Visceral Leishmaniasis (VL) Kishor Wasan (UBC)</p>	<p>and Egypt: A Canadian CRO Perspective Lorelei Lutter (BioPharma Services) and Levon Yeghikyan (BioPharma Metrics, Pakistan)</p> <p>Running Clinical Trials in India: History, Current Environment, and Prospects for the Future Alfred Elvin (Anatase Biopharmaceutic Consulting, USA)</p> <p>Outsourcing or In-house of Conduct of BE Studies in Canada, US and Rest of the World - Create Competitive Advantage Hari Sankar (Watson Pharmaceuticals, India)</p> <p>Recommendations for Improving Quality of Bioequivalence Data Submitted to ANDAs in the US Barbara Davit (US FDA)</p>
16:30-18:00	Poster Session 2		
16:30-17:30	Oral presentations (CPS)		
17:30-18:00	Sarrazin Award Lecture: Duncan Stewart, Ottawa Heart Institute (CPS)		
19:00	CONFERENCE DINNER Delta Chelsea Ballroom		

Friday June 15

08:00	Registration opens and continental breakfast		
8:30-10:30	<p>CARDIOVASCULAR DISEASE AND GLOBAL HEALTH</p> <p>Sponsored by NRC Research Press</p> <p>Chairs: <u>Catherine Pang,</u> <u>Scott Heximer</u></p> <p>Diabetes Therapeutics and Cardiovascular Disease Daniel Drucker (Mount Sinai Hospital)</p> <p>New Concepts in the Physiology of Sudden Cardiac Death in the Young Michael Gollob (University Ottawa Heart Institute)</p>	<p>OBSTACLES IN DRUG ABSORPTION WITH EMPHASIS ON DISEASE AND PATHOPHYSIOLOGICAL CONDITIONS</p> <p>Chairs: <u>Fakhreddin Jamali and</u> <u>Nikoletta Fotaki</u></p> <p>Absorption Profile may be Different Between Healthy Volunteers and Patients: Obstacles in Drug Development; Do Animal Models Help? Fakhreddin Jamali (University of Alberta)</p> <p>Absorption Profile in Special Populations: Effect of Age</p>	<p>08:30-09:30 STEVENSON AWARD LECTURE</p>

	<p>Genetic Predisposition for CAD Robert Roberts (University of Ottawa Heart Institute)</p> <p>Cardiometabolic Risk: Role of Genetics Robert Hegele (University of Western Ontario)</p>	<p>Nikoletta Fotaki (University of Bath, UK)</p> <p>Bioavailability Profile as Predicted by Simulation Approaches Raimar Loebenberg (University of Alberta)</p> <p>Panel Discussion</p>	
10:30-11:00	Nutrition BREAK		
11:00-13:00	<p>NEW INSIGHTS IN NEPHROTOXICITY IN CHILDREN <u>Chair: Michael Rieder</u></p> <p>Drug-Induced Renal Injury: Burden of Illness and Implications for Drug Development and Regulation Marissa Battistella (University Health Network)</p> <p>Drug-Induced Renal Injury in Special Populations: Neonatology and Oncology Michael Rieder (University of Western Ontario)</p> <p>New Mechanisms of Drug-Induced Renal Injury Brad Urquhart (University of Western Ontario)</p> <p>When the Kidney Produces its own Poisons Gideon Koren (The Hospital for Sick Children)</p>	<p>OPTIMIZING DRUG DEVELOPMENT USING BIOMARKERS AND BIOWAIVERS <u>Chairs: Pollen Yeung and Yu Chung Tsang</u></p> <p>Regulatory Issues of Biomarkers Agnes Klein (Health Canada)</p> <p>ATP Metabolism as Biomarker Target for Drug Development Pollen Yeung (Dalhousie University)</p> <p>The Role of Biowaivers in Drug Development Raimar Loebenberg (University of Alberta)</p> <p>Modified Release Formulations: Waiver for Bio-studies for Different Dosage Strengths of a Drug Product Manufactured for Global Market Jasmina Novakovic (Apotex)</p>	<p>11:00-13:00 ORAL PRESENTATIONS</p> <p>11:00-13:00 TRAINEE ORAL PRESENTATIONS</p>
13:00-14:00	Chairs of Pharmacology Departments Meeting (lunch provided)		
13:00-14:30	Trainee Mentoring Luncheon O'Grady's		