

The 3rd International Drug Discovery and Development Forum 2017

**Challenges to drug discovery and
development in the genomics era**

Program outline

June 12-16, 2017

The New Centre for Translational Biology

RI-MUHC, Glen site

Presented by:

**The McGill-CIHR
Drug Development
Training Program**



Educational Sessions

in collaboration with the advanced technological platforms of the Centre for Translational Biology, the Research Institute of the MUHC

Monday, June 12, 2017

TIME	Special Training Session	ROOM
9:00-10:30	 Dr. Min Fu Advanced microscopy for drug discovery	E01.5135
10:45-12:15	 Dr. Robert Hambalek Introduction to hyphenated NMR techniques: Biochemical / Biomedical applications	EM2.3010

Tuesday, June 13, 2017

1:00-2:55	 Dr. Kurt Dejgaard Director, Mass Spectrometry Platform McGill University, Department of Biochemistry Practical proteomics	ES1.1129 Auditorium
Coffee break		
3:05-4:35	 Dr. Jeff Xia Parasitology, Faculty of Agricultural and Environmental Sciences, McGill University Metabolomics – from basic concepts to practical data analysis	ES1.1129 Auditorium

Thursday, June 15, 2017

9:35-10:30	 Dr. Pierre Chaurand Imaging mass spectrometry. Correlating molecular information to histology	EM1.3509
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SPECIAL INTERDISCIPLINARY WORKSHOP

Plant science, natural products, parasitology and health research

DAY 1: Monday, June 12, 2017, ES1.1129 Auditorium

TIME		WORKSHOP
1:30-1:45		<p>Opening Statement Dr. Bertrand Jean-Claude Dr. Donald Smith, Session Chair</p>
1:45-2:15		<p>Dr. Aimee Ryan Manipulating tight junction barriers in development and disease: Characterization of novel reagents that target Claudins</p>
2:15-2:45		<p>Dr. Indra Gupta Kidney Stones, Claudins, and a Plant-Based Therapy</p>
2:45-3:15		<p>Dr. Donald Smith Signaling in the phytomicrobiome – The search for new plant growth promoting molecules</p>
3:15-3:45		<p>Dr. Stan Kubow Polyphenol protection against environmental contaminants involving the human gut microbiome</p>

4:15-4:45



Dr. Ashraf Ismail

Whole-organism fingerprinting techniques for microbial identification

4:45-5:00

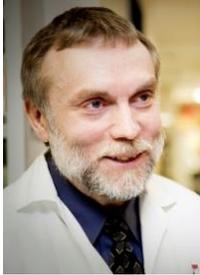
Dr. Bertrand Jean-Claude
Concluding Comments

5:00-6:00

RECEPTION

		DAY 2: Tuesday, June 13, 2017
		Symposium I (Auditorium)
		<i>Gene editing & drug discovery</i>
8:00 - 8:30		Coffee
8:30 - 8:45		Welcome speech by Dr. John Di Battista, Session Chair
8:45 - 9:40		Dr. Matthew Porteus Department of Pediatrics, Hematology/Oncology Stanford University, School of Medicine Stanford, California USA Genetically engineering cells as personalized drugs to cure diseases
9:40 - 10:30		Dr. Sidong Huang Department of Biochemistry McGill University, Montreal Canada Functional genomics to guide cancer therapy
10:30-10:45		Coffee

10:45 - 11:45		<p style="text-align: center;">Dr. George Thanassoulis, M.D. Director, Preventive & Genomic Cardiology McGill University, Montreal Canada</p> <p style="text-align: center;">When nature is the trialist – genomic insights for drug development</p>
11:45-12:00		Round Table
		Special session: Proteomics and metabolomics
1:00-2:55		<p style="text-align: center;">Dr. Kurt Dejgaard Director, Mass Spectrometry Platform McGill University, Dept. of Biochemistry</p> <p style="text-align: center;">Practical Proteomics</p>
Coffee break		
3:05-4:35		<p style="text-align: center;">Dr. Jeff Xia Parasitology, Faculty of Agricultural and Environmental Sciences McGill University, Montreal Canada</p> <p style="text-align: center;">Metabolomics – From Basic Concepts To Practical Data Analysis</p>

		DAY 3: Wednesday, June 14, 2017
		Symposium II (Auditorium)
		<i>Genes, data science, connectivity map and drug discovery</i>
8:00 - 8:15		Coffee
8:15 - 8:20		<p>Welcome speech by Dr. Janusz Rak, MD, PhD, Session Chair</p>
8:20-8:30		<p>Opening statement Dr. Phil Gold</p>
8:30 - 9:15		<p>Dr. Brooke Fridley Chair, Department of Biostatistics and Bioinformatics Moffitt Cancer Centre, Tampa, Florida USA Data science in the age of cancer genomics and drug discovery</p>

9:15 - 10:00		<p style="text-align: center;">Dr. Jie Cheng Associate Director Exploratory Statistics, AbbVie Inc., Boston, MA .USA</p> <p>Systematic evaluation of connectivity map for disease indications</p>
10:00 – 10:15		Coffee
10:15 - 11:00		<p style="text-align: center;">Dr. Kolja Eppert Pediatric Hematology-Oncology McGill University Montreal, Canada</p> <p>Novel therapeutics to target stem cells in acute myeloid leukemia</p>
11:00-11:45		<p style="text-align: center;">Dr. Chi-Ying Huang Chair, Institute of Biopharmaceutical Sciences National Yang Ming University Taipei, Taiwan</p> <p>Identification of thioridazine, an antipsychotic drug, as an antiglioblastoma and anticancer stem cell agent using big data analysis</p>
11:45 – 12:30		<p style="text-align: center;">Dr. Aravind Subramanian Director Biomedical Science Connectivity Map, LINCS & L1000 Broad Institute of MIT & Harvard Cambridge, MA USA</p> <p>A next generation connectivity map using the L1000 platform</p>
LUNCH OFFERED		

		DAY 3: Wednesday, June 14, 2017
		Symposium III (Auditorium)
		<i>Biomarkers and lung cancer</i>
1:30 - 1:45		<p>Welcome speech by</p> <p>Dr. Bassam Abdulkarim, Session Chair</p> <p>Director, Division of Radiation Oncology</p>
1:45 - 2:30		<p>Dr. Kenneth Emancipator, MD, PhD</p> <p>Executive Medical Director & Head of Companion Diagnostics</p> <p>Translational Medicine, Merck Co.</p> <p>Developing an immunohistochemistry test for programmed cell death ligand 1 (pd-11) as a companion diagnostic for pembrolizumab</p>
2:30 - 3:15		<p>Dr. Rui Manuel Reis</p> <p>Coordinator, Molecular Oncology Research Center</p> <p>Barretos Cancer Hospital,</p> <p>Barretos, Brazil</p> <p>Efficacy and predict biomarkers of response of Afatinib, a second generation of anti-HER agent</p>
3:15-3:35		<p>Dr. Bassam Abdulkarim, MD, PhD</p> <p>McGill University, Montreal Canada</p> <p>Radiotherapy and immunotherapy: Liaison and future prospects in lung cancer treatment</p>
3:35-4:00		Round Table
4:00-5:00		Coffee

		DAY 4: Thursday, June 15, 2017
9:00 – 9:30		Coffee (Room EM1.3609)
9:30 - 9:35		Welcome speech by Dr. Bertrand Jean-Claude, DDTP Director, Session Chair
9:35-10:30		Dr. Pierre Chaurand Université de Montréal Imaging mass spectrometry : correlating molecular information to histology
10:30-12:30		Oral presentations by trainees Session Chairs: Dr. Bertrand Jean-Claude & Dr. Nathalie Lamarche
		1) Abi-Rafeh, Jad - (Dr. Geoffrey N. Hendy) Role of osteoblast menin in bone metabolism: <i>in vivo</i> studies of knockout mice 2) Doyle, James - (Dr. Hugh Bennett and Alex Parker) Accelerating gene-specific drug discovery for frontotemporal dementia 3) Lomis, Nikita – (Dr. Satya Prakash)

		<p>A novel nanoparticle formulation for enhanced delivery of milrinone for cardiac applications</p> <p>4) Mahmood, Niaz –(Shafaat A. Dr. Rabbani)</p> <p>Attenuation of breast cancer growth, invasion and metastasis by universal methyl donor S-Adenosylmethionine</p> <p>5) Shorstova, Tatiana – (Dr. M. Witcher)</p> <p>Epigenetic therapies to target SMARCA4-negative cancers</p> <p>6) Fava, Vinicius - (Dr. Erwin Schurr)</p> <p>Targeted resequencing identified PARK2 and LRRK2 mutations as common risk factors for inflammatory disease</p>
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		<p align="center">Symposium IV (Auditorium)</p> <p align="center">DNA targeting in the age of genomics</p>
1:15-1:25		<p align="center">Welcome speech by</p> <p align="center">Dr. Patricia Tonin, Associate Leader, Cancer Research Program, Session Chair</p>
1:25- 2:20		<p align="center">Dr. Yves Pommier</p> <p align="center">Chief, Developmental Therapeutics Branch</p> <p align="center">National Cancer Institute, NIH, Bethesda, MD, USA</p> <p align="center">Laying a trap to kill cancer cells: PARP inhibitors and their mechanisms of action</p>
2:20 - 3:15		<p align="center">Dr. John Hartley</p> <p align="center">Director of Cancer Studies, UCL Cancer Institute</p> <p align="center">London, England, UK</p> <p align="center">The development of novel therapies involving DNA as a target</p>
3:15-3:35		Round Table
3:35-5:00		COCKTAIL AWARD CEREMONY

	Day 5, June 16, 2017
10:00 -2:00	POSTER SESSION COMMERCIAL EXHIBITS Location: CTB ATRIUM
2:00-2:30	AWARD CEREMONY Concluding remarks by Dr. Bertrand J. Jean-Claude
2:30-4:00	COCKTAIL RECEPTION

A special thanks to our proud corporate sponsors



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