



Centre universitaire de santé McGill
McGill University Health Centre

Drug Discovery and Development Forum 2015

Inspiring Drug Discovery Successes

Program outline

November 2-6, 2015

The New Center for Translational Biology, RI-
MUHC, Glen site

presented by

**McGill-CIHR
Drug Development
Training Program**

Educational Sessions

Schedule November 2-4, 2015

Monday, November 2nd, 2015

8:30 -10:00 Proteomics Special Training - Lecture

Dr. Kurt Deigaard , Director Mass Spectrometry Platform

10:00 -12:00 Mass Spectrometry Imaging Training - Lecture 1

Dr. Pierre Chaurand, Associate Professor, Université de Montréal

14:00 -16:00 Mass Spectrometry Imaging Training - Lecture 2

Dr. Pierre Chaurand

Tuesday, November 3rd, 2015

8:30 -10:00 LC-NMR-MS Special Training - Lecture

Dr. Robert Hambalek, President, Aptochem and
Dr. Sanjoy Kumar Das, CTB Drug Discovery Platform Manager

9:00 -17:00 Mass Spectrometry Imaging Training - Demonstration

Dr. Pierre Chaurand

10:00 -11:00 Advanced Microscopy Special Training - Lecture

Dr. Min Fu, Molecular Imaging Platform Manager

13:15 -17:00 Advanced Microscopy Training - Demonstration

Dr. Min Fu

Wednesday, November 4th, 2015

15:00 -17:00 Pharmacokinetics Training - Demonstration

Dr. Padgen, Associate Professor McGill University and Dr. Jean-Claude

Schedule Wednesday, November 4th, 2015

Symposium I: The Discovery of T-DMI (Kadcyla®) and new prospects for HER2 targeted Therapies

Session Chairs: Dr. Bertrand Jean-Claude and Dr. Bassam Abulkarim

8:00 - 8:15 Coffee/Registration

8:15 - 8:30 Dr. Bertrand Jean-Claude, DDTP Director

Welcome Speech

Interface between industry, trainees and mentors

8:30 - 9:15 Dr. Ravi Chari, Executive Director of Chemistry, ImmunoGen, Inc.

T-DMI Discovery Part 1: Design of the molecule

9:15 - 10:00 Dr. John Lambert, Executive VP, ImmunoGen, Inc.

T-DMI Discovery Part 2: Preclinical evaluation and discussion

10:00 -10:30 Coffee

10:30 -11:15 Dr. Johan Lantto, Project Director, Symphogen A/S.

Antibody mixtures: from bench to bedside

11:15 -12:00 Dr. William Muller, Professor, McGill University

The ErbB2 Δ Ex16 splice variant is a major oncogenic driver in breast cancer that promotes a pro-metastatic tumor microenvironment

12:00 -13:15 Lunch

13:15 -16:00 Poster Session (Atrium)

Schedule Thursday, November 5th, 2015

Symposium II: A new drug design concept and short presentation series

Session Chair: Dr. Youla Tsantrizos, Professor, McGill University, President, Canadian Society for Chemistry

8:00 - 8:15 Coffee/Registration

8:15 - 8:30 **Dr. Youla Tsantrizos**

Welcome Speech

8:30 - 9:15 **Dr. Peter Buchwald**, Program Director, University of Miami

Retrometabolic Drug Design

9:15 - 10:15 Trainee Oral Presentations

Anna Tomberg (Department of Chemistry)- Cytochrome P450 aromatic oxidation: a simple model for reactive metabolites prediction

Martin Rupp (Department of Medicine)- Studies on MGMT inhibitors targeted to tumours overexpressing EGFR: a novel targeted approach to overcome chemoresistance

Dr. Balqis Alabdulkarim (Department of Oncology)- Automated colorectal cancer liver metastasis topography classification and grading using phospholipid MALDI-imaging mass spectrometry

Dr. Nicolas Audet (Department of Pharmacology)- High content FRET microscopy reveals opposing cAMP and MAPK ERK1/2 nuclear signalling driven by endogenous nuclear and cell membrane β -adrenergic receptors

10:15 -10:45 Coffee

10:45 -11:45 Trainee Oral Presentations

Dr. Durantini Andres (Department of Chemistry)- ROS-mediated Activation of a dormant singlet oxygen photosensitizer: from autocatalytic singlet oxygen amplification to chemi-controlled photodynamic therapy

Elodie Weider (Department of Medicine)- Llama single domain antibodies as PCSK9 inhibitors and cholesterol regulators

Ljiljana Nicolajev (Department of Medicine)- Using photoreactive pharmacophore and CuAAC reaction to characterize binding site(s) of F-prostanoid (FP) receptor allosteric ligands

Dr. Anne Meunier (Department of Biomedical Engineering)- Combination of mechanical and immune capture to improve isolation of circulating tumor cells

11:45 -13:30 Lunch

Symposium III: The Discovery of Olaparib (Lynparza™): linking BRCA diagnosis to personalized medicine

Session Chair: Dr. Patricia Tonin, Professor and Cancer Program Co-Leader, McGill University

13:30 -13:35 **Dr. Patricia Tonin**

Welcome Speech

13:35 -14:30 **Dr. Niall Martin**, Executive VP, MISSION Therapeutics, Ltd

Identification of KU-059436 and the development of olaparib

14:30 -15:15 **Dr. Anne-Marie Mes-Masson**, Scientific Director of the ICM

Epithelial ovarian cancer (EOC) models for predicting response to PARP inhibitors

15:15 -15:30 Coffee

15:30 -16:15 **Dr. William Foulkes**, Cancer Genetics Program Director

Population genetic testing for cancer susceptibility: founder mutations to genomes

16:15 -16:45 **Dr. Patrick Burke**, Executive VP, Myriad Genetics, Inc.

Development, approval and utilization of portfolio of Companion Diagnostic Products to optimize therapeutic section for breast and ovarian cancer patients

16:45 -19:00 **Cocktail and award ceremony**

Special prizes:
- The Phil Gold Discovery Prize, in celebration of the 50th anniversary of the discovery of the carcinoembryonic antigen (CEA) that led to the first blood test for cancer by Dr Phil Gold, DDTP mentor.
- The Oncology Prize, in celebration of the 25th anniversary of the Department of Oncology

Schedule Friday, November 6th, 2015

Symposium IV: Emerging Successes/new drug candidates

Session Chair: Dr. John Di Battista

8:00 - 8:15 **Coffee/Registration**

8:15 - 8:20 **Dr. John Di Battista**, Professor, McGill University

Welcome Speech

8:20 - 9:10 **Dr. Youssef Bennani**, VP R&D, Vertex Pharmaceuticals Inc.

Drug hunting vs drug fishing

9:10 - 9:40 **Dr. Danuta Radzioch**, Professor McGill University

Fenretinide (4-HPR), as a treatment for cystic fibrosis: a McGill success story

9:40 -10:10 **Dr. Stephen Morris**, Director R&D, PharmaScience. Inc.

Pre-Clinical Development of a Novel, potent and selective BTK inhibitor for autoimmune disease and inflammation including arthritis

10:10 -10:20 **Coffee**

10:20 -10:50 **Dr. Pnina Brodt**, Professor, McGill University

The IGF-Trap: a novel drug candidate for the treatment of metastatic cancer

10:50 -11:20 **Dr. Anne Marinier**, Director of Medicinal Chemistry, IRIC

IRIC's Medicinal Chemistry Platform: From antithrombotics to expansion of stem cells

11:20 -11:45 **Dr. James Jaquith**, Head of Medicinal Chemistry, CDRD

CDRD: Propelling Canadian Academic Research and SMEs toward Commercial Success

11:45 -12:15 **Dr. Sanjoy Kumar Das**, Drug Discovery Platform Manager

Role of new technologies in modern drug discovery and development

12:15 -12:30 **American Association for Pharmaceutical Scientists (AAPS) McGill Chapter and closing statement by Dr. Bertrand Jean-Claude**

Closing Remarks

12:30 -13:30 **Lunch**

13:30 - 15:00 **Visit of the New CTB Drug Discovery Platforms**

Directions

The Forum 2015 will take place in the Centre for Translational Biology of the McGill University Health Centre located at 1001 Decarie Boulevard, Bloc E, Montreal, Quebec H4A 3J1



Drug Development Training Program (DDTP)

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