

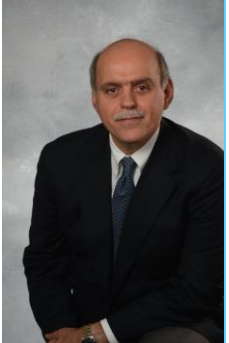



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|--------------|---|--|----------------------------|
|              |   | <b>DAY 5: Friday, June 10, 2016</b>  |                            |
|              |   | <b>Symposium IV</b>  |                            |
|              |   | <b><u>Advanced Imaging in Drug Discovery and Development</u></b>   |                            |
|              |   | <b>Breakfast</b>   |                            |
| 8:00 - 8:15  |   | <b>Welcome speeches by Dr. Bertrand Jean-Claude, DDTP Co-Director, Session Chair</b>   |                            |
| 8:15 - 8:30  |   | <b>Dr. Pierre Chaurand, Université de Montreal, Canada</b><br>Matrix and metal assisted laser desorption ionization for high spatial resolution imaging mass spectrometry of lipids from thin tissue sections. | Innovative imaging methods |
| 8:30 - 9:15  |  | <b>Dr. David Bonnel, Imabiotech, France</b><br>MALDI Imaging application from preclinical to clinical stages   |                            |
| 9:15 - 10:00 |  | <b>Dr Peter Metakos , McGill University, Canada</b><br>Mass Spectrometry Imaging: A surgeon's View   |                            |

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|---------------|---|---|--|
| 10:00 - 10:30 |  | <b>Dr. Sébastien Blais-Ouellette,<br/>Photon ETC, Canada</b><br>Advances in instrumentation and labels<br>for highly multiplexed biological |  |
| 10:30 - 12:00 |   | <b>Panel Discussion</b>   |  |
| 13:00 – 16:00 |   | <b>CTB Drug Discovery Platform MSI<br/>Demonstration</b>  |  |

## **Symposium IV, June 10, 2016: Advanced imaging in drug discovery and development: future prospect**

### **Dr. Pierre Chaurand, Director, Mass Spectrometry Imaging Laboratory, Université de Montréal, Canada**



Dr. Chaurand obtained his Ph.D. in physical biochemistry and mass spectrometry in 1994 from the University of Paris Sud (Orsay, France) after which he joined the Institute of Laser Medicine, University of Dusseldorf, Germany. In 2000, he moved to Vanderbilt University School of Medicine, Nashville, USA, where he focused on MALDI mass spectrometry research directed at mapping the spatial distribution of biocompounds. In 2009, he joined the Department of Chemistry of Université de Montreal as an Associate Professor. Dr Chaurand is a pioneer in mass spectrometry imaging (MSI). His research focuses on combining cutting edge mass spectrometry technologies for profiling, identifying, and mapping the spatial distribution of biocompounds directly in biological samples. He is working at optimizing the translation of these exciting new molecular technologies to the investigation of diseased tissues.

### **Dr. David Bonnel, Director of Operations, ImaBiotech, France**



Dr. Bonnel received a Ph.D. in Biology from the CNRS (Lille, France) and a Ph.D. in Biochemistry from the Sherbrooke Institute of Pharmacology (Sherbrooke, Canada). He worked and published on the development and applications of mass spectrometry imaging (MSI) in the fields of health and pharmacology. Dr Bonnel has contributed to the development of molecular imaging technologies by mass spectrometry to study different diseases, more specifically in Oncology. Then he has joined ImaBiotech as Project Manager, for two years, during which he was in charge of the development of the CRO platform. Since 2013 Dr Bonnel is Director of Operations at ImaBiotech and responsible for the facilities and of the overall scientific projects conducted with a fantastic cross-functional team. As such, he has acquired an extensive knowledge of various types of imaging applications, and more particularly on MS imaging and Quantitative MS imaging dedicated to pharmaceutical molecules and biomarkers.

### **Dr. Sébastien Blais-Ouellette, President and Founder Photon Etc.**



An Astrophysicist by training, Sébastien Blais-Ouellette is the President and founder of Photon etc. After obtaining a Master's degree in particle physics at Université de Montréal, and a Ph.D in astronomy at the Université de Montréal and the Université d'Aix-Marseille in France, he worked as a researcher at the Lawrence Livermore National Laboratory and at the California Institute of technology. In 2003, he launched Photon etc., a developer and manufacturer of high end optical instruments for research laboratories and industrial analysis.

**Dr. Peter Metrakos, Professor of surgery, Director of the Multi-Organ Transplant Program and Director of Hepatopancreatobiliary Surgery at the McGill University Health Center and of the MUHC Cancer Research Program**



Dr. Peter Metrakos, MD CM, FACS, FRCSC is Professor of Surgery and Associate Professor in Anatomy and Cell Biology McGill University. As well he is Director of the Multi-Organ Transplant Program and Director of Hepatopancreatobiliary Surgery at the McGill University Health Center. Dr. Metrakos runs a high volume hepatopancreatobiliary and transplant surgery service. He is the Director of an active HPB and Transplant clinical research program where a high volume of clinical trials are managed yearly. He is also the Program Leader of the McGill University Health Centre Research Institute Cancer Research Program. His research interests include the role and interaction of chemotherapy and liver resection in the management of colorectal cancer liver metastases: *The Effect of Neoadjuvant Chemotherapy on Liver Metastases* (Journal of Gastrointestinal Surgery 2006), *The pathology of liver nodules after neoadjuvant chemotherapy is associated with outcomes for colorectal cancer metastases* (HPB 2007), *A "New era" In the treatment of colorectal cancer liver metastasis: The gloves are off!* (Annals of Surgery. 2009), *Perioperative bevacizumab containing chemotherapy and liver resection for colorectal cancer liver metastasis* (HPB 2010), *Portal Vein Embolization stimulates tumour growth in patients with colorectal cancer liver metastases* (HPB Oxford 2012), and *Staged Hepatectomy for bilobar colorectal hepatic metastases* (HPB Oxford 2012). Other research interests are in HCC, Neuroendocrine tumours and targeted therapies, and include: *SHARP Investigators Study Group. Sorafenib in advanced hepatocellular carcinoma* (New England Journal of Medicine 2008), *Sunitinib Malate for the Treatment of Pancreatic Neuroendocrine Tumors* (New England Journal of Medicine 2011) and *eIF4E/4E-BP ratio predicts the efficacy of mTOR targeted therapies* (Cancer Res. 2012).

Dr. Metrakos is the Director of the Liver Disease Biobank, a one of a kind biorepository with high quality biospecimens used in a number of collaborative research studies. He is also a principal investigator in a strategic FRQS systems medicine grant focused on Non-alcoholic fatty liver disease (NAFLD).