

Monday July 16, 2018

Three Dimensional Imaging

Martin Amphitheatre, 6th Floor McIntyre Medical Sciences Building

Time	Topic & Speaker
8:00-8:30	REGISTRATION
8:30-8:45	Welcome and Introductory Remarks, Overview of the Course
8:45-9:30	Welcome to the World of Microscopy <i>Claire M. Brown, McGill University</i>
9:30-10:30	Any Way You Slice It: 3D Imaging Techniques <i>James Jonkman, University Health Network</i>
10:30-11:00	COFFEE BREAK
11:00-13:00	Lab #1
13:00-15:00	LUNCH & LUNCH-N-LEARN TALKS <i>2nd Floor McIntyre Medical Sciences Building</i>
15:00-17:00	Lab #2
17:00-17:30	COFFEE BREAK
17:30-18:30	Q&A and Lab Review
18:30-20:00	Opening Reception 6 th floor foyer, McIntyre Medical Sciences Building

Tuesday July 17, 2018

Light Sheet Microscopy

Martin Amphitheatre, 6th Floor McIntyre Medical Sciences Building

Time	Topic & Speaker
8:00-8:30	REGISTRATION
8:30-9:00	Introduction to Light Sheet <i>Erika Wee, McGill University</i>
9:00-9:30	Tilted Light Sheet Excitation of Model Organisms <i>Paul Maddox, University of North Carolina</i>
9:30-10:00	Rigorous Sample Preparation <i>Erika Wee, McGill University</i>
10:00-10:30	Quantitative Image Analysis <i>Pina Colarusso, University of Calgary</i>
10:30-11:00	COFFEE BREAK
11:00-13:00	Lab #3
13:00-15:00	LUNCH & LUNCH-N-LEARN TALKS <i>2nd Floor McIntyre Medical Sciences Building</i>
15:00-17:00	Lab #4
17:00-17:30	COFFEE BREAK
17:30-18:30	Q&A and Lab Review

Wednesday July 18, 2018

Imaging Dynamics

Martin Amphitheatre, 6th Floor McIntyre Medical Sciences Building

Time	Topic & Speaker
8:00-8:30	REGISTRATION
8:30-9:00	Keeping Samples Alive on the Microscope <i>Claire Brown, McGill University</i>
9:00-9:45	Measuring Dynamics <i>Rima-Marie Wazen, University of Calgary</i>
9:45-10:30	Imaging Cellular Physiology – Calcium, pH, Membrane Potential <i>Philippe Séguéla, Montreal Neurological Institute (MNI)</i>
10:30-10:40	Group Photo
10:40-11:00	COFFEE BREAK
11:00-13:00	Lab #5
13:00-15:00	LUNCH & LUNCH-N-LEARN TALKS <i>2nd Floor McIntyre Medical Sciences Building</i>
15:00-17:00	Lab #6
17:00-17:30	COFFEE BREAK
17:30-18:30	Q&A and Lab Review
18:30-19:30	KEYNOTE LECTURE Intravital Imaging of the Tumor Microenvironment <i>John D. Lewis, Chair, Prostate Cancer Research Initiative</i> <i>Associate Professor, Department of Oncology, University of Alberta,</i>
19:30-21:00	Wine and Cheese Reception

Thursday July 19, 2018

Big Data and Data Analysis

Martin Amphitheatre, 6th Floor McIntyre Medical Sciences Building

Time	Topic & Speaker
8:00-8:30	REGISTRATION
8:30-9:00	3D Co-localization Analysis <i>Pina Colarusso, University of Calgary</i>
9:00-9:30	Big Data: Multi-dimensional Image Analysis, Data Storage, Computer Hardware and Software <i>Jay Newby, University of North Carolina</i>
9:30:10:00	Machine Learning in Image Processing and Analysis <i>James Jonkman, University Health Network</i>
10:00:10:30	Scientific Reproducibility and its Challenges in Microscopy <i>Judith Lacoste, MIA Cellavie Inc.</i>
10:30-11:00	COFFEE BREAK
11:00-13:00	Lab #7
13:00-15:00	LUNCH & LUNCH-N-LEARN TALKS <i>2nd Floor McIntyre Medical Sciences Building</i>
15:00-17:00	Lab #8
17:00-17:30	COFFEE BREAK
17:30-18:30	Q&A and Lab Review

Friday July 20, 2018

Frontiers in Light Microscopy

Martin Amphitheatre, 6th Floor McIntyre Medical Sciences Building

Time	Topic & Speaker
8:00-8:30	REGISTRATION
8:30-9:00	New Developments in Super-Resolution <i>Thomas Stroh, Montreal Neurological Institute (MNI)</i>
9:00-9:30	Quantitative Single Molecule Localization Microscopy (e.g. PALM, dSTORM) <i>Sarah Aufmkolk, Montreal Neurological Institute (MNI)</i>
9:30-10:00	Technologies for Tissue Transformation, Clearing & Multiscale Imaging <i>Kwanghun Chung, Massachusetts Institute of Technology (MIT)</i>
10:00-10:30	Measuring Dynamic Interactions (FLIM/FRET, Correlation microscopy) <i>Claire M. Brown, McGill University</i>
10:30-11:00	COFFEE BREAK
11:00-11:30	Intra-vital Imaging in the Retina <i>Arjun Krishnaswamy, Department of Physiology, McGill University</i>
11:30-12:00	Visualizing Cellular Signaling During Collective Cell Migration <i>Arnold Hayer, Department of Biology, McGill University</i>
12:00-12:30	Certificates/Wrap Up
12:30-14:00	LUNCH & LUNCH_N_LEARN TALKS <i>2nd Floor McIntyre Medical Sciences Building</i>
14:00-18:00	Afternoon On Your Own
18:00	Dinner at L'Academie https://www.lacademie.ca/