

Monday March 2, 2015

Transmitted Light Techniques

Room N2/2 Stewart Biology Building

Time	Topic & Speaker
8:30-9:00	REGISTRATION
8:45-9:00	Welcome and Introductory Remarks <i>Claire Brown, ABIF</i>
9:00-9:30	Welcome to the World of Microscopy <i>Erika Wee, ABIF</i>
9:30-10:30	Light-Matter Interactions, Basic Optics and Image Formation, Köhler Alignment <i>Claire Brown, ABIF</i>
10:30-11:00	COFFEE BREAK
11:00-11:45	Transmitted Light Techniques: Dyes, Phase Contrast, Darkfield, Riveal Contrast <i>Judith Lacoste, MIA Cellavie</i>
11:45-12:30	Polarization and Digital Interference Contrast (DIC) <i>Claire Brown, ABIF</i>
12:30-14:00	LUNCH
14:00-18:00	Hands-On Laboratory Activities <i>Transmitted Light Microscopy Contrasting Techniques</i>
18:30-21:00	Opening Reception <i>Café Republique, 1200 Peel St.</i>

Tuesday March 3, 2015

Fluorescence Microscopy

Room N2/2 Stewart Biology Building

Time	Topic & Speaker
8:30-9:00	Discussion of Laboratory Results from Day 1
9:00-9:45	Fluorescence and Fluorescent Probes <i>Erika Wee, ABIF</i>
9:45-10:30	Magnification, Resolution, Aberrations <i>Chris Souwand, Carl Zeiss Canada</i>
10:30-11:00	COFFEE BREAK
11:00-11:30	Excitation Light Sources <i>Claire Brown, ABIF</i>
11:30-12:00	The Fluorescence Microscope, Filters and Mirrors <i>Erika Wee, ABIF</i>
12:00-12:30	Detectors and Sampling <i>Judith Lacoste MIA Cellavie</i>
12:30-14:00	LUNCH
14:00-18:00	Hands-On Laboratory Activities <i>Resolution and Objective Lenses, Fluorescence Microscopy</i>

Wednesday March 4, 2015

Practical Fluorescence Microscopy

Room N2/2 Stewart Biology Building

Time	Topic & Speaker
8:30-9:00	Discussion of Laboratory Results from Day 2
9:00-9:45	Introduction to Digital Imaging and Imaging Ethics <i>Erika Wee, ABIF</i>
9:45-10:30	Quantitative Microscopy <i>Judith Lacoste, MIA Cellavie</i>
10:30-11:00	COFFEE BREAK
11:00-11:30	Multi-Dimensional Experiments <i>Elke Küster-Shöck, CIAN</i>
11:45-12:30	Preparing Figures for Publication <i>Claire Brown, ABIF</i>
12:30-14:00	LUNCH
14:00-18:00	Hands-On Laboratory Activities <i>Light Sources & Cameras, Quantitative Imaging</i>

Thursday March 5, 2015

Optical Sectioning Techniques

Room N2/2 Stewart Biology Building

Time	Topic & Speaker
8:30-9:00	Discussion of Laboratory Results from Day 3
9:00-9:45	Wide-Field & Deconvolution <i>Louise Bertrand, Leica Microsystems Inc.</i>
9:45-10:30	Confocal Laser Scanning Microscopy (CLSM) & Resonant Scanning (RS-CLSM) <i>Hervé Barrière, Nikon Canada Inc.</i>
10:30-11:00	COFFEE BREAK
11:00-11:45	Spinning Disk Confocal Microscopy (SDCM) <i>Vincent Pelletier, Quorum Technologies Inc.</i>
11:45-12:30	Which 3D Technique is Right for My Application? <i>Open Discussion, Case Studies, Q&A</i>
12:30-14:00	LUNCH
14:00-18:00	Hands-On Laboratory Activities <i>Rotation: Wide-field Deconvolution, CLSM, RS-CLSM, SDCM</i>

Friday March 6, 2015
Advanced Techniques

Room N2/2 Stewart Biology Building

Time	Topic & Speaker
8:30-9:00	Discussion of Laboratory Results from Day 4
9:00-9:30	Live Cell Imaging Techniques <i>Claire Brown, ABIF</i>
9:30-10:00	3D Image Processing and Analysis <i>Judith Lacoste, MIA Cellavie</i>
10:00-10:30	Measuring Protein Dynamics and Interactions <i>Claire Brown, ABIF</i>
10:30-11:00	COFFEE BREAK
11:00-12:00	Plenary Scientific Lecture <i>Allen Ehrlicher, McGill Bioengineering</i>
12:00-12:30	Open Discussion
12:30-14:00	LUNCH
14:00-18:00	Hands-On Laboratory Activities <u>Rotation:</u> <i>Wide-field Deconvolution, CLSM, SDCM, RS-CLSM, Image Processing</i>