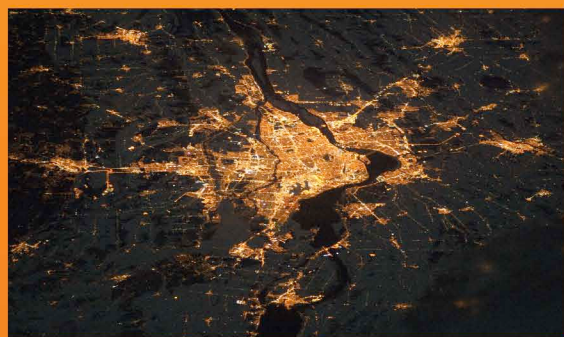


4th CYTOMETRY & MICROSCOPY SYMPOSIUM **4^e** SYMPOSIUM DE CYTOMÉTRIE ET DE MICROSCOPIE

Biotechnologies to shed light on disease
Les biotechnologies pour faire la lumière sur les maladies

June 13th to 15th, 2013
du 13 au 15 juin 2013

McGill University, New Residence Hall, Montreal
Nouvelle résidence de l'Université McGill, Montréal



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ASSOCIATION CANADIENNE DE CYTOMÉTRIE ET DE MICROSCOPIE

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WELCOME FROM THE ORGANIZERS

Welcome to the 4th Symposium of the Canadian Cytometry and Microscopy Association. Visit the CCMA's website (www.cytometry.ca) to find resources on microscopy and cytometry and to find out more about the CCMA. We wish you an interesting and productive meeting.

Bienvenue au 4^e Symposium de l'Association Canadienne de Cytométrie et de Microscopie. Visitez le site Web de l'ACCM (www.cytometry.ca) pour trouver des informations sur la microscopie et la cytométrie et pour en savoir plus sur l'ACCM. Nous vous souhaitons une conférence intéressante et productive.

The organizing committee / Le comité organisateur

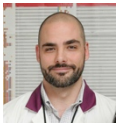
	Claire Brown, PhD Co-president CCMA / <i>Co-présidente ACCM</i> Director - Imaging Facility, Life Sciences Complex, McGill University, Montreal <i>Directrice - Service d'Imagerie, Complexe des Sciences de la Vie, Université McGill, Montréal</i>
	Gisele Knowles Co-president CCMA / <i>Co-présidente ACCM</i> Operational Director - Flow Cytometry and Scanning Microscopy, Sunnybrook Research Institute, Toronto <i>Directrice des Opérations - Cytométrie de Flux et Microscopie à Balayage, Institut de Recherche Sunnybrook, Toronto</i>
	James Jonkman Vice-president CCMA / <i>Vice-président ACCM</i> General Manager - Advanced Optical Microscopy Facility (AOMF), University Health Network, Toronto <i>Manager général – Plateforme de Microscopie Optique de Pointe, UHN, Toronto</i>
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	Gabriel Lapointe Communication Director CCMA / <i>Directeur des communications ACCM</i> Research Assistant - Department of Biology, Concordia University, Montreal <i>Assistant de Recherches - Département de Biologie, Université Concordia, Montréal</i>
	Marie-Hélène Lacombe Administrator CCMA / <i>Administratrice ACCM</i> Immunophenotyping Platform, MUHC Research Institute, Montreal General Hospital <i>Plateforme d'immunophénotypage, Institut de recherche CUSM, Hôpital Général de Montréal</i>
	Nathalie Henley Research Assistant - Maisonneuve Rosemont Hospital Research Centre, Montreal <i>Assistante de Recherche - Centre de Recherche, Hôpital Maisonneuve Rosemont, Montréal</i>

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Talks: Keynote Lecture (KL), Plenary Lectures (PL), Flow Cytometry Workshops (F) & Imaging Workshops (I)	15
Posters (P)	31
Symposium Attendees	41

SCHEDULE

2013 CYTOMETRY AND MICROSCOPY SYMPOSIUM AT A GLANCE

	Thursday June 13 Core Facility Manager Meeting	Friday June 14 Keynote lecture, plenary lectures 1 and 2, concurrent workshops	Saturday June 15 Plenary lectures 3 and 4, concurrent workshops, CCMA general assembly		
08:00		Registration	Registration		08:00
09:00		KEYNOTE LECTURE	<i>Imaging Workshop 3a</i> 3D Microscopy	<i>Flow Workshop 4</i> Panel Designs	09:00
10:00		PLENARY LECTURE 1	Break - Exhibits		10:00
11:00		Break - Exhibits	<i>Imaging Workshop 3b</i> 3D Microscopy	<i>Flow Workshop 5</i> Small Particle analysis	11:00
12:00	Registration	<i>Imaging Workshop 1</i> Super Resolution Imaging	<i>Flow Workshop 1</i> Rare Cell Analysis in Flow	PLENARY LECTURE 3	12:00
13:00	Core Facility Managers' meeting	Corporate Lunch-N-Learn Talks Exhibits	Corporate Lunch-N-Learn Talks Exhibits		13:00
14:00		<i>Imaging Workshop 2a</i> Imaging Living Samples	<i>Flow Workshop 2</i> Clinical Flow Applications	<i>Imaging Workshop 4a</i> Quantitative Imaging	14:00
15:00		Break - Exhibits	Break – Exhibits		15:00
16:00		<i>Imaging Workshop 2b</i> Imaging Living Samples	<i>Flow Workshop 3</i> Clinical Flow Analysis	<i>Imaging Workshop 4b</i> Quantitative Imaging	16:00
17:00	Core Facility Networking Dinner	PLENARY LECTURE 2	PLENARY LECTURE 4		17:00
18:00		POSTER SESSION WINE & CHEESE EXHIBITS	CCMA General Assembly		18:00
19:00					19:00
20:00					20:00

SCHEDULE

Thursday June 13, 2013 – Core Facility Managers' Meeting (Salle du Parc)

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Save money. Save time. Accelerate research.

Registration desk opens at 12:00	
13:00-15:00	Core Facility-Based Associations Training Approaches Institutional or Group Service Contracts
15:00-15:30	COFFEE BREAK
15:30-17:30	Funding Sources and Institutional Support Running a Core on a Lean Budget
18:00-21:00	Core Facility Networking Dinner (Registration and Additional Fees Apply)

Friday June 14, 2013

Registration desk opens at 8:00	
9:00-9:15	Welcome & Introductory Remarks
KEYNOTE LECTURE - Ballroom A	
Preclinical infrared multiphoton microscopy: deep insights into tumor progression and therapy response	
9:15-10:15	Peter Friedl <i>Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands</i>
PLENARY LECTURE (PL1) - Ballroom A	
Detecting antigen-specific T cell responses	
10:15-11:00	Connie Krawczyk <i>Department of Microbiology and Immunology, McGill University, Montreal</i>
11:00-11:30	COFFEE BREAK – sponsored by 

Friday June 14, 2013 (cont'd)

Concurrent Workshops - Ballroom A and Salle Du Parc		
	<u>Imaging Workshop 1</u> - Salle du Parc Super-resolution imaging Challenges and successes <u>Session Organizer - Claire Brown</u> Sponsored by  GE Healthcare	<u>Flow Workshop 1</u> - Ballroom A Rare cell analysis in flow <u>Session Organizer - Gisele Knowles</u>
11:30-12:30	11:30 I1- Single molecule localization microscopy (PALM/STORM) Thomas Stroh <i>Montreal Neurological Institute McGill University, Montreal</i>	11:30 F1- Multi-parametric phenotypic and functional analysis of Foxp3+ Treg cells Ciriaco Piccirillo <i>Department of Microbiology and Immunology McGill University, Montreal</i>
	11:50 I2- Super-resolution: A primer in stimulated emission depletion (STED) with continuous wave (CW) nanoscopy: Strengths and weaknesses Steffany A.L. Bennet <i>Department of Biochemistry, Microbiology and Immunology University of Ottawa, Ottawa</i>	11:50 F2- From pluripotent stem cells to T lymphocytes: identifying the intervening steps Juan Carlos Zuniga-Pflucker <i>Department of Immunology University of Toronto, Toronto</i>
	12:10 I3- Structured illumination microscopy (SIM) Judith Lacoste <i>MIA Cellavie Inc., Montreal</i>	12:10 F3- Thymus-derived innate CD8+CD44hi T cells display features of Antigen-Experienced T Cells with Bystander helper properties Rafei Moutih <i>Department of Pharmacology, Université de Montréal, Montreal</i>
12:30-14:00 LUNCH - Sponsored by 		
Exhibits - Ballroom B		
	Lunch-N-Learn 1 - Salle du Parc  Mercury Free Microscopy Regan Baird <i>Lumencor, Inc.</i> Greening up microscopy, one mercury-free light engine at a time	Lunch-N-Learn 2 - Ballroom A  Why the HPC-100 Personal cytometer™? Nicholas Gagnon <i>Sr. Product manager, handyem Inc.</i> What the F3 sheathless microfluidic flow cell based on optical fiber technology can do for you; in the core lab, the life science lab or simply in the field!
12:45-13:15		

Friday June 14, 2013 (cont'd)

Concurrent Workshops - Ballroom A and Salle Du Parc		
14:00-15:00	<u>Imaging Workshop 2a</u> - Salle du Parc Imaging living samples <u>Session Organizers</u> <u>Claire Brown & James Jonkman</u>	
	14:00	I4- Live cell imaging Claire Brown <i>Department of Physiology McGill University, Montreal</i>
	14:30	I5- In vivo confocal live-imaging to understand and manipulate fundamental cell biological processes Gregory Emery <i>Department of Pathology and Cell Biology Université de Montréal, Montreal</i>
	<u>Flow Workshop 2</u> - Ballroom A Clinical flow applications <u>Session Organizer - Marie-Hélène Lacombe</u> Sponsored by 	
	14:00	F4- EuroFlow diagnostics and classification panels in hematologic malignancies Juan Flores Montero <i>Cancer Research Center (IBMCC-CSIC), Cytometry Service, University of Salamanca and Institute of Biomedical Research of Salamanca, Salamanca, Spain</i>
	14:40	F5- Pan-Canadian initiative for harmonization of flow cytometry data for hematologic malignancies Ryan Brinkman <i>Terry Fox Lab, BC Cancer Agency University of British Columbia, Vancouver</i>
15:00-15:30 COFFEE BREAK – sponsored by 		
Concurrent Workshops - Ballroom A and Salle Du Parc		
15:30-16:30	<u>Imaging Workshop 2b</u> - Salle du Parc Imaging living samples <u>Session Organizers</u> <u>Claire Brown & James Jonkman</u>	
	15:30	I6- Intravital imaging Peter Friedl <i>Radboud University Nijmegen Medical Centre Nijmegen, The Netherlands</i>
	16:00	I7- Panel discussion: Bring your questions! Claire Brown, Gregory Emery, Peter Friedl, Luke McCaffery
	<u>Flow Workshop 3</u> - Ballroom A Clinical flow analysis + Bioinformatics <u>Session Organizer-Marie-Hélène Lacombe</u> Sponsored by 	
	15:30	F6- EuroFlow protocols standardization and new analysis tools Maria Ines Goldaracena <i>BD Biosciences Latin America, Buenos Aires, Agrentina</i>
	16:00	F7- Principles of Multicolor Flow Cytometry Panel Design Maria Jaimes <i>Research and Development, BD Biosciences, San Jose, USA</i>
16:30-17:30 PLENARY LECTURE (PL2) - Ballroom A Par/aPKC polarity signaling in epithelial morphogenesis and cancer Luke McCaffrey <i>Goodman Cancer Centre, Department of Oncology, McGill University, Montreal</i>		
17:30-19:30 Wine & Cheese Reception - Sponsored by 		
Poster Session - Ballroom A Even posters 17:30-18:30 Odd posters 18:30-19:30		
Exhibits - Ballroom B		

Saturday June 15, 2013

Registration desk opens at 8:00

Concurrent Workshops

Ballroom A and Salle Du Parc

Imaging Workshop 3a - Salle du Parc

Which 3D microscopy technique should I use?

Session Organizers

James Jonkman & Claire Brown

9:00 **I8-** Any way you slice it: a comparison of optical sectioning techniques

James Jonkman

*Advanced Optical Microscopy Facility (AOMF),
University Health Network, Toronto*

9:30 **I9-** 4D quantitative analysis of virus infection

Amanda Howard

Bitplane Inc.

Flow Workshop 4 - Ballroom A

Panel designs and standardization

Session Organizer-Gisele Knowles

9:00 **F8-** Standardizing multiple analyzers for uniform users results

Julie Yuan

Hospital for Sick Children, UHN Flow Cytometry Facility, Toronto

9:20 **F9-** Fluorish panel design

Nicholas Ostrout

Tree Star

9:40 **F10** - "I'm in Recovery" - Discussions on purity masking and high speed sorting

Gisele Knowles

CCSM, Sunnybrook Research Institute, Toronto

10:00-10:30

COFFEE BREAK – sponsored by



Concurrent Workshops

Ballroom A and Salle Du Parc

Imaging Workshop 3b - Salle du Parc

Which 3D microscopy technique should I use?

Session Organizers

James Jonkman & Claire Brown

10:30 **I10-** Deconvolution

Louis Villeneuve

Montreal Heart Institute, Montreal

11:00 **I11-** Multi-photon microscopy

Edward Ruthazer

*Montreal Neurological Institute
McGill University, Montreal*

Flow Workshop 5 - Ballroom A

Small particle analysis by flow

Session Organizer - Chris Spring

10:30 **F11-** Flow cytometry for assessment of microparticles: recent improvements of the detection methods in biological fluids

Eric Boilard

Department of Microbiology, Infectious Diseases and Immunology, Université Laval, Quebec

10:50 **F12-** Microparticles and their role in cancer

Janusz Rak

Department of Pediatrics, McGill University, Montreal

11:10 **F13-** Mitochondrial damage in Amyotrophic Lateral Sclerosis revealed by flow cytometry of isolated spinal cord mitochondria

Sarah Pickles

*Department of Biochemistry,
Université de Montréal, Montreal*

10:30-11:30

PLENARY LECTURE (PL3) - Ballroom A

Taming a superbug: The *S. aureus* story

Joaquin Madrenas

Department of Microbiology and Immunology, McGill University, Montreal

11:30-12:30

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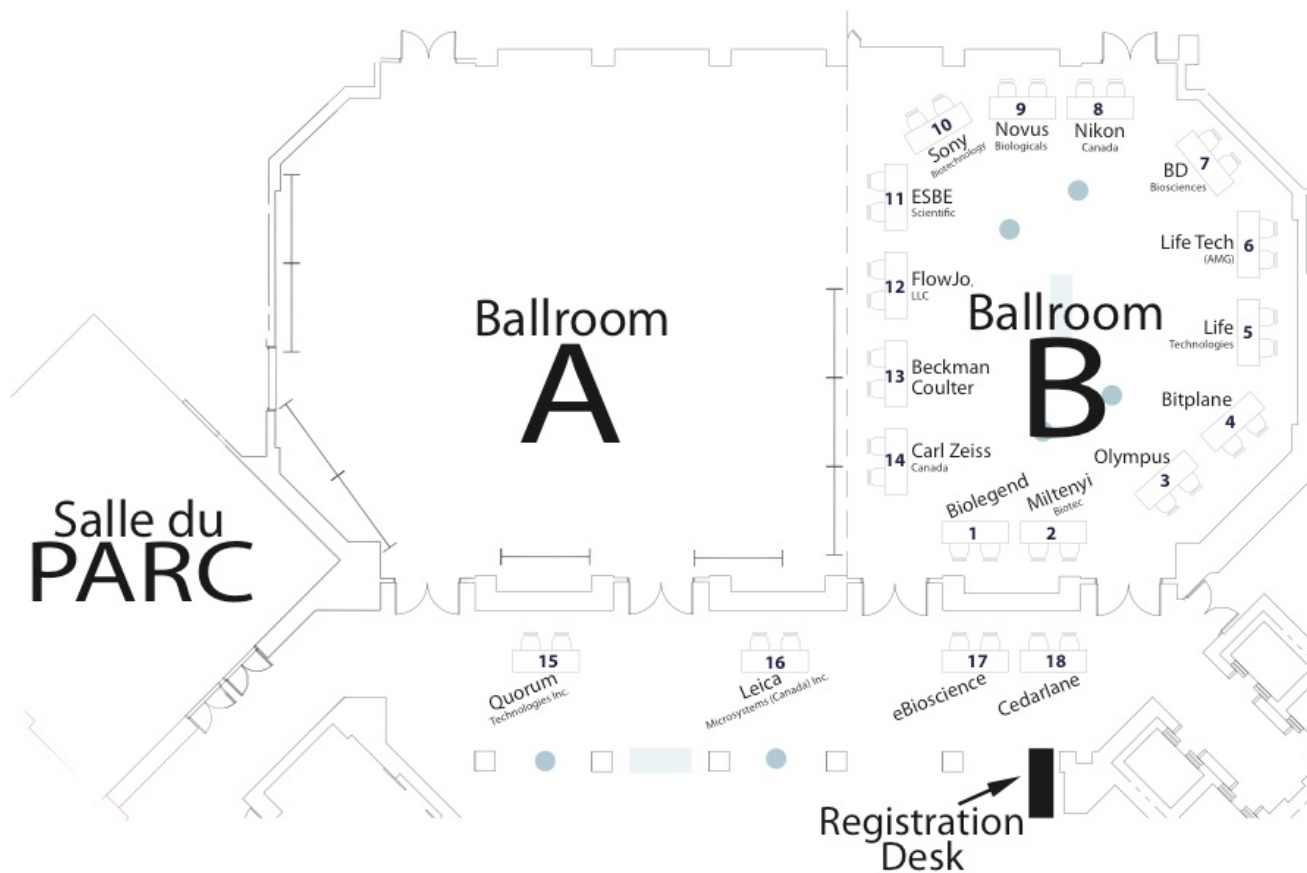
Saturday June 15, 2013 (cont'd)

12:30-14:00		LUNCH - Sponsored by 	
Exhibits - Ballroom B			
Lunch-N-Learn 3 - Salle du Parc		Lunch-N-Learn 4 - Ballroom A	
		SONY	
TBA		New cytometry platforms from Sony Biotechnology	
		Deena Soni	
		Sony Biotechnology	
		Technology for science	
Concurrent Workshops			
Ballroom A and Salle Du Parc			
Imaging Workshop 4a - Salle du Parc		Flow Workshop 6 - Ballroom A	
Quantitative imaging		Mass panel, mass data flow cytometry	
Session Organizers		Session Organizer-Gisele Knowles	
James Jonkman & Claire Brown			
Sponsored by 			
14:00	I12- You call that quantitative!?	14:00	F14- Organizing heterogeneity in ovarian cancer samples
14:00-15:00	James Jonkman		Jocelyn Stewart
	Advanced Optical Microscopy Facility (AOMF), University Health Network, Toronto		University Health Network, Toronto
14:20	I13- Overview of colocalization analyses	14:20	F15- Use of multiparameter phospho-flow profiling to predict in vivo drug responses in AML
	Judith Lacoste		Julie Yuan
	MIA Cellavie Inc, Montreal		Hospital for Sick Children, Toronto
14:40	I14- Step-by-step quantitative fluorescence resonance energy transfer (FRET) analysis	14:40	F16- Microflow1 : An innovative optic fiber-based cytometer for biomedical diagnostic during space missions
	Claire Brown		Genevieve Dubeau
	Department of Physiology McGill University, Montreal		Hôpital Maisonneuve Rosemont, Montreal
COFFEE BREAK			
sponsored by			
15:00-15:30		  	

Saturday June 15, 2013 (cont'd)

		Concurrent Workshops <i>Ballroom A and Salle Du Parc</i>	
		<u>Imaging Workshop 4b</u> - Salle du Parc Quantitative imaging <u>Session Organizers</u> <u>James Jonkman & Claire Brown</u>	<u>Flow Workshop 6b</u> - Ballroom A Data analysis options for mass panel flow cytometry <u>Session Organizer-Gisele Knowles</u>
15:30-16:30	15:30	I15- The Ethics of Digital Imaging Pina Colarusso <i>Live Cell Imaging Facility, Snyder Institute for Chronic Diseases, University of Calgary, Calgary</i>	15:30 F17- CommanJO: High-throughput data analysis Nicholas Ostrout <i>Tree Star</i>
	15:50	I16- Post acquisition processing and analysis of wound healing assays Judith Cathcart <i>Advanced Optical Microscopy Facility & University Health Network, Toronto</i>	15:40 F18- Automated analysis of flow cytometry data for diagnosis and discovery Ryan Brinkman <i>Terry Fox Lab, BC Cancer Agency University of British Columbia, Vancouver</i>
	16:10	I17- Objective lens quality and resolution Tushare Jinadasa <i>Department of Biochemistry Université Laval, Quebec</i>	16:05 F19- Towards single cell systems biology: Cloud computing for high dimensional cytometry Nikesh Kotecha <i>Cytobank Inc, Mountain View, CA</i>
16:30-17:30	PLENARY LECTURE (PL4) - Ballroom A Novel insights into dendritic spine maintenance and motility Anne McKinney <i>Department of Pharmacology and Therapeutics, McGill University, Montreal</i>		
17:30-18:00	Awards & Closing Remarks - Ballroom A		
18:00-18:30	CCMA General Assembly - Ballroom A All are welcome to attend		

ROOM PLAN



Room	Events
Ballroom A	Symposium main sessions Workshops Posters Lunch-N-Learn 1 and 3
Ballroom B	Exhibits
Salle du Parc	Core Facility Managers meeting Workshops Lunch-N-Learn 2 and 4

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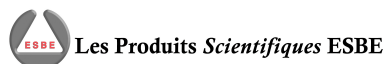
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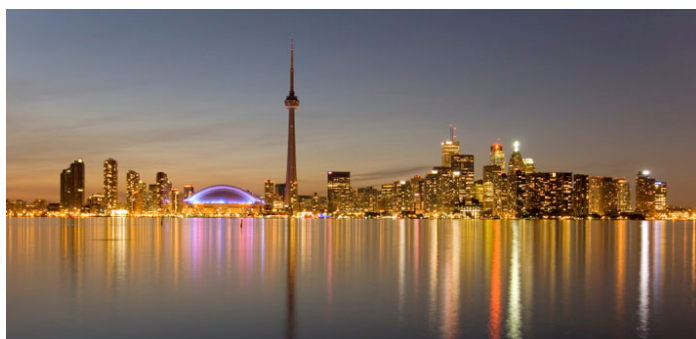


5th CYTOMETRY & MICROSCOPY SYMPOSIUM **5^e** SYMPOSIUM DE CYTOMÉTRIE ET DE MICROSCOPIE

Please Save the Date

Veuillez noter la date

**June 18 to 20, 2015
in Toronto, Ontario**



***Du 18 au 20 juin 2015
à Toronto, Ontario***



CANADIAN CYTOMETRY & MICROSCOPY ASSOCIATION
ASSOCIATION CANADIENNE DE CYTOMÉTRIE ET DE MICROSCOPIE