CANADIAN CYTOMETRY & MICROSCOPY ASSOCIATION

ASSOCIATION CANADIENNE DE CYTOMÉTRIE ET DE MICROSCOPIE

CytoTimes

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THE CCMA EXISTS TO:

- Encourage the sharing of knowledge regarding flow cytometry and optical microscopy;
- Create a pan-Canadian network of people interested in these cutting-edge technologies;
- Promote scientific exchange;
- Provide educational opportunities from experts in the field for technology users of all levels - beginner to expert.

CCMA Election Results

The CCMA Board of Directors is elected with 3 and 4 positions being open on even and odd years, respectively. In 2015, the following positions were open: Co-President (Microscopy), Vice-president, Communications Director, and Secretary. A call for nomination was sent to the membership, resulting in 5 applicants. For the first time more applications than positions available were received. Electronic elections were held from December 14-21, 2015 and resulted in the election of James Jonkman (Co-President Microscopy), Thomas Stroh (Vice-president), Vera Tang (Communications Director) and Claire Brown (Secretary). James, Thomas and Claire are past members of the Board. We are very happy to welcome Vera Tang (U. Ottawa) on the Board: her expertise and connections in flow cytometry will benefit the Association. The full composition of the CCMA Board of Directors can be found on the website.

The Association of Biomolecular Resource Facilities (ABRF) held its annual meeting from February 20-23 in Fort Lauderdale. One of the topics that was focused on during the meeting was reproducibility in science. Topics such as antibody and cell line validation, instrument standardization and the need for detailed materials and methods sections so that others can reproduce studies were presented and discussed throughout the meeting.

The light microscopy track included topics such as new and novel fluorescent probes for single molecule and live-cell microscopy (Nat Methods. 2015 Mar;12(3):244-50) being developed by Luke Lavis, Janelia Farms, HHMI and novel biosensors being developed by Klaus Hahn (UNC) most of which are available on Addgene (www.addgene.org/Klaus_Hahn/). Light sheet microscopy was also a hot topic with presentations on lattice light sheet, commercial systems and how to manage the massive data set the technique generates. Best practice in sample preparation and the importance of choosing the appropriate fluorophores for the respective techniques were also discussed. The Light Microscopy Research Group (LMRG) presented their sample and imaging protocol for a 3D light microscopy standard and will launch the full study world-wide this spring. Nathan Blow gave a presentation on the role of journals in improving reproducibility in science which led to a dynamic discussion on the topic. Finally, the ABRF flow cytometry research community is continually growing and featured a presentation on flow cytometry in inner space, tips to clean sorters and the effects of cell sorting on gene expression. The next ABRF meeting will be held in San Diego, March 25-28, 2017.

FluoroFinder: Resource for flow cytometry antibody panel design

Fluorofinder is a new online tool for the planning of multicolour fluorescence panel designs which takes into consideration the instruments available in your core facility, availability (and brightness) of reagents, antigen density, etc.

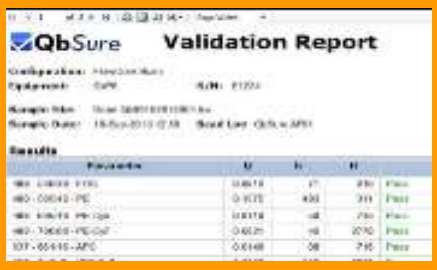
Features:

- **Customized to your Instruments** - Instrument configurations for your core are entered into FluoroFinder so users will know what they can use on your instruments.
- **Antigen Density Tool** - Automatically selects compatible fluorophores according to user entered antigen density for each marker.
- **Antibody Search Tool** - Real time feedback on over 145,000 reagents and 354 fluorochromes available on a cloud-based tool. Once you have built your panel, FluoroFinder provides a list of commercially available antibodies in your panel with catalogue number and price.
- **Save & Share Panels** - Registered users can save and share panels by email along with notes (titration details, etc.). Users also have the option to send the panel to their core facility for verification.
- **Panel Professor** - Provides useful tips at each point during the panel building process.

This is a comprehensive tool that streamlines panel building and is geared towards flow cytometry cores but may be useful for microscopy users as well. Core managers will be able to save time, not needing to repeat instrument configurations every time a new user needs to build a panel, reduces errors, saves time (and money) and links users to over 25 consumable vendors to purchase what is needed for the panels they have built.

FluoroFinder®

Cool Tools



QBSure software (CyTek) is a very inexpensive software and consumable kit that can be used to easily and quickly determine the Q, B and resolution limit of your cytometer in all fluorescent channels. For those interested in dim antigen resolution and microparticle fluorescent discrimination this is crucial in understanding the resolution of your instrumentation.

Webinar Watch

Webinars can be a great way to get in on high-quality training sessions or tutorials from the comfort of your own desk. Here are some of our favourites:

Small instruments for large tasks: High dimensional flow cytometry on compact platforms—April 13, 2016
http://cytou.peachnewmedia.com/store/seminar/seminar.php?seminar=46121
Integrating flow cytometry and single cell transcriptomics
http://cytou.org/store/seminar/seminar.php?seminar=23593
Calibration and characterization of flow cytometers and assays
https://www.youtube.com/watch?v=vL7VktzaM0M&feature=youtu.be
Determining stain index
https://www.youtube.com/watch?v=h5SyJuftgrU&feature=youtu.be
Centrifugal elutration in the flow cytometry laboratory
https://www.youtube.com/watch?v=H5jYK8bFMek

News and Views:

Montreal Light Microscopy Course (MLMC) Frontiers – Multi-dimensional Imaging – August 15-19, 2016,

Register at www.abif-mlmc.ca

Meet The CCMA/ACCM Executive…

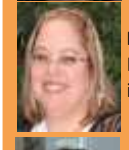
Chris Spring, Co-President
Research Core Facilities - Keenan Research Centre for Biomedical Science, St. Michael's Hospital

James Jonkman, Co-President
Manager –Advanced Optical Microscopy Facility, University Health Network

Thomas Stroh, Vice President
Director– Microscopy Unit, Montreal Neurological Institute, McGill University

Claire Brown, Secretary
Director - Advanced BioImaging Facility (ABIF), McGill University

Guillaume Lesage, Treasurer
Administrator - Cell Imaging and Analysis Network, Dept. Biology, McGill University



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cytometry /cy-tom'-e-try (noun)

The characterization and measurement of cells and cellular constituents.

CANADIAN MICROSCOPY & CYTOMETRY SYMPOSIUM

The Canadian Cytometry and Microscopy Association (CCMA) and the Microscopical Society of Canada (MSC) **are hosting a joint meeting, and we invite you to participate**.

Please save the date:

May 9-12, 2017

La Plaza – 420 Sherbrooke West
Montreal, Quebec

Registration and program information will be available soon on the CCMA and MSC websites.

Contact us at
ccma-accm@curlydog.ca
to be added to our mailing list.

We hope you will join us.

Material Sciences

Flow Cytometry

Light Microscopy

Cryo EM

Correlative Microscopy

Core Facility Managers' Meeting (CFM)

Hands-On Workshops

Student Travel Awards & Prizes

Lunch-N-Learn Sessions

CMCS-SCMC 2017 Joint Meeting Secretariat c/o Curly Dog Communications Inc. (CDC)
ccma-accm@curlydog.ca | +1-866-661-0880 x1

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