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 Elections and General Meeting

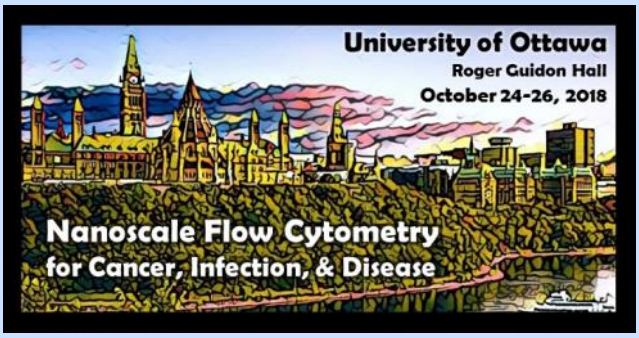
The CCMA had elections in December, with past board members Claire Brown and Guillaume Lesage departing to joint the Canadian Network of Scientific Platforms (CNSP). We wish them and the CNSP all the best in promoting the needs of core facilities across Canada (http://cnsp-rcps.ca/). Vera Tang and Aja Rieger are also taking over for James Jonkman and Thomas Stoh who have stepped down from their positions as Co-President and Vice-Present. We welcome Desmond Pink as the new Public and Corporate Relations Director and Caterina Di Ciano-Oliveira as the new Secretary for the CCMA. Desmond joins us from the University of Alberta where he works on extracellular vesicles and their role as biological indicators of prostate cancer disease status. He runs an EV Core with different platforms for nanoscale flow cytometry and nanoparticle evaluation and is the CSO for a new start-up Nanostics Inc. Caterina joins us from St Michael's hospital where she runs two microscopy facilities including the Centre for Advanced Time-resolved Cellular Analysis and Vesicle dynamic studies Enclave (CAT CAVE).

CMCS 2017 Symposium Highlights

This past May was the CMCS conference- jointly hosted by the CCMA and the MSC (Microscopical Society of Canada). The 2017 conference kicked off with a Scientific Platforms meeting, with 110 attendees hosted by the Canadian Network of Scientific Platforms (CNSP). The CSNP is a newly created network, developed from previous initiatives by the CCMA, that aims to promote awareness about the scientific platforms available across Canada, to educate researchers about technologies, develop best practices for the operation and management of these platforms, and create a cooperative culture in the research community and with industry leaders. The network was founded in August 2016 and currently has institutional members from 8 provinces. Over 100 researchers, platform scientists and research administrators from attended the inaugural meeting of the CNSP across Canada and abroad. The meeting focused on funding and sustaining high-level scientific Facilities that house state-of-the-art infrastructure. The meeting featured presentations by Dr. Philip E. Hockberger, as well as panel discussions on funding sustainability and web-resources and databases. The day ended with a networking dinner at the McGill Faculty Club. Following the Scientific Platforms meeting the CMCS meeting (attended by 272 scientists) officially kicked off with Plenary sessions of Dr. Tetsuya Higashiyama (pollen tube guidance- light microscopy) and Dr. Pratip Chattopadhyay (precision immunology through single cell profiling- flow cytometry). This was followed by plenary presentations by Dr. Bram Koster (zooming in on cells and macromolecules- electron microscopy) and Dr. Paul Midgley (crystal cartography- materials sciences). All talks were inspiring and a fantastic way to start CMCS 2017! The program this year featured streams for flow cytometry, light microscopy, electron microscopy, and materials sciences, with parallel sessions, lunch-n-learn, and exhibitions for each area. The meeting ended with a closing lecture by Dr. John Bergeron, a banquet dinner, and a dance featuring the mixing of DJ Universal.

Conference on Nanoscale Flow Cytometry in Ottawa

Hands-On Workshop: October 24, 2018
Conference: October 25-26, 2018



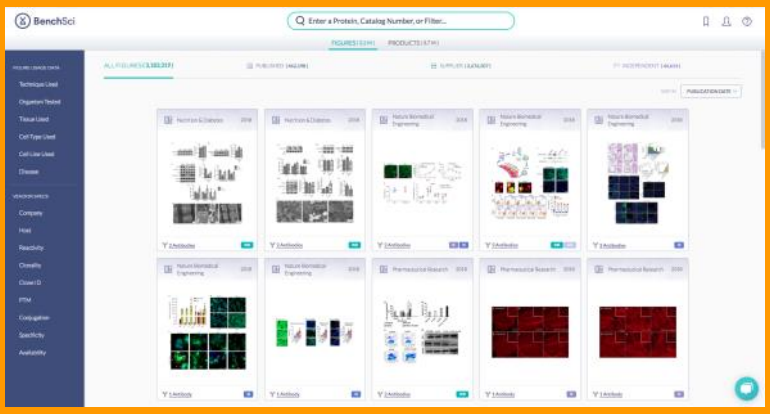
The study of extracellular vesicles has attracted considerable interest in the research community as they have emerged as key mediators in cellular communication regulating diverse biological processes. Nanoscale Flow cytometry is becoming one of the main modalities to analyze extracellular vesicles. Researchers are seeing their flow cytometers in a new light. With some adjustment to protocols, instrument modifications, and added controls, conventional flow cytometers can be used to analyze submicron-sized cell-derived membranous structures such as extracellular vesicles, viruses, organelles, and much more.

This meeting will showcase research in cancer, infection, and disease; specifically on the role of extracellular vesicles and viruses, with a focus on using flow cytometry as an analysis method. Speakers will include researchers from Canada and US. Talks will range in topics from basic research to technical applications from experts in the field of nanoscale flow cytometry sharing insights on controls, basics on instrument set-up, and sample preparation. Also being offered this year is a workshop run by the uOttawa flow core where attendees will learn to set up a flow cytometer for small particle analysis using samples provided by core facility. Space is limited as there will be a maximum of two participants per instrument, with a total of 5 instruments. Registration for this workshop is required and is separate from the meeting. Other features of this meeting include: Flow cytometry-themed product show, talks from vendors on flow cytometry applications, BD Guided Panel Solutions tutorial (hands-on in computer lab), and Travel Awards sponsored by the CCMA. uOttawa conference rates for local hotels are available. To apply for travel awards and access uOttawa hotel rates, please contact the uOttawa Flow Core for details. This is a great opportunity for networking and meeting researchers and other core facility members in the field of nanoscale flow cytometry. We hope you will join us and look forward to seeing you in October!

Meeting Registration:
https://www.thelangloislab.com/#/events/
uOttawa Flow Core Contact (Workshop registration):
flowcore@uottawa.ca

Cool Tools: BenchSci

BenchSci is a free online search tool to help you find antibodies from publications. Using their filters, you can specify your experimental contexts to review antibodies and the associated data that have been published under your specified conditions. It's a great tool to cut down the literature search time when choosing antibodies. You can search by technique, species and many other helpful filters. Check it out here.



BenchSci

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:

Single-cell analysis of virus infection: Zika and beyond?
http://www.labroots.com/webinar/single-cell-virus-infection-zika-beyond

Guide on keeping flow cytometry samples from clumping
https://expertcytometry.com/flow-cytometry-protocols-prevent-clumping/

News and Views:

Thermo Fisher and Cynome agreement on new benchtop sorter
https://www.genomeweb.com/business-news/thermo-fisher-scientific-cytonome-ink-co-development-agreement-flow-cytometry-tech

Stratedigm patent for extracellular vesicle detection
https://stratedigm.com/another-new-year-another-new-patent/

Flowjo is now a subsidiary of BD Biosciences
http://info.flowjo.com/faq

Multi-omic translational studies with mass cytometry: characterizing the molecular pacemakers of pregnancy
https://www.labroots.com/webinar/powering-multi-omic-translational-studies-mass-cytometry-characterizing-molecular-pacemakers-pregnan

Meet The CCMA/ACCM Executive…

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

Vera Tang, Co-President
Flow Cytometry and Virometry Core Facility, University of Ottawa

Aja Rieger, Vice President
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BioImaging Specialist—Research Core Facilities, St. Michael's Hospital

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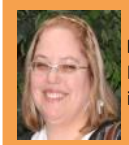

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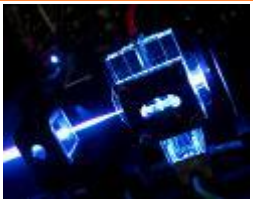

cytometry /cy-tom'-e-try (noun)

The characterization and measurement of cells and cellular constituents.