

registrant information

CCMA CoLD Summit

February 16-19 2023

OTTAWA





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CANADIAN CYTOMETRY AND MICROSCOPY ASSOCIATION

We are delighted to announce the first CCMA Core Leadership and Development Summit → the **CCMA CoLD Summit**.

This fully in-person event aims to gather cytometrists and microscopists together in discussions on the most relevant issues in the field. Importantly, these sessions will be highly interactive and will give you important tools to bring back to your facility to aid in operations, administration, and general technical skills.

This year's session topics fall into three distinct streams:

- **Staff Development**
- **Technical Problem Solving**
- **Operations and Administration**

Details on the various sessions are available within the document.

We will cap the meeting off with a full day of “Training the Trainer” hands-on, interactive tutorials. As core staff, we are expected to quickly incorporate new skills and technologies with limited advanced training. These sessions will focus to bring you up to speed on current “hot topics” in flow and microscopy.

We look forward to seeing you on February 16-19, 2023 in Ottawa, Canada at the CCMA CoLD Summit!

Vera Tang (*CCMA Co-President*)

Aja Rieger (*CCMA Co-President*)



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Registration details:

For the CCMA CoLD Summit, there are two different registration options:

- (1) You can register for the complete package (**The CCMA Special**) which includes registration, 3 nights at the conference hotel, and the Core Networking dinner. Should you also want to attend the "Training the Trainer" tutorials, you can select this as an Add-on item (as well as an additional night in the hotel, if required).
- (2) If you are local, staying for only part of the conference, or choose to stay elsewhere, then you will choose the standard "**Conference Registration Only**"- this will register you for the conference only. To this you can choose to add the Core Networking dinner, Training the Trainer tutorials, and/or specific nights at the conference hotel.

The conference hotel (The Andaz) offers rooms with 1 King bed or 2 Queen beds. You will be randomly assigned a room type when you register. If you have a preference, you can specify this in the "special comments" section of the registration form; however, please note that preferences will not be guaranteed.

Registration Link:

<https://form.jotform.com/ccmaaccm/attendees-registration>

or just scan this QR code:





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What to expect at the CCMA CoLD Summit

At the CCMA, we think attending a conference in-person should be much more than listening to lectures. We want to provide an interactive environment with content that is relevant to you- our flow cytometry & microscopy community! We want to provide learning and career development opportunities to grow our knowledge base and skills in facility techniques and operations to help support cutting edge research. This led to the creation of the CCMA CoLD Summit, a symposium featuring interactive, hands-on workshops and tutorials designed specifically with core facility researchers and staff in mind. These sessions will feature various formats including:

- Discussions with expert panelists
- Small group learning
- Interactive instructional sessions

These discussions will be led by core and industry leaders from across North America.

Attendance for the CCMA CoLD Summit will be capped at 125 registrants in order to promote interaction within the sessions and networking among the attendees. This is a great opportunity to get to know the other core staff from across Canada and parts of the US to establish a network of expertise to draw from in the future - because let's face it, we're all in this together!

Running in parallel to the workshops is the Demonstration Hall. Unlike a normal vendor show, all tables in the Demonstration Hall will have interactive activities for you to participate in. Whether this be demo-ing an instrument or trying out a new software, this Hall will give you the opportunity to get hands-on time with the sponsors.

What is a Techie Brekkie?

You can think of this like a Lunch 'n' Learn, but better because it comes with a full, hot breakfast. This won't be your usual continental fare but instead a hearty, balanced buffet breakfast to fuel your learning for the day (and all the caffeine you need to get your brain going). These sessions will feature 2 x 40 minutes presentations in parallel by sponsoring vendors. Breakfast is included with the cost of registration.



Networking and Social Sessions at the CCMA CoLD Summit

The CCMA CoLD Summit will kick off with an **Opening Reception** at the Copper Lounge at the Andaz Hotel- a 16th floor roof-top lounge, featuring seasonal Canadian-inspired cuisine and handcrafted cocktails served with a view of Ottawa's iconic sky-line. This opening reception is included in your registration.

The **evening of Day 2** is free time for you to network, enjoy the local Ottawa sights, have dinner with your favorite vendor - or just take a break!

The **afternoon of Day 3** will feature free time to enjoy the **Winterlude activities**. Winterlude is a free Canadian winter festival hosted annually in Ottawa. During Winterlude, you can marvel at beautiful ice sculptures, skate on the world-famous Rideau Canal Skateway (a UNESCO World Heritage Site), and play till you drop in a gigantic snow playground called Snowflake Kingdom. Many other Winterlude activities—indoors and outdoors—highlight Canada's cultural, artistic and culinary diversity. Urban sites, museums and special events present special seasonal programming as well as opportunities to connect with Indigenous culture.

Day 3 will end with a **Core Networking Dinner**, hosted by the CCMA at an off-site location. Tickets for this event will need to be purchased during registration.

Tentative agenda:

Time	Thurs Feb 16, 2023	Fri Feb 17, 2023	Sat Feb 18, 2023	Sun Feb 19, 2023
	Day 1	Day 2	Day 3	Day 4
8:00		Techie brekkie (Studio 1) - 1a/b	Techie brekkie (Studio 2/3) - 2a/b	CCMA general meeting- breakfast included
8:30		Techie brekkie (Studio 2/3) - 2a/b	Techie brekkie (Studio 5/6) - 5a/b	
9:00		Techie brekkie (Studio 5/6) - 3a/b	Techie brekkie (Studio 5/6) - 6a/b	
9:30		Spectral flow	Methods for training in core facilities	
10:00		Data reporting- microscopy	Spatial multi-omics and imaging flow	
10:30		Institutional policies	The 3 R's: resources, reagents and reference	
11:00		Coffee Break	Coffee Break	
11:30		Career development	Facility management software	
12:00		Data Analysis & Reporting- flow	Service contracts	
12:30		Thick sample imaging	Organizational culture and staff management	
13:00		Lunch break	Afternoon break for Winterlude activities	
13:30		Core facility management 101		"Training the Trainer" Tutorials- requires additional registration
14:00		Instrument QC and maintenance- flow		
14:30		Instrument QC and maintenance- microscopy		
15:00		Coffee Break		
15:30	Hotel Check-in	Correlative microscopy	Small Particle FCM: EVs, Viruses, & other small stuff	
16:00		Image analysis trends	Optimizing and trouble shooting cell sorting	
16:30		Instrument QC and maintenance- flow	Negotiations and new instrument purchases	
17:00		Instrument QC and maintenance- microscopy		
17:30	Opening session (Copper Rooftop) ice breaker/Meal & Guest happy hour with food			
18:00				
18:30				
19:00		Open evening		
19:30			Core Networking Dinner (tickets purchased in regi- offsite eat down dinner - SRI, networking, connecting core facilities, promote CCMA)	
20:00				
20:30				
21:00				
21:30				

Time	Sun Feb 19, 2023
	"Training the Trainer" Tutorial Agenda
9:00-12:00	Strategies for panel design as a core manager
12:00-1:00	Training the trainer on how to train
1:00-4:00	High parameter image analysis
	Break (Beverages provided from 9:30am-1:30pm)
9:00-12:00	Strategies for panel design as a core manager
12:00-1:00	Training the trainer on how to train
1:00-4:00	High parameter image analysis
	Break (Beverages provided from 1:30-4:30pm)
9:00-12:00	High dimensional data analysis
12:00-1:00	Trouble shooting spectral data
1:00-4:00	Small particle instrument calibration and optimization



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Workshop descriptions (Feb 17 & 18)

Join in the discussion on topics that matter to you and your core facility!

WS1: The spectral revolution

Incorporating full spectrum cytometers into your equipment arsenal and how to bring your user base along for the ride.

WS2: Data reporting- microscopy

We are facing a data reproducibility crisis in the bio-imaging sciences due to a lack of standardization in data reporting and collection methods. Experimental design and documentation of protocols should not just be an afterthought. These are critical elements in the scientific process that serve as a record and roadmap to help guide future researchers. In this session we will cover what parameters should be mentioned in a light microscopy data report and why they are important.

WS3: Institutional policies with respect to shared resources

This Q+A session will focus on various types of institutional policies with respect to cost recovery, dealing with aging instruments, and acquiring new instrumentation, with a specific focus on CFI funding models.

WS4: Career development as core facility staff

As core staff you wear many hats - but how do you continue to learn and advance in your career while maintaining a healthy work/life balance? Join us in the discussion and share your experiences.

WS5: Data Analysis Workflows & Reporting - Flow Cytometry

As the data from our experiments become increasingly complex, the best practices on how to analyze and report this data must also expand to accommodate. In this session, we discuss some of the recommended workflows and tools to use for high parameter and small particle data analysis as well as go over some recommended reporting frameworks such as MIFlowCyt and MIFlowCyt-EV.

WS6: Thick sample imaging

This session will focus on several advances in sample preparation, microscopy hardware, and computing that enable 3D imaging of centimeter sized samples at cellular resolution including: tissue clearing, fluorescence labeling, lightsheet microscopy, objective lens selection, AI-assisted segmentation and cloud computing/storage.

WS7: Core facility management 101

With a panel of veteran Canadian core managers, this session will address the basics of running a core facility from building budgets, setting rates, managing service contracts, to growing your core and much more.



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WS8/12: Instrument repair and QC- flow cytometry

An interactive session on the practical aspects of quality control and maintenance for flow cytometers; featuring service engineers from major flow cytometry companies.

WS9/12: Instrument repair and QC- microscopy

An interactive session on the practical aspects of quality control and maintenance for microscopes including cleaning, light source monitoring, and calibrations.

WS10: Correlative microscopy

A discussion of Correlative Light-Electron Microscopy (CLEM) imaging of cell monolayers and tissue sections to elucidate imaging workflow using two microscopy modalities.

WS11: Image analysis trends

What you should know about open source software, collaborative data sharing, and deep learning platforms and more.

WS14: Principles and practices unlock the hidden value of scientific platforms

This workshop will highlight how the principles and practices in adult education can support the activities within scientific platforms. By analyzing platforms through the lens of an adult educator, we can more clearly identify and analyze how they contribute to the research landscape beyond the standard metrics, such as publications and number of users trained. Further, best practices from adult education can also strengthen the existing training programs within platforms.

WS15: An image speaks a thousand words- how imaging flow and spatial multi-omics can add to your core

Seeing is truly believing! Imaging technologies are becoming more common across core facilities and are no longer restricted to imaging cores. This session will look at emerging imaging techniques that are more frequently being found in imaging to genomic cores and how they may contribute to your facility.

WS15: Resources/Reference/Reagent (The 3 R's)

Knowing where to find the right tools to aid our users is a critical part of any core manager's arsenal. This session will look at common resources and reference materials, with specific break-outs for both microscopy and flow.

WS16: Facility management software

Could the right facility management software help you to run your facility more efficiently? Join us for an interactive Q&A session where managers who have implemented facility management systems share their tips and tricks for choosing and implementing the right software for you.



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WS17: Service contracts: To pay or not to pay - what are your options?

As the cost of instruments rise, so too does the cost of service on these instruments. Service costs can contribute to a significant proportion of the operating costs of a facility. This is your opportunity to engage in a discussion with both industry representatives and other core managers to explore your service options.

WS18: Developing a strong organizational culture, staff management, and conflict management

The organization culture in your core facility includes an array of rules, practices, values, and expectations that impact the inner working of your group. Join us in a discussion of organizational culture. We'll play cards too. There must be a reason!

WS19: Small particle flow

This will be a discussion on supporting small particle samples in a core facility. Topics will include: instrument & sample workflows (calibrations, titrations, controls, etc), training, instrument QC & maintenance, and research acknowledgements.

WS20: Optimizing and troubleshooting cell sorting in a core facility

When a group of flow cytometry experts gather together, it is imperative that we discuss cell sorting issues. In this 'stump the chump' style session, we'll test our expert panel with issues experienced by the audience members, so bring your questions!

WS21: Negotiations and advocating for new instrument purchases (including RFPs)

Do you struggle with getting the "right" equipment in your facility? Are you unsure of what details to include in an RFP? This session will cover that and more!



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Tutorial descriptions (Feb 19)

These tutorials are designed to help you tackle more advanced topics through a hands-on approach. Tutorial attendees are strongly encouraged to bring their own laptops and download any required software and datasets for the tutorials before the sessions. Tutorials are an add-on item not included with the standard registration cost.

TT1: Troubleshooting Spectral Data

Many flow cores across Canada have recently acquired spectral cytometers. These instruments require a new set of skills for troubleshooting data. This tutorial will teach you how to deal with common issues such as unmixing errors, autofluorescence subtraction, and more.

TT2: Strategies for panel design as a core manager- what are your options?

As the detection capabilities on flow cytometers increase, greater demands for panel design are being placed on core facilities. Learn some tips & strategies for panel design, as well as resources to support you in this high parameter adventure!

TT3: Instrument Optimization and Calibration for Small Particle Flow Cytometry using FCM_{PASS}

More researchers are now exploring the use of flow cytometry for single-particle analysis of small particle samples such as extracellular vesicles and viruses. These types of samples require specific tools and procedures to be successfully supported in a core facility setting. In this tutorial we will be going through the use of FCM_{PASS}, a free software for small particle data calibration and instrument optimization. Attendees will have access to a practice dataset as we walk through the use of this software for small particle flow cytometry.

TT4: High Dimensional Flow Cytometry Data Analysis

Have you wondered how t-SNE plots are generated? This is an introduction on the workflow for dimension reduction analysis for high parameter flow cytometry data. Attendees of the tutorial will be provided with trial software and a practice dataset to learn hands-on how to analyze this data.

TT5: How to be an effective trainer for a scientific platform

This interactive session will introduce participants to best practices in adult education. You will also have the opportunity to put the concepts into practice through small group activities. By the end of the tutorial, you will have identified a learning need in your platform, and have drafted a plan for a short activity to support the learning.

TT6: Introducing high parameter image analysis

This is a hands-on tutorial to learn the basics of image analysis using open-source image analysis software. Attendees will be asked to download software and data sets ahead of the tutorial so that they can follow along with a practice dataset.



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Location Details

This is the first CCMA conference that will take place in Ottawa - our nation's capital! We are very excited to have everyone visit Ottawa during the festive season of Winterlude and hope you will have the opportunity to explore parts of the city while you are here. We have included some information below to enhance your experience.

Conference Hotel - Andaz Ottawa Byward Market

Situated at the heart of downtown Ottawa's historic Byward Market, the Andaz is a 200-room boutique hotel that is steps away from restaurants, bars, shops, and public transportation.

Traveling to Ottawa

Train - Those traveling to Ottawa from Toronto or Montreal may wish to consider taking VIA Rail to Ottawa and then connecting onto the O-Train (Line 1, westbound) to get downtown (Rideau Station). Rideau Station is located below the Rideau Shopping Centre, which is a few minutes walk from the Andaz Hotel.

Car - Limited parking is available at the conference hotel for a fee of \$35 per night. There are also several public indoor parking garages within walking distance of the Andaz including the Byward Parking Garage and the Parking Indigo Ottawa - Market Garage.

Plane - Those traveling to Ottawa by air will arrive at the Macdonald–Cartier International Airport, which is approximately 15km from downtown Ottawa and the Andaz Hotel. The quickest options to get from the airport to downtown is Taxi or Uber. The most economical option is to take the OCTranspo bus route 97 Hurdman to Hurdman Station and then transfer onto the O-Train Line 1 to Rideau Station (westbound to downtown). Rideau station is a short walk to the Andaz Hotel. Suggestions for local airlines: WestJet, Porter, AirCanada, Swoop, Flair.

Local Good Eats, Sights & Activities

Lunch and some dinners are not included with the registration fee. We strongly encourage you to explore the many culinary options the Byward Market has to offer that will fit a range of budgets. Stroll through the Byward Market and the surrounding downtown shops and sights for the full Ottawa experience!

Scan this QR code to check out some local recommendations - new updates to come as we get closer to the event!

