## ALBERTA SOCIETY OF CLINICAL CHEMISTS



ASCC Annual General Meeting 20 September 2019

Locations

**Primary site:** Mazankowski Alberta Heart Institute (Shaw 3i Auditorium 0A8.60), Edmonton **Teleconference locations:** DynaLIFE base lab, Alberta Public Labs DSC Calgary (Exec C244), Red Deer Regional Hospital (Room 3401)

## Mass Spectrometry: To Infinity and Beyond?

13:00 - 13:30	ASCC Business Meeting (Members Only)
13:30 – 13:35	Welcome
13:35 – 13:45	Presentation of the 2019 ASCC Outstanding Contribution to Clinical
	Chemistry Award to Trefor Higgins
13:45 – 14:30	Keynote Speaker: Dr. Andy Hoofnagle (Dept. of Laboratory Medicine, University of Washington) 2019 CSCC Travelling Lectureship sponsored by <i>Bio-Rad</i> <i>Clinical proteomics: What every sample wants</i>
	<ul> <li>At the end of this session, participants will be able to: <ol> <li>List three reasons why immunoassays may generate misleading results and how mass spectrometric approaches could help provide better accuracy</li> <li>Outline the steps of a protein assay that uses mass spectrometry as the detection method</li> <li>Summarize how mass spectrometry can improve monitoring for thyroid cancer recurrence.</li> </ol> </li> </ul>
14:30 – 14:45	Questions
14:45 – 15:55	Refreshment Break
14:55 – 15:20	Dr. Andy de Souza (Dept. of Laboratory Medicine and Pathology, University of Alberta) Newborn metabolic screening in Alberta: Past, present and future
	<ul> <li>At the conclusion of this session, participants will be able to: <ol> <li>Recognize the impact of tandem mass spectrometry on newborn screening</li> <li>Describe Alberta's Newborn Metabolic Screening Program</li> <li>Appreciate the utility of tandem mass spectrometry for second-tier testing</li> </ol></li></ul>
15:20 - 15:25	Questions
15:25 – 15:50	Dr. Greg Kline (Division of Endocrinology, Cumming School of Medicine, University of Calgary) Mass spec or mass chaos?At the conclusion of this session, participants will be able to:
	<ol> <li>Describe one common clinical endocrinology scenario where a move to LC-MS/MS hormone testing may provide an increase in diagnostic value</li> </ol>

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	<ol><li>Describe how a change to LC-MS/MS for adrenal steroid</li></ol>
	measurements may adversely affect clinical use of the tests for
	dynamic diagnostic procedures that do not make sure of a
	traditional reference range
15:50 – 15:55	Questions
15:55 – 16:05	Refreshment Break
16:05 – 17:50	Trainee Presentations (15 minutes per trainee [12 minutes for the presentation, 3 minutes for questions])
	Dr. Heather Paul: Pre-analytical contamination of pediatric and newborn urine drug screening samples with tributoxyethylphosphate (TBEP)
	<ul> <li>At the conclusion of this session, participants will be able to:</li> <li>1) Describe how urine samples are collected from neonates and how this can lead to sample contamination</li> <li>2) Describe the investigative process for determining the source of TBEP contamination observed in urine drug screens</li> </ul>
	Arshia Mostoufi How stable in your FIT testing?
	<ul> <li>At the conclusion of this session, participants will be able to:</li> <li>1) Understand the impact of delayed delivery of fecal samples to the lab on test results</li> <li>2) Understand the importance of having a stable testing-window to decrease the rate of false negatives due to sample aging</li> <li>3) Understand the importance of refrigeration in preventing sample degradation</li> </ul>
	Kaltrina Doberdolani In search of a patient-friendly screening test for gestational diabetes
	<ul> <li>At the conclusion of this session, participants will be able to:</li> <li>1) Understand the current issues patients face with oral glucose testing</li> <li>2) Appreciate a new alternative method to oral glucose testing that is easier for patients and lab staff</li> </ul>
	<b>Michelle To</b> Developing approaches to reagent lot-to-lot validation: can we standardize the procedure within the Edmonton zone?
	<ul> <li>At the conclusion of this session, participants will be able to:</li> <li>1) Appreciate the purpose and importance of performing reagent lot-to-lot validations.</li> <li>2) Understand the current reagent lot validation practices within the Edmonton Zone.</li> </ul>

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	<ol> <li>Discuss the strategies to implement a change in reagent lot validation practices.</li> </ol>
	<b>Steven Dang</b> Wine coloured samples? Development of laboratory reporting guidelines for hydroxocobalamin (OHCob) interference in patients pulled from house fires
	<ul> <li>At the conclusion of this session, participants will be able to: <ol> <li>Appreciate the significance of hydroxocobalamin interference on various laboratory methods (enzymatic, spectrophotometric, mechanical) and instruments</li> <li>Recognize the need for standard operating procedures in handling hydroxocobalamin interference</li> <li>Understand the importance of communication between the emergency department and laboratory when patients are administered hydroxocobalamin</li> </ol></li></ul>
	<b>Dr. Miranda Brun</b> Effects of hand delivery vs pneumatic tube system transport on ammonia results
	<ul> <li>At the conclusion of this session, participants will be able to:</li> <li>1) Identify preanalytical variables that can affect ammonia results</li> <li>2) Appreciate the variety of workflows that may exist at different hospital sites</li> <li>3) Understand the importance of communication and engagement with preanalytic staff</li> </ul>
	Alyssa Marusyn Can we standardize serum indices in the Edmonton zone?
	<ul> <li>At the conclusion of this session, participants will be able to:</li> <li>4) Understand the different manufacturers use different method and wavelengths, preventing complete standardization of serum indices</li> </ul>
	<ul> <li>5) Understand how hemolysis, icterus and lipemia are determined to have significant interference in chemistry testing</li> <li>6) Understand that serum indices produce unbiased, and reproducible results in comparison to the visual grading of interferences</li> </ul>
17:50 – 18:00	Closing remarks
18:00 – 19:00	ASCC Mixer – *** <b>NOTE CHANGE IN VENUE</b> *** The Writer's Room (11113-87 Ave, Edmonton)

"This event is an Accredited Group Learning Activity as defined by the CSCC/CACB Professional Development Program"

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