



## 2023 CANADIAN CRITICAL CARE REVIEW (CCCR) PROGRAM

June 8 – 9, 2023

The Old Mill, Toronto

### Learning Objectives

The learning objectives are developed based on the Royal College of Physicians and Surgeons of Canada objectives of training in Adult Critical Care.

By the end of the program, participants will be able to:

1. Describe evidence-based approaches to assessment of adult patients with critical illness;
2. Develop and implement evidence-based management plans for adult patients with critical illness.

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University. You may claim a maximum of 9.0 hours (credits are automatically calculated).

This activity is an Accredited Self-Assessment Program (Section 3) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada, and approved by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University. You may claim a maximum of 4.5 hours (credits are automatically calculated).

Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

Each session is 45 minutes with a minimum of 25% dedicated to participant interaction.

### THURSDAY, JUNE 8, 2023

Sessions will be held in Brule BC.

Breakfast and lunch will be held in Brule A.

Exhibits and breaks will be held in Brule A.

Time	Session	Faculty
7:00 a.m. - 8:00 a.m.	Check-in / Breakfast	
8:00 a.m. - 8:15 a.m.	Welcome	Karen Burns
8:15 a.m. - 9:00 a.m.	<b>Arrhythmias</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"><li>• apply a diagnostic approach to arrhythmias in the ICU;</li><li>• design a management approach to arrhythmias in the ICU; and</li><li>• recognize clinical pearls.</li></ul>	Shaheeda Ahmed



9:00 a.m. - 9:45 a.m.	<b>Acute Respiratory Failure: ARDS</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• review the evidence-based management of ARDS; and</li> <li>• discuss current and future research on novel management strategies for ARDS.</li> </ul>	Eddy Fan
9:45 a.m. - 10:30 a.m.	<b>Weaning - Mechanical Ventilation</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• describe the 3 epidemiologic weaning groups and their respective prognoses;</li> <li>• apply evidence-based methods for screening and testing patients to identify those ready for extubation; and</li> <li>• formulate a management plan for difficult to wean patients.</li> </ul>	Karen Bosma
10:30 a.m. -11:00 a.m.	Break	
11:00 a.m. - 11:45 a.m.	<b>Toxicology and Drug Overdoses</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• describe the diagnostic evaluation of a patient with a presumed poisoning;</li> <li>• select appropriate decontamination modalities based on the timing, type, and severity of poisoning; and</li> <li>• recognize indications for antidote therapy of various poisonings.</li> </ul>	Osama Loubani
11:45 a.m. - 12:30 p.m.	<b>The Future of Critical Care in Canada</b> <i>Panel</i> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• recognize the implications of new technologies and artificial intelligence for the field of critical care medicine;</li> <li>• describe the impact of social and economic challenges such as emerging pandemics, climate change, and health system constraints on current practice patterns in critical care; and</li> </ul>	David Maslove, Dominique Piquette, Alison Fox-Robichaud, Arthur Slutsky



	<ul style="list-style-type: none"> <li>describe how the above factors will shape training and assessment practices in critical care.</li> </ul>	
12:30 p.m. - 1:30 p.m.	Lunch	
1:30 p.m. - 2:15 p.m.	<b>Unraveling the Complex Interplay between Frailty and Critical Illness</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>define frailty and how it can be measured in the critically ill;</li> <li>identify the impact of frailty on outcomes in the critically ill; and</li> <li>express how their practice could be adjusted to account for frailty.</li> </ul>	John Muscedere
2:15 p.m. - 3:00 p.m.	<b>Determination of Death</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>review death by neurological criteria (DNC) and death by circulatory criteria (DCC), highlighting key changes in the updated Canadian guidelines;</li> <li>discuss some unique considerations of management for potential donors following DNC and DCC (including MAiD); and</li> <li>identify important features in the management of donor families.</li> </ul>	Jennifer Hancock
3:00 p.m. - 3:45 p.m.	<b>ICU Hematology</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>employ an organized approach to cytopenias in the ICU;</li> <li>recognize and treatment thrombotic and coagulopathic emergencies; and</li> <li>demonstrate knowledge of blood product utilization in critical care settings.</li> </ul>	Ryan Zarychanski
3:45 p.m. - 4:15 p.m.	Break	
4:15 p.m. - 5:00 p.m.	<b>Acute Kidney Injury &amp; Renal Replacement Therapies</b> At the end of this session, participants will be able to:	Jan Friedrich



	<ul style="list-style-type: none"> <li>• review principles and application of the different modes of dialysis used in critically ill patients; and</li> <li>• describe the evidence supporting treatments for acute renal failure in critically ill patients.</li> </ul>	
5:00 p.m. - 5:45 p.m.	<b>Sepsis</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• discuss sepsis history, epidemiology, definitions and scoring systems</li> <li>• review sepsis biology and physiology</li> <li>• discuss evidence-based management (guidelines, RCTs) and emerging concepts</li> </ul>	Aleksandra Leligdowicz

## FRIDAY, JUNE 9, 2023

Sessions will be held in Brule BC.

Breakfast and lunch will be held in Brule A.

Exhibits and breaks will be held in Brule A.

Time	Session	Faculty
7:00 a.m. - 8:00 a.m.	Check-in / Breakfast	
8:00 a.m. - 8:15 a.m.	Welcome	Program Chairs
8:15 a.m. - 9:00 a.m.	<b>Infectious Diseases in the ICU</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• describe the role of patient-level antimicrobial use on antimicrobial resistance in the ICU;</li> <li>• discuss the existing evidence supporting antimicrobial therapy in critically ill patients; and</li> <li>• consider the limitations in diagnosing infections in critically ill patients.</li> </ul>	Andrew Morris
9:00 a.m. - 9:45 a.m.	<b>Non-Invasive Mechanical Ventilation / HFNC (High Flow)</b> At the end of this session, participants will be able to: <ul style="list-style-type: none"> <li>• review the physiology of non-invasive ventilation and high flow nasal cannula;</li> <li>• review the indications and contra-indications for both non-invasive ventilation and high-flow ventilation; and</li> </ul>	Kim Lewis



	<ul style="list-style-type: none"> <li>• discuss strategies to assist with intolerance for non-invasive ventilation.</li> </ul>	
9:45 a.m. - 10:30 a.m.	<p><b>Gastroenterology and Hepatology in ICU</b></p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• differentiate acute liver failure (ALF) from acute on chronic liver failure (ACLF);</li> <li>• indicate the causes and complications of ALF;</li> <li>• review neuroprotective strategies in ALF;</li> <li>• review the indications for ICU care in acute on chronic liver failure; and</li> <li>• review the indications and contraindications for liver transplant (LT) in ACLF.</li> </ul> <p><i>Presenting virtually</i></p>	Dean Karvellas
10:30 a.m. - 11:00 a.m.	Break	
11:00 a.m. - 11:45 a.m.	<p><b>Neurological Critical Care</b></p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• name 10 considerations/complications of SAH and describe their management;</li> <li>• list a differential diagnosis for causes of ICH and explain general management principles for all patients with ICH; and</li> <li>• describe the management of status epilepticus.</li> </ul>	Julie Kromm
11:45 a.m. - 12:30 p.m.	<p><b>Cardiovascular Care of ICU Patients</b></p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• describe the common post-operative cardiac surgery complications and an approach to their management;</li> <li>• describe the physiology and management of common post-operative cardiac surgery pathologies; and</li> <li>• describe the modalities, indications, contraindications, and complications of commonly applied methods of mechanical circulatory support.</li> </ul>	Ken Parhar
12:30 p.m. - 1:30 p.m.	Lunch	
1:30 p.m. - 2:15 p.m.	<b>Acute Coronary Syndromes</b>	Andrew Moeller



	<p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• describe the five different types of myocardial infarction;</li> <li>• recognize the cardiac conditions that mimic acute coronary syndromes in the critically ill patient; and</li> <li>• identify ECG abnormalities in keeping with acute coronary syndromes.</li> </ul>	
2:15 p.m. - 3:00 p.m.	<p><b>Nutrition in the ICU</b></p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• discuss the caloric and nutrient requirements in critically ill patients;</li> <li>• recognize indications for specific nutritional therapies (enteral vs parenteral); and</li> <li>• utilize metabolic assessments in the ICU – monitoring response to therapy.</li> </ul>	Kristen MacEachern
3:00 p.m. – 3:30 p.m.	<b>Break</b>	
3:30 p.m. - 4:15 p.m.	<p><b>Endocrine Emergencies</b></p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• describe the evidence for and against the use of steroids in Septic Shock;</li> <li>• describe the current recommendations for glycemic control in critical illness; and</li> <li>• list the potential endocrine complications of brain injury and a plan for investigation and management.</li> </ul>	Wael Haddara
4:15 p.m. - 4:45 p.m.	<p><b>Tips to Prepare for the Royal College Exam</b></p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> <li>• employ study strategies for the Royal College exam; and</li> <li>• identify content resources to help with preparation for the Royal College exam.</li> </ul>	Albert Chang
4:45 p.m. - 5:00 p.m.	Closing Remarks	Program Chairs



## **Thank You to Our Sponsors**

This program has received an educational grant from the following:

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