



2019 CANADIAN CRITICAL CARE REVIEW PROGRAM

June 6 – 7, 2019

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.

THURSDAY, JUNE 6, 2019

Sessions will be held in Brulé C.

Breakfast and lunch will be held in Brulé B.

Exhibits and breaks will be held in Brulé B.

Time	Session	Faculty
7:00 a.m. - 8:00 a.m.	Breakfast	
8:00 a.m. - 8:15 a.m.	Welcome	Program Chairs
8:15 a.m. - 9:00 a.m.	Septic Shock: 2019 Update At the end of this session, participants will be able to: <ul style="list-style-type: none"> • understand pathogenesis and immune response to sepsis; • review the diagnostic criteria for sepsis; • review treatment of septic illnesses; and • understand preventative infection control techniques. 	Bram Rochweg
9:00 a.m. - 9:45 a.m.	Arrhythmias: Approach and Treatment At the end of this session, participants will be able to: <ul style="list-style-type: none"> • provide a diagnostic approach to arrhythmias encountered in the ICU; and • highlight principles of management. 	Shaheeda Ahmed



<p>9:45 a.m. - 10:30 a.m.</p>	<p>Weaning from Mechanical Ventilation</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • describe the 3 epidemiologic weaning groups and their respective prognoses; • apply evidence-based methods for screening and testing patients to identify those ready for extubation; and • formulate a management plan for difficult to wean patients. 	<p>Karen Bosma</p>
<p>10:30 a.m. -11:00 a.m.</p>	<p>Break</p>	
<p>11:00 a.m. - 11:45 a.m.</p>	<p>Infectious Diseases in the ICU: Bugs & Drugs</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • identify common ICU infections and optimize management; • recognize Infections not to be missed • describe mechanisms of antimicrobial resistance and example pathogens; and • list types of immune compromise and opportunistic infections seen in critical care. 	<p>Wendy Sligl</p>
<p>11:45 a.m. - 12:30 p.m.</p>	<p>Toxicology and Drug Overdoses</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • describe the main elements of risk evaluation; • differentiate different toxidromes • manage appropriately the unstable poisoned patient; • describe the indications and modalities for extracorporeal toxin removal • describe the indications for extracorporeal life support. 	<p>Maude St-Onge</p>
<p>12:30 p.m. - 1:30 p.m.</p>	<p>Lunch</p>	
<p>1:30 p.m. - 2:15 p.m.</p>	<p>ICU Hematology</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • identify the optimal use of red cell and plasma transfusion and anticoagulant reversal; • demonstrate an approach to thrombocytopenia in the ICU including HIT / DIC diagnosis and treatment; 	<p>Ryan Zarychanski</p>



	<ul style="list-style-type: none"> • identify the role for therapeutic apheresis in critical illness; and • demonstrate an approach to Thrombosis in the ICU. 	
2:15 p.m. - 3:00 p.m.	<p>ICU Management of Trauma Patients</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • understand advanced topics in the resuscitation of trauma patients in hemorrhagic shock; • describe an approach to the management of severe TBI and ICP elevation; and • list the indications for diagnostic imaging tests in the work up of the injured trauma patient. 	Mark Oppenheimer
3:00 p.m. - 3:30 p.m.	Break	
3:30 p.m. - 4:15 p.m.	<p>The Recovery Journey</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> • describe the contributors to ICU Acquired weakness, including its pathophysiology and prognosis; and • identify the major physical and neuropsychological morbidities of an episode of critical illness for patients and families. 	Elizabeth Wilcox
4:15 p.m. - 5:00 p.m.	<p>Gastroenterology in ICU: Liver Failure, GI Bleeding, Pancreatitis, Abdominal Compartment Syndrome</p> <p>At the end of the session, the participant will be able to:</p> <ul style="list-style-type: none"> • understand the management and prognostication of acute liver failure; • diagnose and develop treatment plans for acute gastrointestinal hemorrhage; • recognize the supportive treatments and interventions for acute pancreatitis and its complications; and • list the physiologic impact and indications for surgery in abdominal compartment syndrome. 	Mark Oppenheimer



FRIDAY, JUNE 7, 2019

Sessions will be held in Brulé C.

Breakfast and lunch will be held in Brulé B.

Exhibits and breaks will be held in Brulé B.

Time	Session	Faculty
7:00 a.m. - 8:00 a.m.	Breakfast	
8:10 a.m. - 8:15 a.m.	Welcome	Program Chairs
8:15 a.m. - 9:00 a.m.	<p>The Cardiovascular ICU Patient: Complications and Mechanical Devices</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> describe the common postoperative cardiac surgery complications and an approach to their management; and describe the modalities, indications, contraindications, and complications of commonly applied mechanical circulatory support modalities. 	Ken Parhar
9:00 a.m. - 9:45 a.m.	<p>Endocrine Emergencies</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> describe the evidence for and against the use of steroids in Septic Shock; describe the current recommendations for glycemic control in critical illness; list the potential endocrine complications of brain injury and a plan for investigation and management; and describe an approach to uncommon endocrine emergencies. 	Wael Haddara
9:45 a.m. - 10:15 a.m.	Break	
10:15 a.m. - 11:00 a.m.	<p>Management of the Organ Donor</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> describe the pathways for potential organ donation in a typical Canadian organ donation organization; describe the criteria for the determination of death by neurological and circulatory criteria; identify potential pitfalls in the determination of death; 	Jeff Singh



	<ul style="list-style-type: none"> describe typical evidence-informed management of potential organ donors; and list three presently evolving concepts in the evolution of donation science in Canada. 	
11:00 a.m. - 11:45 a.m.	<p>Acute Respiratory Failure I: ARDS</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> review the diagnostic criteria for patients with ARDS; and describe the therapeutic approach to managing the patient with ARDS. 	Ken Parhar
11:45 a.m. - 12:45 p.m.	Lunch	
12:45 p.m. - 1:30 p.m.	<p>Neurological Critical Care</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> review key neuroanatomy and principles of neurophysiology relevant to the critical care patient; overview of the management of TBI; and review of high yield literature and topics including declaration of neurological death. 	Laurel Murphy
1:30 p.m. - 2:15 p.m.	<p>Acute Respiratory Failure II: Asthma & COPD</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> understand the clinical and physiologic manifestations of obstructive lung diseases; describe the medical treatment of severe exacerbations of asthma and respiratory failure related to exacerbations of chronic obstructive pulmonary disease (COPD); and describe the indications, benefits and strategies for both non-invasive and invasive positive pressure ventilation in asthma and COPD exacerbations. 	Clare Ramsey
2:15 p.m. - 2:30 p.m.	Completion of Needs Assessment /Program Evaluation	
2:30 p.m. - 3:15 p.m.	<p>Nutrition in the ICU</p> <p>At the end of this session, participants will be able to:</p> <ul style="list-style-type: none"> discussing the caloric and nutrient requirements in critically ill patients; 	Kristen MacEachern



	<ul style="list-style-type: none"> indications for specific nutritional therapies (enteral vs. parenteral); and role/utility of metabolic assessments in the ICU – monitoring response to therapy. 	
3:15 p.m. - 4:00 p.m.	<p>Acute Kidney Injury & Renal Replacement Therapies</p> <p>At the end of the session, the participant will be able to:</p> <ul style="list-style-type: none"> describe treatments for acute renal failure in ICU including the differences between the various renal replacement modalities; and assess the evidence underlying treatments of acute renal failure in critically ill patients. 	Jan Friedrich
4:00 p.m. - 4:15 p.m.	Closing Remarks	Program Chairs

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 4.0 hours (credits are automatically calculated).

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