IDCCM Kavanagh Physiology Rounds

Tuesday September 23, 2025

4:00 pm - 5:00 pm

Theme: Applied Respiratory Physiology

Measuring inspiratory effort in non-intubated patients: physiological insights, methods and clinical potential

Roberto Tonelli, MD
Assistant Professor of Respiratory Medicine
Department of Surgical and Medical Sciences
Laboratory of Experimental Pulmonology,
University of Modena and Reggio Emilia, Italy

Objectives:

1. Introduce the physiological rationale for measuring inspiratory effort in non-intubated patient
2. Review available methods for assessing effort in non-intubated patients, highlighting their strength and limitations
3. Explore how inspiratory effort monitoring may guide clinical decision-making in acute respiratory failure

Chair: Jan de Mey

How to join:

Join Zoom Meeting: https://ca01web.zoom.us/j/69888200040?pwd=sZy3FveIol9llBvlaMIXCxuOQbI0fI.1
Meeting ID: 698 8820 0040
Passcode: 514116

IDCCM Kavanagh Physiology Rounds

Tuesday October 28, 2025

4:00 pm - 5:00 pm

Theme: Applied Respiratory Physiology

When What Seems Like Sleep Isn't Sleep: Sedation-Related EEG Patterns in Acute Hypoxemic Respiratory Failure.

Antenor Rodrigues
Assistant Professor, Faculté de médecine
École des sciences de la réadaptation, Université Laval
Researcher – Institut Universitaire De Cardiologie Et De Pneumologie de Québec (IUCPQ) Research Center

Objectives:

1. Explain why sleep is important and how it changes in critically ill patients under sedation;
2. Identify and compare methods used to assess sleep and sedation depth in mechanically ventilated patients
3. Describe the main findings of the study on sedation-related EEG patterns in acute hypoxemic respiratory failure.

Chair: Dr. Angela Jerath

How to join:

Join Zoom Meeting:

https://ca01web.zoom.us/j/63423034081?pwd=bHOmBL64QEwIh6GZuSekBVZadQ5cwL.1

Meeting ID: 634 2303 4081

Passcode: 046167

UNIVERSITY OF TORONTO | Interdepartmental Division of Critical Care Medicine

IDCCM Joint Visiting Professor/Kavanagh Physiology Rounds

Tuesday November 4th, 2025

4:00 pm - 5:00 pm

Theme: Applied Respiratory Physiology

Personalized Right Ventricular Hemodynamics in Patients with ARDS

Douglas Slobod, MD

Intensivist, Critical Care Medicine Program, McGill University Health Centre

Assistant Professor (Clinical), Department of Medicine, McGill University

Investigator, Translational Research in Respiratory Diseases Program, McGill University Health Centre Research Institute

Objectives:

1. Differentiate between the different right ventricular injury subtypes encountered in patients with ARDS
2. Develop strategies to provide right ventricle–protective mechanical ventilation in patients with ARDS
3. Describe therapeutic interventions that can lower right ventricular afterload in patients with ARDS

Chair: John Granton

How to join:

In person Location:

585 University Ave., 9 MaRS, Room 9006

Toronto, ON M5G 2N2

Virtual option:

Join Zoom Meeting

https://ca01web.zoom.us/j/64331657382?pwd=XkkIqxi3LZL9sSYvaZVobeyN9y2FOD.1

Meeting ID: 643 3165 7382

Passcode: 724429

UNIVERSITY OF TORONTO | SickKids | St. Michael's Inspired Care. Inspiring Science. | MOUNT SINAI HOSPITAL Joseph and Wolf Lebovic Health Complex | UHN Toronto General Toronto Western Princess Margaret Toronto Rehab | Sunnybrook HEALTH SCIENCES CENTRE

IDCCM Kavanagh Physiology Rounds

Tuesday December 9, 2025

4:00 pm - 5:00 pm

Theme: Applied Respiratory Physiology

Computational modeling for protective ventilation in ARDS

Prof. Wolfgang A. Wall
Founding Director
Institute for Computational Mechanics &
Center for Computational Biomedical Engineering
Technical University of Munich (TUM)

Objectives:

1. Learn about the potential of a novel (physics-based, data-enhanced, predictive, adaptive, individual) computational respiratory modelling approach
2. Learn the insights of the computational modelling approach for scientists and clinicians
3. Review the current state of a digital twin lung model

Chair: Dr. Laurent Brochard

How to join:

In person Location:

Keenan Research Centre/LiKaShing
2nd floor, room # 216
209 Victoria Street, Toronto, ON M5B 1T8
(LKS entrance -No badge required to access)

Virtual option:

Join Zoom Meeting:
https://ca01web.zoom.us/j/66149203661?pwd=LaqSbC7cnB4KQWarzes1eIp4jjeqWd.1
Meeting ID: 661 4920 3661
Passcode: 800740