

2,3,4 JUNE 2020 | Sheraton Centre  
Toronto

# MECHANICAL VENTILATION COURSE 2020

FROM **PHYSIOLOGY** TO **CLINICAL PRACTICE**



PRESENTED BY:  
The Interdepartmental Division of Critical Care Medicine, University of Toronto



UNIVERSITY OF  
**TORONTO** | Interdepartmental Division of  
Critical Care Medicine



St. Michael's  
Inspired Care.  
Inspiring Science.



## Monday, June 27, 2016

09:00 - 09:45	<b>Equation of motion: pressures, volumes and flow</b> <b>Laurent Brochard</b>
09:55 - 10:25	<b>Mechanical ventilation and the respiratory muscles</b> <b>Ewan Goligher</b>
10:25 - 10:45	<b>BREAK</b>
10:45 - 11:15	<b>Spontaneous breathing under mechanical ventilation</b> <b>Brian Kavanagh</b>
11:20 - 11:50	<b>Ventilator waveforms and patient-ventilator synchrony</b> <b>Laurent Brochard</b>
11:50 - 13:00	<b>LUNCH BREAK</b>
13:00 - 13:25	<b>PEEP and lung recruitment</b> <b>Ewan Goligher</b>
13:30 - 14:00	<b>Main modes of ventilation and ventilator settings</b> <b>Niall Ferguson</b>
14:05 - 14:30	<b>Heart-lung interactions</b> <b>John Granton</b>

**14:35 - 15:00**                    **Ventilation and the brain**  
**Jeffrey Singh**

**15:05 - 15:35**                    **Ventilator-induced lung injury**  
**Arthur Slutsky**

**15:35 - 15:50**                    **BREAK**

**15:50 - 16:15**                    **Gas exchange in clinical practice**  
**Lorenzo Del Sorbo**

**16:20 - 17:00**                    **Interactive session on simulator: respiratory mechanics during volume and pressure ventilation**  
**Laurent Brochard**

**17:00 - 18:00**                    **Welcome Reception**

**Tuesday, June 28, 2016**

**08:30 - 09:00**                    **Determinants of inspiratory effort under mechanical ventilation**  
**Laurent Brochard**

**09:05 - 09:25**                    **Proportional assist ventilation**  
**Laurent Brochard**

**09:30 - 10:00**                    **Neurally adjusted ventilatory assist**  
**Jennifer Beck, Keenan Research Centre, St. Michael's Hospital**

**10:05 - 10:30**                    **Extubation vs tracheotomy**  
**Damon Scales**

**10:30 - 10:45**                    **BREAK**

**10:45 - 11:10**                    **Testing the ability to be separated from mechanical ventilation**  
**Laurent Brochard**

**11:15 - 11:35**                    **Difficult weaning: mechanisms and assessment**  
**Ewan Goligher**

**11:40 - 12:05**                    **Long-term mechanical ventilation**  
**Louise Rose**

**12:05 - 13:00**                    **LUNCH BREAK**

**13:00 - 13:30**                    **Noninvasive ventilation technique and indications (including high flow)**  
**Laurent Brochard**

**13:35 - 13:55**                    **Humidification, aerosols**  
**Laurent Brochard**

**14:00 - 14:25**                    **Sedation for Mechanical Ventilation**  
**Sangeeta Mehta**

**14:30 - 17:00**                    **Monitoring (I): Mechanics, lung recruitment**  
**Lu Chen**

**14:30 - 17:00**                    **Monitoring (II): Bedside ultrasound**

<b>14:30 - 17:00</b>	<b>Alberto Goffi</b> <b>Monitoring (III): Esophageal pressure, EAdi, EIT</b> <b>Ewan Goligher</b>
<b>14:30 - 17:00</b>	<b>Monitoring (IV): Patient-ventilator synchrony</b> <b>Laurent Brochard</b>
<b>Wednesday, June 29, 2016</b>	
<b>08:30 - 09:00</b>	<b>ARDS: Berlin definition and clinical trials</b> <b>Niall Ferguson</b>
<b>09:05 - 09:30</b>	<b>ARDS: recommendations for mechanical ventilation</b> <b>Dr. John Laffey, St. Michael's Hospital</b>
<b>09:35 - 10:00</b>	<b>ARDS: from stiff lungs to baby lung, stress and strain</b> <b>Laurent Brochard</b>
<b>10:05 - 10:30</b>	<b>ARDS: role for extracorporeal techniques</b> <b>Niall Ferguson</b>
<b>10:35 - 11:00</b>	<b>Long-term outcomes after mechanical ventilation</b> <b>Margaret Herridge</b>
<b>11:00 - 11:15</b>	<b>BREAK</b>
<b>11:15 - 13:15</b>	<b>Interactive case presentation: ARDS</b> <b>Niall Ferguson</b>
<b>11:15 - 13:15</b>	<b>Interactive case presentation: COPD</b> <b>Laurent Brochard</b>
<b>11:15 - 13:15</b>	<b>Interactive case presentation: difficult weaning</b> <b>Ewan Goligher</b>
<b>14:00</b>	<b>END OF COURSE</b>