



INTERNATIONAL UPDATE

26th Postgraduate Refresher Course
Cardiovascular and Respiratory Physiology
Applied to Intensive Care Medicine

Brussels, December 3-5, 2024



26th Postgraduate Refresher Course Cardiovascular and Respiratory Physiology Applied to Intensive Care Medicine Brussels, December 3-5, 2024

Tuesday, December 3, 2024

08:30	Introduction
08:35	Basic respiratory mechanics and the equation of motion Laurent Brochard (Toronto, Canada)
09:05	Gas exchange Luigi Camporota (London, UK)
09:35	Physiological aspects of the different modes of ventilation Laurent Brochard (Toronto, Canada)
10:05	Discussion
10:20	Break
10:40	Mechanical power and ventilation-induced lung injury Luigi Camporota (London, UK)
11:10	Optimal PEEP Laurent Brochard (Toronto, Canada)
11:40	Extrapulmonary effects of PEEP Luigi Camporota (London, UK)
12:10	Discussion
12:25	Lunch
13:20	Right ventricular function Michael R Pinsky (Pittsburgh, USA)
13:50	Patient-ventilator interactions Laurent Brochard (Toronto, Canada)
14:20	Oxygen delivery and consumption Jean-Louis Vincent (Brussels, Belgium)
14:50	Discussion
15:05	Break



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Workshops

15:30	Hypoxemia Jean-Louis Vincent (Brussels, Belgium)
15:50	Approach to a patient in respiratory distress Luigi Camporota (London, UK)
16:10	Assessing respiratory efforts Laurent Brochard (Toronto, Canada) & Luigi Camporota (London, UK)
16:30	Setting PEEP Laurent Brochard (Toronto, Canada) & Luigi Camporota (London, UK)
17:00	Discussion
17:30	End of the day

Wednesday, December 4, 2024

08:30	The physiologic effects of prone positioning Luigi Camporota (London, UK)
09:00	Venous return Xavier Monnet (Le Kremlin-Bicêtre, France)
09:30	Ventricular pump function: P/V loops & energetics Michael R Pinsky (Pittsburgh, USA)
10:00	Discussion
10:10	Break
10:40	The determinants of cardiac output Jean-Louis Vincent (Brussels, Belgium)
11:10	Heart-lung interactions Michael R Pinsky (Pittsburgh, USA)
11:40	Fluid responsiveness Xavier Monnet (Le Kremlin-Bicêtre, France)
12:10	Discussion
12:25	Lunch



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13:20	Circulatory shock Jean-Louis Vincent (Brussels, Belgium)
13:50	Systemic blood pressure: ventriculo-arterial coupling Michael R Pinsky (Pittsburgh, USA)
14:20	Tissue perfusion and oxygenation Daniel De Backer (Braine l'Alleud, Belgium)
14:50	Discussion
15:00	How VV ECMO works Luigi Camporota (London, UK)
15:25	Disturbed physiology during ECMO Daniel De Backer (Braine l'Alleud, Belgium)
15:50	Discussion
16:00	Break

Workshops

16:25	A hypotensive patient with ARDS Laurent Brochard (Toronto, Canada) & Luigi Camporota (London, UK)
16:45	Fluid responsiveness Daniel De Backer (Braine l'Alleud, Belgium) & Xavier Monnet (Le Kremlin-Bicêtre, France)
17:05	Vasoplegia Michael R Pinsky (Pittsburgh, USA) & Xavier Monnet (Le Kremlin-Bicêtre, France)
17:25	Discussion
17:45	End of the day



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Thursday, December 5, 2024

08:30	Blood transfusions Fabio S Taccone (Brussels, Belgium)
09:00	The effects of a fluid bolus Xavier Monnet (Le Kremlin-Bicêtre, France)
09:30	The pros and cons of fluid balance reduction Daniel De Backer (Braine l'Alleud, Belgium)
10:00	Discussion
10:10	Break
10:40	Methods to estimate cardiac output Xavier Monnet (Le Kremlin-Bicêtre, France)
11:10	Blood flow distribution Michael R Pinsky (Pittsburgh, USA)
11:40	Cerebral hemodynamics Fabio S Taccone (Brussels, Belgium)
12:10	Discussion
12:30	Lunch
13:30	How to manipulate the peripheral circulation Daniel De Backer (Braine l'Alleud, Belgium)
14:00	Adrenergic agents Jean-Louis Vincent (Brussels, Belgium)
14:30	Non-adrenergic vasopressors Filippo Annoni (Brussels, Belgium)
	<u>Workshop</u>
15:00	A patient in circulatory shock Jean-Louis Vincent (Brussels, Belgium), Xavier Monnet (Le Kremlin-Bicêtre, France), Daniel De Backer (Braine l'Alleud, Belgium) & Micheal R Pinsky (Pittsburgh, USA)
15:30	Remaining questions
16:00	End of the meeting