



# Mechanical Ventilation – State of the Art 2017

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Course directors: JD Chiche, D Chiumello & C Guérin

Dates: November 28-30, 2017

Location: ESICM Brussels Training Centre

**Mechanical ventilation – State of the Art Part I: Modules 1 & 2**

**Mechanical ventilation – State of the Art Part II: Modules 3, 4 & 5**

## Day 1 (November 28, 2017)

### Module 1 - Respiratory physiology: What you really need to know

13.30-14.00: Welcome & registration

14.00-14.30: Gas exchange

14.30-15.00: Basic lung mechanics

15.00-15.45: Transpulmonary pressure measurement

15.45-16.15: Coffee break

16.15-17.00: Advanced lung mechanics: COPD, ARDS & Obesity

17.00-18.00: Lung imaging

18.00-18.30: Not sure I understand... may I ask you?

*D Gommers*

*D Chiumello*

*C Guérin*

*L Heunks*

*D Chiumello*

*D Chiumello, L Heunks, C Guérin*

## Day 2 (November 29, 2017)

### Module 2 - From respiratory physiology to mechanical ventilation

08.00-10.00: Respiratory physiology Workshop - Small group rotations - 30 min/station

- Pressure-volume curves

- Understanding respiratory monitoring

- Transpulmonary pressures

- Lung imaging

*B Cupic*

*A Mercat*

*D Chiumello*

*C Guérin*

10.00-10.30: Coffee break

10.30-11.10: Patient-ventilator asynchrony

11.10-11.50: Diaphragmatic function: How to explore & preserve?

11.50-12.30: Ventilator-induced lung injury

12.30-13.00: Mechanical Power for dummies

*A Mercat*

*L Heunks*

*D Gommers*

*A Mercat*

13.00-14.00: Lunch & registration

## Day 2 (November 29, 2017)

### Module 3 - Mechanical ventilation for ARDS

14.00-14.30: Setting PEEP in ARDS patients  
14.30-15.00: Assisted-breathing in ARDS: pro & cons  
15.00-16.00: Clinical case based discussion

*A Mercat  
D Gommers  
JD Chiche*

16.00-16.30: Coffee break

16.30-17.30: Prone position: Why and how?  
17.30-18.30: Extracorporeal support & adjunctive therapies

*C Guérin  
JD Chiche*

*Optional – Meet and greet the Faculty – Dinner downtown*

## Day 3 (November 30, 2017)

### Module 4 - Delivering mechanical ventilation

08.00-08.45: Non-invasive ventilation & High flow nasal canula  
08.45-10.45: Mechanical Ventilation Workshop - Small group rotations – 30 min/station  
- PEEP selection strategies & driving pressure optimisation  
- Prone position  
- From auto-modes to closed loop ventilation  
- Non-invasive ventilation & High flow therapy

*JD Chiche  
D Gommers  
C Guérin  
JD Chiche  
D Chiumello*

10.45-11.00: Coffee break

11.00-11.30: Ventilatory modes: what's new?  
11.30-12.15: Mechanical ventilation for COPD & asthma  
12.15-13.00: Clinical case based discussion

*JD Chiche  
C Guérin  
JD Chiche*

13.00-13.45: Lunch

## Day 3 (November 30, 2017)

### Module 5 - Caring for the ventilated patient

13.45-14.15: Weaning from mechanical ventilation  
14.15-14.45: Tracheostomy: Why and how?  
14.45-15.15: Haemodynamics & mechanical ventilation

*L Heunks  
D Chiumello  
JD Chiche*

15.15-15.30: Coffee break

15.30-16.30: Round table - 60 min  
- Just Ask Me Anything – JAMA session *L Heunks, D Chiumello, C Guérin, D Gommers & JD Chiche*

16.30-16.45: Course conclusion