



Educational Program

ESPNIC Winter School Champéry, Switzerland, 11.03.-13.03.2019

Respiratory and Cardiac Failure in the Paediatric and Neonatal ICU: Assessment, Decision Making and Treatment Strategies

(a postgraduate course with interactive hands-on sessions)

MONDAY, MARCH 11TH 2019 (afternoon session)

14:00-14:05 Welcome and Introduction (*Peter Rimensberger, Switzerland*)

ECMO for cardiac and respiratory failure (*Heidi Dalton, USA ; Malaika Mendonca, Switzerland*)

14:05-14:30 Physiology of VA and VV ECMO

14:30-14:45 When to pick VA or VV

14:45-15:15 How to initiate and what to pay attention to

15:15-16:00 Interactive decision making of "is this patient a candidate" and data

16:00-17:00 Patient management pearls

17:00-17:30 Outcomes of patients

17:30-17:45 *Break*

17:45-18:15 Cardiac physiology and ECMO

18:15-18:30 Cannulation strategies in cardiac patients

18:30-19:00 What to pay attention to and why!

19:00-19:30 Interactive case scenarios (management and weaning pearls included)



TUESDAY, MARCH 12TH 2019 (morning session)

ECMO Simulation (*Heidi Dalton, USA ; Aparna Hoskote, UK ; Malaika Mendonca, Switzerland*)

07:30-09:30 Respiratory based case scenarios to include:
Initiation of VA ECMO, Initiation of VV ECMO
Common troubleshooting (hypovolemia, bleeding, hypoxemia, pump failure)

09:30-09:45 *Break*

09:45-11:45 Troubleshooting continued (case based cardiac; bleeding, LV distention, assessment of recovery and weaning)

11:45-16:30 *Lunch break (and time for winter sports)*

TUESDAY, MARCH 12TH 2019 (afternoon session)

Mechanical Ventilation and Cardiopulmonary Interactions (*Peter Rimensberger, Switzerland*)

16:30-17:15 Mechanical ventilation in hypoxic respiratory failure / PARDS / patients on ECMO

17:15-17:30 *Break*

17:30-18:15 Cardiopulmonary interactions in lung and cardiac pathologies

18:15-19:15 Treatment approaches to PPHN / PHT, including CDH



WEDNESDAY, MARCH 13TH 2019 (morning session)

Heart failure and Arrhythmias in the PICU/NICU (*Aparna Hoskote, UK*)

- 07:30-07:50 The spectrum of heart failure in neonates, infants and children
- 07:50-08:20 Recognition of acute heart failure – is it myocarditis?
- 08:20-08:50 Management of a deteriorating child with new onset cardiac failure in the ICU:
“the what to do’s & not to do’s”
- 08:50-09:30 When to consider VAD implantation? Key aspects of ICU management of VADs -
anticoagulation, complications and outcomes.

09:30-09:45 *Break*

- 09:45-10:00 Common arrhythmias in ICU
- 10:00-10:45 Fast rhythms
- 10:45-11:15 Slow rhythms
- 11:15-11:45 Temporary Pacemaker in the post-operative period