

# European School of Neonatology (ESN) Pre-congress Course at jENS 2023

Tuesday, 19 September 2023, 09:00 - 17:00 CEST

## **ESPR Section Name:**

Pulmonology

**Course chair(s):** Bernard Barzilay

Main theme: Mechanical ventilation

ECTS points: 0.5

**Course description:** Neonatal Mechanical Ventilation – Theoretcal and Practical Course

#### **Course objectives:**

- Get an understanding of lung physiology.
- Learn about various modes of conventional mechanical ventilation advantages and disadvantages.
- Learn about High-Frequency Ventilation.
- Get a sense of graphs and loops associated with mechanical ventilation and its clinical implications.
- Learn about trigger possibilities, including NAVA.
- Gain experience in applying the theory of mechanical ventilation into clinical practice.

#### Course programme:

Time			
Start	End	Торіс	Speaker
Theoret	cal Part		
09.00	09.10	Introduction	Bernard Barzilay
09.10	09.40	Physiology of the Lung	Bernard Barzilay
09.40	10.10	Lung Injury and Protection Strategy	Olivier Danhaive
10.10	10.55	Modes of Conventional Ventilation- SIMV, PTV (AC), PSV including	Tomasz Szczapa
11.10	11.40	Volume Guarantee High Frequency Ventilation	Anton van Kaam
11.40	12.10	Graphs and Loops	Theodore Dassios
12.10	12.35	Trigger Possibilities	Andreas Flemmer
12.35	12.55	NAVA	Hans Fuchs
Practica	Part		
13.30	16.30	3 Rotations in small groups (60 min. for each station)	
		1. Conventional ventilation: this includes VTV, loops/graphics, including cases	Tomasz Szczapa, Theodore Dassios
		2. HFV: how to set and how to recruit, including cases	Anton van Kaam, Hans Fuchs
		3. Practical station:	



		<ul> <li>a) Surfactant: the way of administration (Like InSuRe, LISA, MIST)</li> <li>b) NAVA- How to set and adjust</li> </ul>	Bernard Barzilay Olivier Danhaive, Andreas Flemmer
16.30	17.00	Closing Remarks	Faculty

### Faculty:

Name	Position, University	Country
Bernard	Head of Neonatology	Israel
Barzilay	Mayanei Hayeshua Medical Center	
	Chair of the Academy of Neonatology	
Olivier	Head of Neonatology	Belgium
Danhaive	Professor of Pediatrics	
	Catholic University Louvain	
Tomasz Szczapa	Associate Professor at PUMS	Poland
	Board Members European School of Neonatology (ESN)	
	Head - II Department of Neonatology	
	Head - Neonatal Biophysical Monitoring and Cardiopulmonary	
	Therapies Research Unit	
	Chair of Neonatology	
	Poznan University of Medical Sciences	
	Vice president - Polish Neonatal Society	
Anton van	Professor of neonatology	The Netherlands
Kaam	chief of the neonatal intensive care units at the Emma Children's	
	Hospital in the Amsterdam University Medical Centers in	
	Amsterdam, The Netherlands.	
Theodore	Reader in Neonatology, School of Life Course Sciences, King's	UK
Dassios	College London,	
	Consultant Neonatologist, King's College Hospital NHS Foundation	
	Trust,	
	Neonatal Unit, Golden Jubilee Wing, King's College Hospital,	
	Denmark Hill, SE5 9RS, London, UK	
Andreas	Head of Neonatology	Germany
Flemmer	Dr. v. Haunersches Kinderspital & Perinatal Center	
	Campus Grosshadern / City Center	
	LMU Medical Center, Munich University	
	Marchioninistrasse 15, 81377 Munich	
	Germany	
Hans Fuchs	University Hospital Freiburg	Germany
	Center for Pediatrics	
	Section of Neonatology and Pediatric Intensive Care	
	Freiburg, Germany	