



Mechanical Ventilation

August 23-25, 2023

**All times listed CENTRAL time zone.*

Wednesday, August 23, 2023

Pre-Course Workshop

7:00 a.m.	Registration and Continental Breakfast
8:00 a.m.	Respiratory Physiology and Pulmonary Mechanics
8:45 a.m.	Ventilator Modes
9:30 a.m.	Break / Refreshments
10:00 a.m.	Intro to Ventilator Waveforms
10:45 a.m.	Basic Mechanical Ventilation Strategies – How to Manage and Troubleshoot
11:30 a.m.	Lunch

Wednesday, August 23, 2023

11:30 a.m.	Registration and Lunch
12:15 p.m.	Welcome, Announcements, and Conference Overview
Lectures: Basic Physiologic Principles – Introduction to Mechanical Ventilation and ARDS	
12:30 p.m.	A Short History of Mechanical Ventilation
1:00 p.m.	Basic Modes of Ventilation: Pressure vs. Flow Regulation
1:30 p.m.	ARDS: Redefine? Time to Abandon? Are We Asking the Right Questions?
2:00 p.m.	What Have We Learned From Animal Models of VILI?
2:30 p.m.	Break and Exhibits
3:00 – 4:30 p.m. Breakout Sessions: Intensive Tutorials, Case Discussions, Introductory Workshops	

Select ONE of these sessions (90 minutes):

Intensive Tutorials (90 minutes):

1. Lung Protective Mechanical Ventilation: The role of PEEP today-Pros & Cons
2. Advanced Options and Non-standard Modes: Does the mode make a difference?
3. The Golden Hour of Mechanical Ventilation: Transitioning Respiratory Care from the Emergency Department to the ICU
4. “Catch The Wave” – Wave Form Analysis and Patient-Ventilator Dyssynchrony

Or select TWO of the following, 45 minutes each

Case Discussions (45 minutes):

5. A Systematic Approach to Refractory Hypoxemia – the Mayo Model
6. Inability to Ventilate – Airway Obstruction and High Airway Pressures
7. Taking ownership of invasive and noninvasive ventilation devices –How to Manage and Troubleshoot

Introductory Workshops (45 minutes):

8. The ABC's of Prone Positioning: When, Why and How
9. Ventilation Adjuncts – Tubes, Aerosols and Clearance
10. Lung Recruitment and Setting PEEP: Is My Patient's Lung Recrutable?

4:30 p.m.	Get to Know the Experts – Q&A Session
5:00 p.m.	Reception

Thursday, August 24, 2023

7:00 a.m.	Continental Breakfast
Lectures: Advanced Mechanical Ventilatory Support and Cardiopulmonary Interactions	
8:00 a.m.	Cardiopulmonary Interactions During Mechanical Ventilation.
8:30 a.m.	Practical Approach to Mechanical Ventilation during ECMO –Why and How?
9:00 a.m.	Cardiopulmonary interactions during ECMO –Thoughtful vasopressor use
9:30 a.m.	Adults with Congenital Heart Disease: Complex Cardiopulmonary Interactions in Respiratory Care.
10:00 a.m.	Break and Exhibits
10:30 – 12:00 p.m. Breakout Sessions: Intensive Tutorials, Case Discussions, Introductory Workshops	
<i>Select ONE of these sessions (90 minutes):</i> Intensive Tutorials (90 minutes): 1. Mechanical Ventilation Guided by Esophageal Pressure 2. Monitoring Diaphragmatic Activity and Respiratory Efforts 3. Mobilizing the Mechanically Ventilated Patient on ECMO 4. Airway Management and Ventilatory Support in Pediatrics	
<i>Or select TWO of the following, 45 minutes each</i>	
Case Discussions (45 minutes): 5. Managing the obese patient: Obesity and Other Disorders of the Chest Wall 6. Integration of Pulmonary Mechanics –Transpulmonary and Airway Driving Pressure 7. Ventilator Use at Home Introductory Workshops (45 minutes): 8. Controlled Vs. Spontaneous Ventilation in ARDS: When and How? 9. Lungs in a Box: Ex vivo lung perfusion (EVLV) for lung transplantation 10. “Catch the Wave” – Wave Form Analysis and Patient-Ventilator Dyssynchrony	
12:00 p.m.	Lunch
Lectures: Monitoring During Mechanical Ventilation	
1:00 p.m.	Monitoring of Pulmonary Mechanics During Invasive and Noninvasive Ventilatory Support
1:30 p.m.	How Do I Monitor Respiratory Effort to Avoid Patient Self-Inflicted Lung Injury (PSILI)?
2:00 p.m.	Driving Pressure: Defining the Range and Clinical Implications
2:30 p.m.	Which component of mechanical power is most important in causing VILI?
3:00 p.m.	Break and Exhibits

3:30 – 5:00 p.m.	
Breakout Sessions: Intensive Tutorials, Case Discussions, Introductory Workshops	
<i>Select ONE of these sessions (90 minutes):</i> Intensive Tutorials (90 minutes): 1. How to optimize Mechanical Power to avoid VILI: A practical workshop 2. Extra-Corporeal Life Support –Indications, Initial Evaluation and Implementation 3. The Golden Hour of Mechanical Ventilation: Transitioning Respiratory Care from the Emergency Department to the ICU 4. Refractory Hypoxemia –A Systematic Approach	
Or select TWO of the following, 45 minutes each	
Case Discussions (45 minutes): 5. Taking ownership of invasive and noninvasive ventilation devices – How to Manage and Troubleshoot 6. Managing the obese patient: Obesity and Other Disorders of the Chest Wall 7. Non-Invasive Ventilatory Support in ARDS Introductory Workshops (45 minutes): 8. The ABC's of Prone Positioning: When, Why and How 9. Bedside Assessment of Auto-PEEP, and Lung Stress and Strain – What should we monitor in the ventilated patient and when? 10. Setting PEEP and Bedside Assessment of Lung Recruitability	
5:00 p.m.	Get to Know the Experts – Q&A
5:30 p.m.	Adjourn

Friday, August 25, 2023

7:00 a.m.	Continental Breakfast
Lectures: Ventilation	
8:00 a.m.	Ethical Considerations in Mechanical Ventilation: Allocation, Long-term Use, and Withdrawal
8:30 a.m.	Liberation from Mechanical Ventilation
9:00 a.m.	HFNC and NIV in Hypoxemic-Hypercapnic Respiratory Failure: Optimizing NIV Settings
9:30 a.m.	Long-Term Mechanical Ventilation
10:00 a.m.	Break and Exhibits
10:30 – 12:00 p.m. Breakout Sessions: Intensive Tutorials, Case Discussions, Introductory Workshops	
<i>Select ONE of these sessions (90 minutes):</i> Intensive Tutorials (90 minutes): 1. How to optimize Mechanical Power to avoid VILI: A practical workshop 2. Mechanical Ventilation in Asthma and COPD 3. Extra-Corporeal Life Support – Indications, Initial Evaluation and Implementation 4. Mechanical Ventilation Guided by Esophageal Pressure	
<i>Or select TWO of the following, 45 minutes each</i>	
Case Discussions (45 minutes): 5. Integration of Pulmonary Mechanics –Transpulmonary and Airway Driving Pressures 6. Non-Invasive Ventilatory Support in ARDS 11. Taking ownership of invasive and noninvasive ventilation devices – How to Manage and Troubleshoot Introductory Workshops (45 minutes): 7. Controlled Vs. Spontaneous Ventilation in ARDS: When and How? 8. Lungs in a Box: Ex vivo lung perfusion (EVLP) for Lung Transplantation 9. Setting PEEP and Bedside Assessment of Lung Recruitability	
12:00 p.m.	Lunch (Shorter Brake - 30 min)
Master Class Series: Advances in Respiratory Failure Management	
12:30 p.m.	Advanced Mechanical Ventilation Monitoring: Regional Ventilation and Diaphragmatic Function
1:00 p.m.	Mechanical Ventilation in 2023: What's New? And What's Really Important?
1:30 p.m.	Mechanical Ventilation in Pediatric and Neonatal Patients: Little Lungs, Little Differences?
2:00 p.m.	Mechanical Ventilation in the Operative Room
2:30 p.m.	Break and Exhibits

3:00 p.m.	Positioning and the Compromised Respiratory System – Who Gets to be Proned and How Often?
3:30 p.m.	<i>Pros & Cons Debate:</i> Airway Pressure Release Ventilation (APRV) in ARDS
4:00 p.m.	What is Lung Protection in 2023?
4:30 p.m.	Get to Know the Experts – Q&A
5:00 p.m.	Adjourn