

November 12-14, 2025 HSC Conference Center USC Health Sciences Campus Live Conference Fundamentals of Mechanical Ventilation for Practicing Intensivists and Advanced Practice Providers

Keck School of Medicine of USC

Presented by: Division of Pulmonary, Critical Care, and Sleep Medicine USC Office of Continuing Medical Education





PROGRAM AGENDA

Wednesda	ay, November 12, 2025	т
7:00 am	Registration	11
8:00 am	Introduction and Pre-Test	
	Burton W. Lee, MD	
8:20 am	Ohm's Law, Equation of Motion and	
	Alveolar Pressure	
	Burton W. Lee, MD	
9:40 am	Break	
9:50 am	Natural Decay Equation, Time	12
	Constant and Autopeep	1:
	Nitin Seam, MD	
11:10 am	Break	2:
11:20 am	Test Lung Praxis I-PIP and P _{PLAT}	2:
	Souvik Chatterjee, MD and	
	Burton W. Lee, MD	4:
	MV Clinical Simulation I	4:
	Nitin Seam, MD and Eric Kriner, RRT	
12:35 pm	Lunch	
1:20 pm	Normal I- Passive Expiration and	5:
	Putting the Equations Together	
	Burton W. Lee, MD	F
3:00 pm	Break	7:
3:10 pm	Normal II- Pressure Control Breaths	8:
	Souvik Chatterjee, MD	
4:10 pm	Break	9:
4:20 pm	Test Lung Praxis II-	9:
	Tau and Autopeep	
	Souvik Chatterjee, MD and	
	Nitin Seam, MD	
	MV Clinical Simulation II	
	Kavitha Bagavathy, MD and	
	Eric Kriner, RRT	10
5:30 pm	Adjourn	11
Thursday	November 13, 2025	
7:30 am	Registration	
8:00 am	Normal III-Volume Control Breaths:	12
0.00 am	Square Wave and Decelerating	12
	Breaths	
	Souvik Chatterjee, MD	
9:45 am	Break	
9:55 am	Normal V- Volume Targeted Breaths	
oroo uni	Nitin Seam, MD	
10:55 am	Break	

Thursday,	November 13, 2025
11:05 am	Test Lung Praxis III-
	Normal Waveforms
	Souvik Chatterjee, MD and
	Nitin Seam, MD
	MV Clinical Simulation III
	Kavitha Bagavathy, MD and
	Eric Kriner, RRT
12:35 pm	Lunch
1:20 pm	Asynchronies of Initiating the Breat
	Nitin Seam, MD
2:20 pm	Break
2:30 pm	Asynchronies of Flow
	Eric Kriner, RRT
4:20 pm	Break
4:30 pm	Asynchronies of Terminating the
	Breath
	Eric Kriner, RRT
5:30 pm	Adjourn
Friday, No	ovember 14, 2025
7:30 am	Registration
8:00 am	Asynchronies During Expiration
	Eric Kriner, RRT
9:10 am	Break
9:20 am	Test Lung Praxis IV -
	Waveform Analysis
	Souvik Chatterjee, MD and
	Nitin Seam, MD
	MV Clinical Simulation IV
	Kavitha Bagavathy, MD and
	Eric Kriner, RRT
10:50 am	Break
11:00 am	Lung Protective Ventilation
	Strategies-Beyond 6 ml/kg
	Burton W. Lee, MD
12:15 pm	Adjourn and Post-Test

FACULTY

Course Director

Kavitha Bagavathy, MD

Clinical Assistant Professor of Medicine Clinician Educator Associate Director - Respiratory Therapy Division of Pulmonary, Critical Care and Sleep Medicine Department of Medicine Keck School of Medicine of USC Los Angeles, CA

Guest Faculty

Souvik Chatterjee, MD

Assistant Professor of Medicine Medical Director, Critical Care Medical Services JHBMC Medical Director, Hopkins Bayview Medical Intensive Care Unit John Hopkins University School of Medicine Baltimore, MD

Eric Kriner, BS, RRT, FAARC

Pulmonary Critical Care Specialist Medstar Washington Hospital Center Washington, DC

Burton W. Lee, MD

Adjunct Professor of Medicine, University of Pittsburgh School of Medicine President, Global Critical Care Collaborations Pittsburgh, PA

Nitin Seam, MD

Professor of Medicine Vice Chief, Pulmonary, Critical Care and Sleep Medicine Assistant Dean, Innovation and Educational Technologies University of Maryland School of Medicine Baltimore, MD

HOTEL INFORMATION

The Hyatt House LA-University Medical Center is located steps away from the entire USC Health Sciences Campus. USC guests are eligible for a discount off the hotel's best available rate. To reserve a room at USC's discounted rate, please visit the following link or QR code. https://www.hyatthouselauniversitymedicalcenter.com



_The Hyatt House LA-University Medical Center is located at: 2200 Trojan Way, Los Angeles, CA 90033

For questions about the hotel, call (323) 909-1155.

COURSE DESCRIPTION

The Fundamentals of Mechanical Ventilation for Practicing Intensivists course will be an in-person, two-and-a-half-day-course. The curriculum is founded in pulmonary physiology as it applies to mechanical ventilation including Ohm's Law, the equation of motion, natural decay equation and time constant. The course focuses on understanding normal waveforms and recognition and management of common clinically consequential ventilator asynchronies. The educational content is delivered via a series of peer-reviewed didactics, small group exercises and clinical simulations. This course has been previously delivered to Pulmonary and Critical Care Fellows and has been modified and adapted for an attending knowledge base.

COURSE OBJECTIVES

By the end of the course, participants will be able to:

- Explain and apply Ohm's Law, Equation of Motion, Natural Decay Equation and Time Constant.
- Know and draw normal pressure-time, flow-time, volume-time and pressure-volume curves.
- Recognize asynchronies of triggering, flow, cycling and expiration.
- Explain how lung protective strategy can go wrong in context of some patient-ventilator asynchronies.

TARGET AUDIENCE

This course is intended for ICU attending physicians and ICU advanced practice providers seeking to enhance their knowledge of mechanical ventilation and patient ventilator interactions to make optimal management decisions.

ACCREDITATION STATEMENT

The Keck School of Medicine of the University of Southern California is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

CREDIT DESIGNATION

The Keck School of Medicine of the University of Southern California designates this live activity for a maximum of 20.25 *AMA PRA Category* 1 *Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The following may apply 20.25 AMA PRA Category 1 Credit(s)[™] for license renewal: Registered Nurses may report up to credit hour(s) toward the CME requirements for license renewal by their state Board of Registered Nurses (BRN). CME may be noted on the license renewal application in lieu of a BRN provider number.

Physician Assistants: The National Commission on Certification of Physician Assistants states that AMA PRA Category 1 Credits[™] accredited courses are acceptable CME requirements for recertification.

REGISTRATION

Live Tuition:

Early-bird price for registration ends November 7, 2025 at 12:00 pm, PST. To register after November 7, 2025: Please register on-site on November 12.

Tuition: MD/DO		Early-Bird \$1,400	After Novemb	per 7		
NP/PA/APP		□ \$1,400 □ \$1,400	□ \$1,450 □ \$1,450		國際	
RN/AH		□ \$1,400 □ \$1,400	□ \$1,450		111152597	
Cancellation:	November	ons must be received 7, 2025, 12:00 pm P t of course cancellat	d by the USC Office of T, for a refund. A \$50 c tion by conference orga	cancellation	fee will be ap	-
Location:		rence Center on the n Way, Los Angeles,	USC Health Sciences (CA 90033	Campus		
Parking:	90033. Ple 25023. Entr after parki	ase park in any unn er your license plat	cture (P1): 1630 San Pa narked space on the 4 e details. To avoid citi 1E does not control pa sues or citations.	th floor and ation, pleas	above. Text SF se pay immedi	PST to ately
Register:	Mail:1540 Alcazar Street, CHP 223, Los Angeles, CA 90033 Mail-in registration must be postmarked by November 7, 2025.Online:https://keckusc.cloud-cme.com/vent2025Visa or Mastercard onlyPhone:(323) 442-2555 I Fax: (323) 442-3734 AMEX, Visa or Mastercard usccme@usc.eduOn-site:Live registration: Available Nov. 7, 7:00 am, HSC Conference Center.					
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Office of Continuing Medical Education 1540 Alcazar Street, CHP 223 Los Angeles, CA 90033



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