BREAKOUT SESSIONS (IN-PERSON & VIRTUAL)

	Description	Learning Objectives
TeamSTEPPS: Team Strategies & Tools to Enhance Performance and Patient Safety Session Time: 1:30pm – 3:00pm	Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) is an evidence-based set of teamwork tools designed to optimize team function and improve patient safety. Our session will introduce the key tools and principles - what they are, how to use them, and how they can be used to improve patient outcomes. You will walk away with knowledge regarding the basic application of TeamSTEPPS tools and strategies to improve the delivery of safe and efficient care within your unit, division or department. This course will be taught by two of Houston Methodist's own, Master Trainers.	• **Define TeamSTEPPS.** • **Describe how communication and leadership affect team processes and patient outcomes.** • **Recognize the core TeamSTEPPS tools to improve team communication.** • **Discuss the current evidence for the utilization of TeamSTEPPS to improve patient safety.**
From Idea to Publication: Turning Research Ideas into Published Works Session Time: 3:00pm – 4:30pm	In this workshop we will discuss how to develop a research idea, study design, data collection and sharing and synthesis of the results for a publication. You are urged to bring your own ideas for a research project for discussion by the group.	• **Describe the process of developing a research idea** • **Evaluate various study designs** • **Describe data collection methods** • **Create an outline of study results for a publication**

HANDS ON WORKSHOPS (IN-PERSON)

	Description	Learning Objectives
POCUS Fundamentals: Mastering Ultrasound at the Bedside Session Time: 1:30pm – 4:30 pm	This 3-hour in-person workshop is a basic Point-of-Care Ultrasound workshop that will introduce you to the fundamentals of cardiac ultrasound, lung ultrasound and vascular ultrasound.	• **Develop Basic Cardiac Ultrasound Skills** Obtain standard transthoracic echocardiographic views, identify cardiac chambers, and assess basic cardiac structure and function through a combination of lecture and hands-on practice. • **Perform Lung Ultrasound and DVT Evaluation** Understand the principles of lung ultrasound for identifying pneumothorax, pleural effusions, and interstitial syndromes, and they will perform a focused lower extremity ultrasound for DVT evaluation. • **Apply Ultrasound Protocols for Critical Care Scenarios** Evaluate cardiac output using IVC variability and the distensibility index, perform focused assessments with sonography for trauma (FAST), and integrate POCUS findings into shock assessment and management through protocol-driven case discussions

POCUS Mastery: Advanced Techniques in Critical Care Ultrasound Session Time: 1:30pm – 4:30 pm	This 3-hour in-person workshop will cover advanced topics in Point-of-Care Ultrasound.	• **Apply the BLUE Protocol for Acute Respiratory Failure** Utilize POCUS to systematically evaluate causes of acute respiratory failure, including pneumothorax, pleural effusions, interstitial syndrome, and alveolar consolidations, in critically ill patients. • **Evaluate Right Heart Function in Shock and Acute Pathologies** Assess right heart function in cases of acute pulmonary embolism, pulmonary hypertension, and right heart failure, incorporating IVC and hepatic vein evaluation into their diagnostic approach. • **Perform Advanced Hemodynamic Measurements** Measure cardiac output, stroke volume variation, and dynamic preload responsiveness using advanced ultrasound techniques to guide management of hemodynamic instability. • **Assess Left Ventricular Function and Diastology** Quantify left and right ventricular systolic function, evaluate diastolic function using E/A ratios and E/e measurements, and recognize valvular abnormalities and their implications in critical care settings.
Heart of the Matter: Hemodynamic Case Workshops for Intensive Care Session I Time: 1:30pm – 3:00pm Session II Time: 3:00pm – 4:30pm	This 1.5-hour in-person workshop will introduce you to will learn about advanced hemodynamic insights for individualized patient management. You will learn about noninvasive devices that can assist clinicians when assessing and treating critically ill patients. You will learn how to assess preload, contractility, and afterload as well as fluid management and determine fluid responsiveness. You will also have the opportunity to participate in interactive case-based discussions.	• **Understand the fundamental concepts of hemodynamics in patient management.** • **Explain the principles and applications of non invasive hemodynamic monitoring** • **Describe the assessment of preload, contractility, and afterload in critically ill patients.** • **Explain the role of various monitoring devices in clinical decision-making.** • **Develop skills in fluid management and determination of fluid responsiveness in intensive care settings.** • **Apply the acquired hemodynamic knowledge in Analyzing and managing patient-specific cases.**
Critical Lifelines: ECMO Application in Critical Care Scenarios Session I Time: 1:30pm – 3:00pm Session II Time: 3:00pm – 4:30pm	This 1.5-hour in-person workshop will introduce you to the basics of extracorporeal membrane oxygenation (ECMO), indications, contraindications, daily management, and general trouble shooting/adverse event scenarios.	• **Define ECMO and its indications/contraindications** • **Understand the different types of ECMO support and the components of the circuit** • **Understand the goals of ECMO therapy** • **Discuss general and nursing management of a patient with ECMO** • **Identify the role and responsibilities of an ECMO specialist**

Airway Challenges: Mastering Difficult Intubations and Cricothyroidotomy Session I Time: 1:30pm – 3:00pm Session II Time: 3:00pm – 4:30pm	This hands-on course will familiarize you with airway evaluation (particularly early identification of the potentially difficult airway), an array of airway devices and their indications, and management of the difficult and/or failed airway, including surgical airways. There will be multiple simulation stations for individual devices and techniques.	• **Identify and predict potential difficult airway.** • **Identify the various equipment used for the management of difficult airway.** • **Develop primary and alternative strategies for difficult airway.**
Breathing in Sync: Mastering Patient-Ventilator Asynchrony in Critical Care Session I Time: 1:30pm – 3:00pm Session II Time: 3:00pm – 4:30pm	In this 1.5-hour in-person workshop, you will gain a comprehensive understanding of patient-ventilator asynchrony, a critical issue in mechanical ventilation that can greatly impact patient comfort and recovery. The session will provide both theoretical knowledge and practical insights into how to identify, analyze, and resolve different types of asynchrony, including flow, cycle, and trigger asynchrony.	• **Identify and classify types of patient-ventilator asynchrony** Recognize different types of patient-ventilator asynchrony (e.g., flow asynchrony, cycle asynchrony, trigger asynchrony) and understand the underlying mechanisms. • **Analyze clinical scenarios to detect patient-ventilator asynchrony** Develop the ability to assess case-based clinical scenarios and identify signs of patient-ventilator asynchrony using both patient assessment and ventilator waveforms. • **Interpret ventilator settings and adjust them to resolve asynchrony** Understand how to optimize ventilator settings (e.g., trigger sensitivity, inspiratory flow, pressure vs. volume control) to minimize asynchrony and improve patient comfort and outcomes. • **Evaluate the impact of patient-ventilator asynchrony on patient outcomes** Discuss how unresolved asynchrony can negatively affect patient outcomes, including increasing the work of breathing, prolonged mechanical ventilation, and potential ventilator-induced lung injury.