

**Pneumothorax: "Rule in or rule out"**

Stream: VECCUS

**Descriptor:** Pneumothorax is arguably the toughest point of care ultrasound application when it comes to the pleural space and lung. However, there are several key concepts that make the diagnosis easier when they are properly understood; Does detection of the glide sign always rule out pneumothorax? Is a glide sign always visible when the lung contacts the chest wall? Are the detection of B lines 100% specific to rule out a pneumothorax? Is the lung point the same as a lung pulse? What the heck are abnormal curtain signs?!? Better yet, what is a curtain sign and how does it help us diagnose pneumothorax? Why does Kris insist that playing "Peak a Boo" with his kids or that "playing an accordion" helps him diagnose pneumothorax?!?!? Trust me, you don't want to hear Kris try to play the accordion, but you do want know why it helps him diagnose pneumothorax.

**Focused cardiac ultrasound: "Application in shock"**

Stream: VECCUS

- This session will focus on the basic principles of bedside echocardiography (POCUS) in patients with undifferentiated shock.
- Review of image acquisition and probe positions.
- Basic cardiac phenotypic appearances in different types of shock
- Fluid tolerance
  - The left atrium
  - Extravascular lung water semi-objective measurement (B-lines)
  - The right heart
  - The caudal vena cava

**POCUS around CPR**

Stream: Advanced

**Descriptor:** what can ultrasound tell us? Arguably the faster any causes contributing to an arrest can be identified and reversed, the better the chances of successful CPR. However, the ability to assess patients in the CPR setting is limited to physical exam findings and simple point of care diagnostics. With the rapidly growing availability of mobile and hand held ultrasound units, the use of POCUS during and right after the CPR setting is also rapidly expanding. It can help identify contributing causes of an arrest, and evidence suggests it can determine the presence of cardiac activity and detect arrhythmias without interrupting or having to stop CPR efforts! This lecture will cover the basic application of POCUS in the arrest setting, and, technology permitting (and provided the stars align correctly) will include live cases scanned in real time to demonstrate some of the applications.