**Emergency Imaging**  
_Seeing Soundwaves: Ocular US_  
10/25/2021 | 8:00:00 AM - 8:30:00 AM

While your differential for vision changes may be great, the dilated eye exam is a thing of the past in the ED. Harness the power of soundwaves & put a probe on the eye to discover what might be going on without the help of an ophthalmologist. This session will review the basics of ocular ultrasound & ways to incorporate it into your practice.

- Describe the indications for ocular ultrasound.
- Recognize the most common retinal & vitreous pathology on ocular ultrasound.
- Describe the pearls & pitfalls of ocular ultrasound for approximating ICP in patients.

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**Emergency Imaging**  
_Procedural Ultrasound Lab_  
10/25/2021 | 8:00:00 AM - 10:00:00 AM

The use of ultrasound by emergency physicians to help perform procedures is becoming more frequent. Some of these may soon be considered standard of care & some are useful in selected situations. This procedural lab will provide hands-on experience with practical EM ultrasound applications. (Prior attendance in "Procedural Ultrasound" is required. This lab is limited to 30 participants.)

- Demonstrate ability to perform ultrasound-guided central venous catheter placement.
- Demonstrate ability to localize vertebral interspace for lumbar puncture using ultrasound.
- Perform technique for ultrasound-guided pericardiocentesis.
Emergency Imaging

*Point-of-care Ultrasound in The Management of Pediatric Patients with COVID-19 & MIS-C*

10/25/2021 | 12:30:00 PM - 1:30:00 PM

This didactic will focus on how point-of-care ultrasound (POCUS) can help guide the management of pediatric patients who present to the Emergency Department in the time of COVID-19 and MIS-C. This didactic will discuss the sonographic findings of pathology and disease progression in pediatric patients with COVID-19 and Multi-Inflammatory Syndrome in Children (MIS-C) as well as describe how to integrate POCUS into the emergent care of patients with MIS-C.

- Discuss the sonographic findings of COVID-19 and MIS-C.
- Define how point-of-care ultrasound can assist with the diagnosis and management of pediatric patients with COVID-19 and MIS-C in the emergency department.
- Discuss the evidence surrounding point-of-care ultrasound for each of the indications discussed.

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Emergency Imaging

*Procedural Ultrasound Lab*

10/25/2021 | 12:30:00 PM - 2:30:00 PM

The use of ultrasound by emergency physicians to help perform procedures is becoming more frequent. Some of these may soon be considered standard of care & some are useful in selected situations. This procedural lab will provide hands-on experience with practical EM ultrasound applications. (Prior attendance in "Procedural Ultrasound" is required. This lab is limited to 30 participants.)

- Demonstrate ability to perform ultrasound-guided central venous catheter placement.
- Demonstrate ability to localize vertebral interspace for lumbar puncture using ultrasound.
- Perform technique for ultrasound-guided pericardiocentesis.
Emergency Imaging

*Critical Care Emergency Ultrasound*

10/25/2021 | 3:30:00 PM - 4:30:00 PM

The practicing emergency physician needs to be able to utilize ultrasound effectively in the evaluation of the critically ill patient. The speaker will highlight the use of ultrasound to perform an RUSH exam, discuss the use of FALL and BLUE protocol, how to dynamically monitor & measure the IVC in the setting of hypovolemic shock, & to detect pericardial effusion & perform ultrasound guided pericardiocentesis. (This course is a prerequisite to the "Critical Care Emergency Ultrasound Lab.")

- List the indications for point-of-care ultrasound in the management of the critically ill patient.
- Describe the RUSH technique to evaluate the hypotensive patient
- Demonstrate ability to identify & accurately measure the IVC & apply to management of hypovolemic shock.
- Discuss the use of the BLUE and FALL protocol in lung ultrasound

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Emergency Imaging

*Procedural Ultrasound Lab*

10/25/2021 | 3:30:00 PM - 5:30:00 PM

The use of ultrasound by emergency physicians to help perform procedures is becoming more frequent. Some of these may soon be considered standard of care & some are useful in selected situations. This procedural lab will provide hands-on experience with practical EM ultrasound applications. (Prior attendance in "Procedural Ultrasound" is required. This lab is limited to 30 participants.)

- Demonstrate ability to perform ultrasound-guided central venous catheter placement.
- Demonstrate ability to localize vertebral interspace for lumbar puncture using ultrasound.
- Perform technique for ultrasound-guided pericardiocentesis.
Emergency Imaging
Critical Care Emergency Ultrasound Lab
10/26/2021 | 8:00:00 AM - 10:00:00 AM

The practicing emergency physician needs to be able to utilize ultrasound effectively in the evaluation of the critically ill patient. This hands-on practical lab will highlight the use of ultrasound to perform a EFAST scan, to dynamically monitor & measure the IVC in the setting of hypovolemic shock, & to detect pericardial effusion & perform ultrasound-guided pericardiocentesis. (Prior attendance in "Critical Care Emergency Ultrasound" is required. This lab is limited to 30 participants.)

- Practice performing the indications for point-of-care ultrasound in the management of the critically ill patient.
- Apply techniques to maximize sensitivity & specificity of EFAST scan imaging in difficult patients.
- Demonstrate ability to identify & accurately measure the IVC & apply to management of hypovolemic shock.
- Become familiar with the RUSH exam in patients presenting with shock

Emergency Imaging
Ultrasound-Guided ACLS Resuscitation
10/26/2021 | 10:00:00 AM - 11:00:00 AM

How did your last ACLS resuscitation go? Unclear as to the underlying cause? Was it medication or fluids that was really needed? Not sure when to cease heroic efforts? Ultrasound gives valuable information in guiding resuscitation efforts; we just have to know how to use it during this critical time. Join our speaker & learn proper timing, alternate windows & become a master at US-guided ACLS resuscitation.

- Explain options for timing of ultrasound performance within ongoing ACLS.
- Describe how to achieve modified versions of standard views when critical equipment impedes standard probe positioning.
- Explain how to guide ACLS & treatment pathways using ultrasound findings.
Emergency Imaging

Critical Care Emergency Ultrasound Lab
10/26/2021 | 12:30:00 PM - 2:30:00 PM

The practicing emergency physician needs to be able to utilize ultrasound effectively in the evaluation of the critically ill patient. This hands-on practical lab will highlight the use of ultrasound to perform a EFAST scan, to dynamically monitor & measure the IVC in the setting of hypovolemic shock, & to detect pericardial effusion & perform ultrasound-guided pericardiocentesis. (Prior attendance in "Critical Care Emergency Ultrasound" is required. This lab is limited to 30 participants.)

- Practice performing the indications for point-of-care ultrasound in the management of the critically ill patient.
- Apply techniques to maximize sensitivity & specificity of EFAST scan imaging in difficult patients.
- Demonstrate ability to identify & accurately measure the IVC & apply to management of hypovolemic shock.
- Become familiar with the RUSH exam in patients presenting with shock

Emergency Imaging

Procedural Ultrasound
10/26/2021 | 1:30:00 PM - 2:30:00 PM

The use of ultrasound by emergency physicians to help perform procedures is becoming more frequent. Some of these may soon be considered standard of care & some are useful in selected situations. The speaker will discuss procedural applications for ultrasound that the emergency physician can easily incorporate into daily clinical practice. (This course is a prerequisite to the "Procedural Ultrasound Lab.")

- Demonstrate ability to perform ultrasound-guided central venous catheter placement.
- Demonstrate ability to localize vertebral interspace for lumbar puncture using ultrasound.
- Perform technique for ultrasound-guided pericardiocentesis.
Emergency Imaging

Emergency Ultrasound 101: 10 Things You Need to Know for Your Community ED Gig
10/26/2021 | 3:30:00 PM - 4:30:00 PM

The range of clinical applications that point-of-care ultrasound (POCUS) is being used for is rapidly expanding in the recent years. However, use of POCUS may be limited by time constraints in the busy community emergency department. Ever gone to a lecture & wished they had discussed how POCUS can be efficiently utilized in a busy community ED. Well, here it is - the top 10 POCUS applications for emergency physicians working in a community ED. Attend this lecture to find out the must-learn high-yield POCUS applications that can be rapidly done, impact patient care, & generate reimbursement.

- Describe the top 10 point-of-care ultrasound applications for emergency physicians working in a community ED.
- Incorporate high yield point-of-care ultrasound applications efficiently into busy ED clinical practice.
- Illustrate pearls & pitfalls of high-yield diagnostic point-of-care ultrasound techniques.

Emergency Imaging

Critical Care Emergency Ultrasound Lab
10/26/2021 | 3:30:00 PM - 5:30:00 PM

The practicing emergency physician needs to be able to utilize ultrasound effectively in the evaluation of the critically ill patient. This hands-on practical lab will highlight the use of ultrasound to perform a EFAST scan, to dynamically monitor & measure the IVC in the setting of hypovolemic shock, & to detect pericardial effusion & perform ultrasound-guided pericardiocentesis. (Prior attendance in "Critical Care Emergency Ultrasound" is required. This lab is limited to 30 participants.)

- Practice performing the indications for point-of-care ultrasound in the management of the critically ill patient.
- Apply techniques to maximize sensitivity & specificity of EFAST scan imaging in difficult patients.
- Demonstrate ability to identify & accurately measure the IVC & apply to management of hypovolemic shock.
- Become familiar with the RUSH exam in patients presenting with shock.
Emergency Imaging
The Nerve! Ultrasound Guided Lower Extremity Nerve Blocks
10/26/2021 | 5:00:00 PM - 5:30:00 PM

Regional anesthesia is a useful skill to have in the ED. Although landmarks can be helpful in delivering effective regional anesthesia, ultrasound has become an invaluable tool in providing localized anesthesia with great accuracy and allowing to provide nerve blocks that might not have easily identifiable landmarks. This course will cover the various uses of ultrasound to assist in lower extremity nerve blocks through case presentations.

- Discuss basics of ultrasound use for nerve blocks
- Discuss specific lower extremity nerve blocks which benefit from ultrasound guidance
- Identify troubleshoots with ultrasound guided nerve blocks

Emergency Imaging
Critical Access in the Critically Ill
10/27/2021 | 8:00:00 AM - 10:00:00 AM

Emergency care providers must be experts in rapidly securing venous and arterial access in their critically ill patients. Instructors will guide participants through an streamlined approach to using ultrasound to obtain access of IJ, subclavian and femoral central veins in addition to a dynamic approach to localizing, placing and confirming arterial lines. Experienced instructors will discuss key tips and tricks to success and to avoiding common pitfalls in critically ill patients requiring vascular access.

- Demonstrate and perform ultrasound guided central venous access in internal jugular, subclavian, and femoral veins.
- Localize and perform ultrasound guided arterial line placement in the radial and femoral arteries.
- Perform peripheral IV insertion under direct ultrasound guidance.

Emergency Imaging
Tapping A Joint
10/27/2021 | 9:30:00 AM - 10:00:00 AM

Some of us learned arthrocentesis before the age of ultrasound, others spent their entire residency with probe in hand. Regardless of your background, this session will improve your joint-tapping skills. The speaker will run the gamut of appropriate imaging technique, procedural tips for joints large & small & even discuss interpreting your results. Don’t miss this opportunity to be the EM physician to out-tap your orthopedic colleagues!

- Describe how to diagnose joint effusion on point of care ultrasound.
- Acquire the skills to perform ultrasound guided arthrocentesis of the knee, hip, ankle, elbow, & wrist.
- Interpret & treat synovial fluid laboratory analysis.
Emergency Imaging
*Soundwaves & Soft Tissues*
10/27/2021 | 10:30:00 AM - 11:00:00 AM

Ultrasound can help the provider quickly diagnose and manage common musculoskeletal injuries in the Emergency Department without having to wait for advanced imaging such as a CT or MRI. Focused sonography by the emergency physician also provides a rapid cost-effective evaluation of pathology. The speaker will use a case-based approach to the application of musculoskeletal sonography in the ED

- Describe how to use POCUS for shoulder dislocation including using the interscalene block.
- Discuss how to utilize US to identify abscess and foreign bodies
- Describe how to use POCUS to identify various tendon ruptures

Emergency Imaging
*Critical Access in the Critically Ill*
10/27/2021 | 12:30:00 PM - 2:30:00 PM

Emergency care providers must be experts in rapidly securing venous and arterial access in their critically ill patients. Instructors will guide participants through a streamlined approach to using ultrasound to obtain access of IJ, subclavian and femoral central veins in addition to a dynamic approach to localizing, placing and confirming arterial lines. Experienced instructors will discuss key tips and tricks to success and to avoiding common pitfalls in critically ill patients requiring vascular access.

- Demonstrate and perform ultrasound guided central venous access in internal jugular, subclavian, and femoral veins.
- Localize and perform ultrasound guided arterial line placement in the radial and femoral arteries.
- Perform peripheral IV insertion under direct ultrasound guidance.

Emergency Imaging
*Ten Most Commonly Missed Radiographic Findings in the ED*
10/27/2021 | 1:30:00 PM - 2:30:00 PM

As an emergency physician, you need to know the most commonly missed radiographic findings that can lead to morbidity & malpractice. The speaker will highlight the most commonly missed x-ray & CT findings by emergency physicians. The speaker will also discuss strategies for reading these films so that you don’t miss one of these findings on your next shift.

- Review the most frequently missed findings on commonly ordered ED x-rays & CTs.
- Discuss the medical & financial scope of radiographic misinterpretation.
- Review strategies & tips to help the emergency physician improve their interpretation skills.
Emergency Imaging

Orthopedic Radiographic Diagnosis Not to Miss
10/27/2021 | 3:30:00 PM - 4:30:00 PM

Expertise in interpreting orthopedic plain film radiography remains a vital skill for emergency physicians. Most often, they are the first to interpret plain films & they receive the official radiologist interpretation at a later time. An otherwise disabling diagnosis occasionally can be made based on plain film radiography alone. Using case studies, the speaker will review scenarios of potentially disabling radiographic diagnoses that are commonly missed by the initial interpretation.

- Identify at least five orthopedic plain film diagnoses that must not be missed.
- Describe key radiographic findings to identify and recognize commonly missed orthopedic injuries.
- Review confirmatory studies (CT, US, MR) required to secure a diagnosis in these cases.

Emergency Imaging

Critical Access in the Critically Ill
10/27/2021 | 3:30:00 PM - 5:30:00 PM

Emergency care providers must be experts in rapidly securing venous and arterial access in their critically ill patients. Instructors will guide participants through an streamlined approach to using ultrasound to obtain access of IJ, subclavian and femoral central veins in addition to a dynamic approach to localizing, placing and confirming arterial lines. Experienced instructors will discuss key tips and tricks to success and to avoiding common pitfalls in critically ill patients requiring vascular access.

- Demonstrate and perform ultrasound guided central venous access in internal jugular, subclavian, and femoral veins.
- Localize and perform ultrasound guided arterial line placement in the radial and femoral arteries.
- Perform peripheral IV insertion under direct ultrasound guidance.

Emergency Imaging

Imaging Overtesting & Overuse: Just How Dangerous Is It?
10/28/2021 | 8:00:00 AM - 8:30:00 AM

Modern medicine is rife with overtesting and overuse and emergency medicine is not immune. Overtesting is expensive, time-consuming, and a poor use of limited resources. But how just how dangerous is overtesting to patients? This course will take a close look at several key drivers of overtesting, with a special eye on imaging. How bad is one CT scan for a patient? Does age matter? How bad are many CTs, over many years? What are the other downstream effects of over-imaging? On the other hand, some of the risks of overtesting have been overplayed. For example, do we really need to worry about contrast-induced nephropathy? Probably not. We will look at the latest data. In addition, this lecture will touch on the downsides of overuse of ultrasound.
Emergency Imaging

- To describe overttesting and overuse, with an emphasis on imaging, and its overall impact on limited resources.
- To identify some of the patient-centered harms of overttesting/over-imaging
- To debunk myths about overttesting/over-imaging.
- Discuss Meaningful Use Criteria
Emergency Imaging

Tips for Trauma Radiology
10/28/2021 | 11:00:00 AM - 12:00:00 PM

The CT scan in trauma has become the standard of care in ruling out splenic, liver, aortic, pulmonary, intracranial, & aortic injury. The presenter will review the major findings that must be looked for on the trauma CT and when imaging might not be necessary. Tips to rapidly & efficiently review the CT as well as a review of differentiating bleeding in different organs from normal tissue will be provided.

- Discuss the utility and important findings of chest and pelvic plain films in trauma
- Review a pertinent findings of CTs of the head, neck, chest & abdomen in the setting of trauma.
- Discuss opportunities to reduce radiation exposure in the trauma patient and how to avoid the 'pan scan'.

Emergency Imaging

Fatal Imaging Myths That Will Change Your Practice
10/28/2021 | 12:00:00 PM - 1:00:00 PM

Over the last few decades, the array of imaging modalities available to emergency physicians has exploded. From cutting-edge ultrasound to the plain film radiograph, each modality has its myths and misconceptions which can result in potentially fatal misdiagnosis or delay. Can an x-ray really rule out free air, obstruction, or aortic dissection? Can a normal ovarian ultrasound rule out ovarian torsion? Using clinical cases and actual images, the presenter will discuss several clinical scenarios where multiple imaging modalities could be applied and the benefits of each.

- Discuss different approaches to imaging of some of the most feared pathologies in the emergency department (ex: dissection, torsion, etc)
- Explain why certain imaging "axioms" are incorrect or insufficient to diagnose the intended problem and suggest alternate high yield imaging practices
- Review common errors in diagnostic interpretation