

# FOAMed Ultrasound Curriculum

This curriculum is entirely FOAMed based! That means that all the education provided by these links is free. These resources are from the best of the best in ultrasound, so the education is some of the highest quality available. The curriculum is broken down into sections (like cardiac or procedures) with modules containing a collection of resources for a particular scan.

## Basics

### Orientation to Ultrasound

Download

- Introduction to Bedside Ultrasound Vol. 1 & 2 (occasionally free on Inkling or iTunes)
- One Minute Ultrasound App (always free)

Subscribe To

- Sonospot blog & twitter (<http://www.sonospot.com/>)
- Ultrasound Podcast & twitter (<http://ultrasoundpodcast.com> and on iTunes)

Watch

- Castlefest 2013: “**Knobology and Physics**”
- USC Ultrasound Learning Modules: “**Introduction to Ultrasound**”

### Intro to Ultrasound

Read

- Read Introduction to Bedside Ultrasound Vol. 1: Ch. 8 “Physics”
- Sonoguide: “**Physics**”

Watch

- USC Ultrasound Learning Modules: “**Introduction to Ultrasound Transducers**”
- USC Ultrasound Learning Modules: “**Modes of Diagnostic Ultrasound**”
- USC Ultrasound Learning Modules: “**Image Orientation and Resolution**”
- USC Ultrasound Learning Modules: “**Introduction to Ultrasound Artifacts**”
- Mike Stone Vimeo: “**Back to Basics – Transducer Manipulation**”

# Ultrasound Applications

## Trauma

Read

- Introduction to Bedside Ultrasound Vol. 1: Ch. 1 “eFAST”
- Introduction to Bedside Ultrasound Vol. 2: Ch. 7 “SUSS IT”
- Quickhits: “Life in the eFAST Lane” [Quick Hit, Part 1, Part 2](#)
- iPad App: [Trauma Ultrasound](#)

Watch

- One Minute Ultrasound: “[FAST](#)”
- Castlefest 2013: Cliff Reid “[Trauma](#)”
- EMCRIT Podcast: “Don’t Half Ass your FAST” [Click Here](#) & [Click Here](#)
- Ultrasound Podcast: “[Advanced Trauma Ultrasound](#)”

## RUSH

Read

- Introduction to Bedside Ultrasound Vol. 1: Ch. 5 “RUSH”
- Mount Sinai Emergency Medicine Ultrasound: “[RUSH](#)”

Videos & Lectures

- Castlefest 2013: “[RUSH](#)”
- EMCRIT: “[RUSH Exam](#)”

## Fluid Responsiveness

Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 12 “Fluid Responsiveness”

Watch

- One Minute Ultrasound: “[IVC](#)”
- Ultrasound Podcast: “Fluid Responsiveness” [Part 1, Part 2](#)
- Ultrasound Podcast: “[Integrated Ultrasound Approach to Fluid Responsiveness](#)”
- Ultrasound Podcast: “[Carotid VTI Passive Leg Raise for Volume Responsiveness](#)”
- Ultrasound Podcast: “[Carotid Flow Time for Volume Responsiveness](#)”

## Soft Tissue

### Read

- Introduction to Bedside Ultrasound Vol. 2: Ch. 10 “Soft Tissue”
- SonoGuide: “[Soft Tissue Ultrasound](#)“
- SonoGuide: “[Foreign Bodies](#)“

### Watch

- One Minute Ultrasound: “[Soft Tissue](#)“
- Castlefest 2013: Dr. Matthew Dawson “[Soft Tissue Infection](#)” (Chapter 2)

## Ocular

### Read

- Introduction to Bedside Ultrasound Vol. 2: Ch. 16 “Ocular”
- UK Quickhits: “[Keeping an Eye on Intracranial Pressure: Measuring ICP Using Ocular Ultrasound](#)”
- Life in the Fast Lane: “[Ocular Ultrasound Quiz](#)“

### Video & Lecture

- One Minute Ultrasound: “[Ocular Ultrasound](#)“
- Castlefest 2013: “[Ocular Ultrasound](#)” (Chapter 2)
- EMCRIT Podcast: “[High ICP Herniation](#)“
- EMCRIT Podcast: “[Optic Nerve Sheath Ultrasound for Detecting Increased ICP](#)“

## Vascular

### DVT

### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 12 “DVT”
- Sonoguide: “[DVT](#)“

### Watch

- One Minute Ultrasound: “[DVT](#)”
- Castlefest 2013: “[Venous Imaging for Acute DVT](#)” (Chapter 2)
- Ultrasound Podcast: “[DVT](#)”
- Ultrasound Podcast: “[DVT How To](#)”

## Aorta

### Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 3 “Aorta”
- Sonoguide: “[Aorta](#)”

### Watch

- One Minute Ultrasound: “[Aorta](#)”
- Castlefest 2013: “[Aortic Ultrasound](#)”

## IVC

### Watch

- One Minute Ultrasound: “[IVC](#)”
- USC Ultrasound Learning Module: “[ICV Ultrasound](#)”

## Lung

### Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 4 “Lung”

### Watch

- Castlefest 2013: “[Lung Ultrasound](#)”, (Chapter 1)
- Ultrasound Podcast: “[Dyspnea](#)”
- Ultrasound Podcast: “[Lung Month](#)”
- Ultrasound Podcast: “Lung Ultrasound” with Mike Stone [Part 1](#), [Part 2](#)
- Ultrasound Podcast: “Lung Ultrasound” with Vicki Noble [Part 1](#), [Part 2](#)
- Ultrasound Podcast: “[Multi-Organ Ultrasound for PE](#)”

## Cardiac

### Basics

### Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 2 “Basic Cardiac”

### Watch

- One Minute Ultrasound: “[Basic Cardiac](#)”
- Castlefest 2013: “[Basic Cardiac Ultrasound](#)”

- Ultrasound Podcast: “**ECHO ECHO ECHO**”

## Functional Assessment

### *Assessment of Cardiac Output and Ventricle Function*

#### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 1 “Echocardiographic Assessment of Cardiac Output and Ejection Fraction”
- Intro to Bedside Ultrasound Vol. 2: Ch. 2 “Right Heart”

#### Watch

- One Minute Ultrasound: “**EPSS**”
- Ultrasound Podcast: “**E-Point Septal Separation**” (EPSS)
- One Minute Ultrasound: “**Passive Leg Raise**”
- Castlefest 2013: “**LV Function**”
- One Minute Ultrasound: “**Wall Motion**”
- Ultrasound Podcast: “**Wall Motion**”

### *Diastology*

#### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 3 “Diastology”

#### Watch

- One Minute Ultrasound: “**Diastology**”
- Castlefest 2013: “**Diastology**”
- Ultrasound Podcast: “**Diastology Part 1**”
- Ultrasound Podcast: “**Diastology Part 2**”
- **Ultrasound Podcast: “Diastology How To”**

### *Valve Assessment*

#### Watch

- Ultrasound Podcast: “Ultrasound of Valves” **Part 1, Part 2**

### *Transesophageal Echocardiography (TEE)*

#### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 4 “Transesophageal Echo

Watch

- Castlefest 2013: “[TEE](#)”, Chapter 1

### Pericardial Tamponade

Watch

- Ultrasound Podcast: “Pericardial Tamponade” [Part 1](#), [Part 2](#)

## **OB/GYN**

Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 7 “Pregnancy”
- SonoGuide: “[OB/GYN](#)”

Watch

- One Minute Ultrasound: “[Intrauterine Pregnancy \(IUP\)](#)”
- One Minute Ultrasound: “[Transvaginal Ultrasound](#)”
- Mike Stone Vimeo: “[Essential 1st Trimester Pelvic Ultrasound](#)”
- USC Ultrasound Module: “[Female Pelvic Ultrasound](#)”
- Castlefest 2013: “[First Trimester Ultrasound](#)”, Chapter 3

## **ENT**

### Peritonsillar Abscess

Read

- Sonoguide: “[ENT Ultrasound Applications](#)”

Watch

- Ultrasound Podcast: “[Peritonsillar Abscess](#)”

### Thyroid

Watch

- USC Ultrasound Learning Modules: “[Thyroid](#)”

## **Abdomen & Pelvis**

### Renal

## Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 6 “Renal”
- Sonoguide: “[Renal](#)”

## Watch

- One Minute Ultrasound: “[Kidney](#)”
- Castlefest 2013: “[Renal Ultrasound](#)”, chapter 1
- Ultrasound Podcast: “[Renal Ultrasound](#)”

## Appendix

### Read

- Intro to Bedside Ultrasound Vol. 2: Ch.13 “Appendicitis”

### Watch

- Ultrasound Podcast: “[Appendix](#)”

## Small Bowel Obstruction

### Read

- Intro to Bedside Ultrasound Vol. 2: Ch.14 “Small Bowel Obstruction”

### Watch

- One Minute Ultrasound: “[Small Bowel Obstruction](#)”
- Ultrasound Podcast: “[Small Bowel Obstruction](#)”

## Gallbladder and Biliary Tree

### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 15 “Right Upper Quadrant”
- Sonoguide: “[Biliary](#)”

### Watch

- One Minute Ultrasound: “[Gallbladder](#)”
- Ultrasound Podcast: “[Gallbladder Ultrasound](#)”

## Liver

Watch

- USC Ultrasound Learning Module: “[Liver](#)”

Spleen

Watch

- USC Ultrasound Learning Module: “[Spleen Ultrasound](#)”

Bladder

Watch

- USC Ultrasound Learning Module: “[Bladder and Ureter Ultrasound](#)”

Hernia

Watch

- Ultrasound Podcast: “[Using Ultrasound for Hernias](#)”
- Ultrasound Podcast: “[Bonus Hernia](#)”

**Testicular**

Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 10 “Testicular”
- Sonoguide: “[Testicular](#)”

Watch

- Ultrasound Podcast: “Testicular Ultrasound” [Part 1](#), [Part 2](#)

**Musculoskeletal**

Basics

Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 11 “Musculoskeletal Basics”
- Intro to Bedside Ultrasound Vol. 1: Ch. 13 “Joint Injections”
- Sonoguide: “[MSK Overview](#)”

Hip



Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 14 “Hip”

Watch

- Ultrasound Podcast: “[Hip Ultrasound, Aspiration, and Injection](#)”

### Shoulder

Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 15 “Shoulder”

Watch

- One Minute Ultrasound: “[Shoulder Dislocation](#)”

### Fractures

Read

- Sonoguide: “[Sternum](#)“
- Sonoguide: “[Ribs](#)“

Watch

- Ultrasound Podcast: “[Scanning the Scaphoid](#)”
- Ultrasound Podcast: “[Ultrasound of Radius Fracture](#)”

### Pediatrics

Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 17 “Pediatrics”

Watch

- UCI Emergency Ultrasound Course: “[Pediatrics](#)“

### Great Ultrasound Protocols

#### Echo-Guided Life Support (EGLS)

Watch

- Ultrasound Podcast: “[EGLS](#)“

### Focused Sonography for HIV-Associated TB (FASH)

Watch

- Ultrasound Podcast: “[FASH US Exam](#)“

## Ultrasound Guided Procedures

### Vascular Access

Basics

Watch

- Castlefest 2013: “[Ultrasound Guided Vascular Access](#)”

### Peripheral IVs

Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 8 “Peripheral IV Placement”

Watch

- One Minute Ultrasound: “[IV Placement](#)”
- Ultrasound Podcast Microcast: “[Peripheral IV Placement](#)” (shorter version)
- Ultrasound Podcast: “[Ultrasound Guided Peripheral IVs](#)” (full length version)

### Central Lines

Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 9 “Central Lines”

Watch

- One Minute Ultrasound: “[IJ Ultrasound](#)”
- Ultrasound Podcast Microcast: “[IJ Placement](#)”
- Ultrasound Podcast: “[Wire in Needle a Win for Needle Visualization](#)”

### Radial Artrial Lines

Watch

- Ultrasound Podcast Microcast: “[Radial Arterial Line Insertion](#)”

## Nerve Blocks

### Basics

#### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 6 “Peripheral Nerve Blocks”
- Sonoguide: “[Nerve Block](#)”

#### Watch

- Mike Stone Vimeo: “[Nerve Blocks](#)”
- Ultrasound Podcast: “[Ultimate Ultrasound Nerve Block Education](#)”
- Ultrasound Podcast: “Ultrasound Guided Nerve Blocks” [Part 1](#), [Part 2](#)

## Brachial Plexus Blocks

#### Read

- Intro to Bedside Ultrasound Vol. 1: Ch. 11 “Brachial Plexus Nerve Blocks”

#### Watch

- Ultrasound Podcast: “[Brachial Plexus Blocks](#)”
- Mike Stone Vimeo: “[How to Find the Infraclavicular Brachial Plexus](#)”
- Mike Stone Vimeo: “[How to Find the Axillary Brachial Plexus](#)”
- Mike Stone Vimeo: “[How to Find the Interscalene Brachial Plexus](#)”

## Other Upper Extremity Blocks

#### Watch

- Mike Stone Vimeo: “[How to Find the Ulnar Nerve](#)”
- Mike Stone Vimeo: “[How to Find Radial Nerve](#)”
- Mike Stone Vimeo: “[How to Find Median Nerve](#)”

## Lower Extremity Blocks

#### Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 5 “Femoral Nerve Block”

#### Watch

- Ultrasound Podcast: “[More Nerve Blocks with Stone: Sciatic and Ankle Blocks](#)”
- Ultrasound Podcast: “[Femoral Nerve](#)”
- Mike Stone Vimeo: “[How to Find the Sciatic Nerve in Popliteal Fossa](#)”
- Mike Stone Vimeo: “[How to Find the Tibial Nerve at the Ankle](#)”
- Mike Stone Vimeo: “[Fascial Iliaca Compartment Block](#)”

## Airway

Watch

- Ultrasound Podcast: “[Full Cricothyriodotomy](#)”
- Ultrasound Podcast: “[Ultrasound Guided Intubation](#)”

## Other Procedures

Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 9 “Procedures”

## Lumbar Puncture

Watch

- Ultrasound Podcast Microcast: “[Ultrasound Guided LP](#)”
- Mike Stone Vimeo: “[Ultrasound Guided LP – The Essentials](#)”

## Thoracentesis

Watch

- Ultrasound Podcast Microcast: “[Thoracentesis](#)”

## Paracentesis

Watch

- Ultrasound Podcast: “[Paracentesis](#)”

## Pericardiocentesis

Watch

- Ultrasound Podcast Microcast: “[Ultrasound Guided Pericardiocentesis](#)”

## More Topics in Ultrasound

### Ultrasound in Medical Education

Read

- Intro to Bedside Ultrasound Vol. 2: Ch. 20 “Medical School Ultrasound Integration”

Watch

- Ultrasound Podcast: “Ultrasound in Medical Education” [Part 1](#), [Part 2](#)
- Ultrasound Podcast: “[Interview with Richard Hoppmann Dean of USC](#)” (USC has a 4 year integrated ultrasound curriculum)
- Ultrasound Podcast: “Future of Medical Education” [Part 1](#), [Part 2](#)
- SonoMojo Vimeo: “[Learning Ultrasound in Ultrasound Naïve Learning Environments](#)”

### Advanced Ultrasound Topics

#### Ultrasound Physics

Watch

- Ultrasound Podcast: “[Tissue Harmonics](#)”
- Ultrasound Podcast: “[Doppler Ultrasound](#)”

#### Know Your Limits

Watch

- Ultrasound Podcast: “Ultrasound Mistakes” [Part 1](#), [Part 2](#)