

2024 Annual Pain Care Skills Training

Workshop Title: MSK Ultrasound for Pain

Presented by: Drs. Yin-Ting Chen, Chelsea Hamilton

Offered: 21 Aug 2024 Full Day - 0730-1130/1230-1630 ET

Location: NIH Natcher Center, Room E1/E2

Course Description: This class reviews the basic principles of musculoskeletal (MSK) ultrasound (US), instrumentation and basic US examination for the diagnosis of MSK conditions. Students will learn to recognize the appearance of pathologic tissue and how it differs from normal tissue under US. They will learn how to adjust instruments and knobs to optimize image quality, reducing artifact. Basic protocols for scanning the shoulder, elbow, hip and knee will be reviewed, with common diagnoses and conditions highlighted. Students will get hands on experience operating the US and scanning body regions.

Learning Objectives:

- 1) Incorporate basic principles of MSK ultrasound, instrumentation, and basic imaging adjustment (knobology) to improve exam quality.
- 2) Recognize normal and pathologic appearances on US of various body structures to facilitate diagnosis and management of MSK conditions.
- 3) Recognize artifact and implement measures to reduce it in order to optimize diagnostic imaging.
- 4) Use basic ultrasound exam protocols for the shoulder, elbow, hip and knee to diagnose common MSK conditions.

21 AUG AM Agenda

0730 - 0815 Principles of MSK US

- I. Intro to the US machine, tools, settings
- II. Basic image adjustment (knobology)
- III. Practice session

0815 -0915 Shoulder

- I. Review of normal anatomy, pathology, scanning protocol
- II. Practice session

0930 -1015 Elbow

- I. Review of normal anatomy, pathology, scanning protocol
- II. Practice session

1015 -1130 Wrist and Hand

- I. Review of normal anatomy, pathology, scanning protocol
- II. Practice session

1130 -1230 ----- **LUNCH** -----

1230 -1330 Hip

- I. Review of normal anatomy, pathology, scanning protocol
- II. Practice session

1330 -1430 Knee

- I. Review of normal anatomy, pathology, scanning protocol
- II. Practice session

1445 -1545 Ankle

- I. Review of normal anatomy, pathology, scanning protocol
- II. Practice session

1545 -1630 Questions & Answers, Resources