MSK Webinars or Lectures

Sonographic Evaluation of the Brachial Plexus and Pathologic Variations https://learn.aium.org/products/sonographic-evaluation-of-the-brachial-plexus-and-pathologic-variations

Muscle Tears, Contusions and Heterotopic Ossification: Early Detection and Follow-up using MSKUS https://learn.aium.org/products/muscle-tears-contusions-and-heterotopic-ossification-early-detection-and-follow-up-using-mskus

Decoding Wrist and Hand Tendon Pathology with Ultrasound Imaging https://learn.aium.org/products/decoding-wrist-and-hand-tendon-pathology-with-ultrasound-imaging

A Practical Guide to Elbow Sonography

https://learn.aium.org/products/a-practical-guide-to-elbow-sonography Sonography of the Quadrilateral Space https://learn.aium.org/products/sonography-of-the-quadrilateral-space

Optimizing Treatment of Achilles Tendon Injuries Using Ultrasound Imaging https://learn.aium.org/products/optimizing-treatment-of-achilles-tendon-injuries-using-ultrasound-imaging

Sonographic Evaluation of Common Soccer-Related Injuries https://learn.aium.org/products/sonographic-evaluation-of-common-soccer-related-injuries#tab-product_tab_details

Ultrasound Evaluation of Hernias

https://learn.aium.org/products/ultrasound-evaluation-of-hernias

Sonography of Hand and Finger Disorders

https://learn.aium.org/products/sonography-of-hand-and-finger-disorders

Optimizing Treatment of Rotator Cuff–Related Shoulder Pain Using Diagnostic Ultrasound https://learn.aium.org/products/optimizing-treatment-of-rotator-cuffrelated-shoulder-pain-using-diagnostic-

Improving Clinical Outcomes: How to Integrate Ultrasound Into Your Musculoskeletal Shoulder Examination <u>https://learn.aium.org/products/improving-clinical-outcomes-how-to-integrate-ultrasound-into-your-musculoskeletal-shoulder-examination</u>

Diagnostic Ultrasound of the Wrist and Hand <u>https://learn.aium.org/products/diagnostic-ultrasound-of-the-wrist-and-hand</u>

MSK Ultrasound Evaluation - Differentiation of Tendinopathy vs Tear in the Rotator Cuff with Case Studies <u>https://learn.aium.org/products/msk-ultrasound-evaluation-differentiation-of-tendinopathy-vs-tear-in-the-rotator-cuff-with-case-studies</u>

Sport Ultrasound of the Forefoot https://learn.aium.org/products/sport-ultrasound-of-the-forefoot

Sports Ultrasound of the Plantar Hindfoot https://learn.aium.org/products/sports-ultrasound-of-the-plantar-hindfoot

Neuromusculoskeletal Ultrasound for Peripheral Nerve Entrapment and Nerve Injuries https://learn.aium.org/products/neuromusculoskeletal-ultrasound-for-peripheral-nerve-entrapment-and-nerve-

MSK Ultrasound: The Five Most Prevalent Pathologies in Each Joint: Upper Limb https://learn.aium.org/products/msk-ultrasound-the-five-most-prevalent-pathologies-in-each-joint-upper-limb

MSK Ultrasound: The Five Most Prevalent Pathologies in Each Joint: Lower Limb

https://learn.aium.org/products/msk-ultrasound-the-five-most-prevalent-pathologies-in-each-joint-lower-limb Monitoring Joint Health, Damage, and Disease Activity Using MSKUS: The MSKUS Experience in Hemophilic Arthropathy Management

https://learn.aium.org/products/monitoring-joint-health-damage-and-disease-activity-using-mskus-the-mskusexperience-in-hemophilic-arthropathy-management

Musculoskeletal Ultrasound Assessment of Tendinopathy

https://learn.aium.org/products/musculoskeletal-ultrasound-assessment-of-tendinopathy

Ultrasound-Guided Dry Needling

https://learn.aium.org/products/ultrasound-guided-dry-needling

Sideline Ultrasound

https://learn.aium.org/products/sideline-ultrasound

Understanding Occupational Musculoskeletal Injuries in Ultrasound Providers and Sonographers

https://learn.aium.org/products/understanding-occupational-musculoskeletal-injuries-in-ultrasound-providers-and-

RMSK OUTLINE

General Sonographic Anatomy 26%

Abdominal wall

Perform general ultrasound of the ligaments, neurovascular system, and tendons of the abdominal wall Ankle and foot Perform general ultrasound of the bones, bursae, cartilage, and joints of the ankle and foot

Perform general ultrasound of the fascia, ligaments, and tendons of the ankle and foot

Perform general ultrasound of the neurovascular system of the ankle and foot

Chest wall

Perform general ultrasound of the bones, bursae, cartilage, ligaments, muscles, neurovascular system, and tendons of the chest wall

Elbow

Perform general ultrasound of the bones, bursae, cartilage, and joints of the elbow

Perform general ultrasound of the tendons of the elbow

Hand and wrist

Perform general ultrasound of the bones, cartilage, joints, and ligaments of the hand and wrist

Perform general ultrasound of the neurovascular system of the hand and wrist

Perform general ultrasound of the tendons of the hand and wrist

Hip and groin

Perform general ultrasound of the bursae, cartilage, joints, and ligaments of the hip and groin

Perform general ultrasound of the neurovascular system of the hip and groin

Perform general ultrasound of the tendons of the hip and groin

Knee

Perform general ultrasound of the bones, bursae, joints, ligaments, and tendons of the knee

Perform general ultrasound of the neurovascular system of the knee

Shoulder

Perform general ultrasound of the bones, bursae, cartilage, joints, and ligaments of the shoulder Perform general ultrasound of the neurovascular system of the shoulder

Perform general ultrasound of the tendons of the shoulder

General Sonographic Pathology 23%

Abnormal physiology

- Evaluate abscesses
- Evaluate bone erosion

Evaluate cartilage pathology

Evaluate crystal deposits

Evaluate cystic structures
Evaluate for gas in soft tissues
Evaluate foreign bodies
Evaluate fractures
Evaluate infections
Evaluate joint instability/altered function
Evaluate joint effusions
Evaluate ligament tears
Evaluate masses
Evaluate muscle tears
Evaluate nerve entrapment
Evaluate neuromas
Evaluate subcutaneous abnormalities
Evaluate synovial proliferation
Evaluate synovitis
Evaluate tendon calcification
Evaluate tendon tears
Ultrasound-guided Interventional Procedures

Ankle and foot

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the bursae and joints of the ankle and Perform interventional procedures (e.g., aspirations, biopsies, injections) on the fascia, ligaments, and tendons of the ankle and foot

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the neurovascular system of the ankle Chest wall

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the bursae, ligaments, muscles, sternoclavicular joints, neurovascular system, and tendons of the chest wall

18%

Elbow

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the bursae, joints, and tendons of the Hand and wrist

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the joints and ligaments of the hand Perform interventional procedures (e.g., aspirations, biopsies, injections) on the tendons of the hand and wrist Perform interventional procedures (e.g., aspirations, biopsies, injections) on the neurovascular system of the hand Hip and groin

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the bursae and joints of the hip and Perform interventional procedures (e.g., aspirations, biopsies, injections) on the tendons of the hip and groin Perform interventional procedures (e.g., aspirations, biopsies, injections) on the neurovascular system of the hip Knee

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the bursae and joints of the knee Perform interventional procedures (e.g., aspirations, biopsies, injections) on the ligaments and tendons of the knee Perform interventional procedures (e.g., aspirations, biopsies, injections) on the neurovascular system of the knee Shoulder

Perform interventional procedures (e.g., aspirations, biopsies, injections) on the bursae, joints, and ligaments of the Perform interventional procedures (e.g., aspirations, biopsies, injections) on the neurovascular system of the Perform interventional procedures (e.g., aspirations, biopsies, injections) on the tendons of the shoulder Integration of Data 7%

Incorporate outside data (e.g., clinic assessment, history and physical, lab values)

Assess anatomy as it relates to trauma

Assess joints with dynamic scanning

Correlate information with previous tests

Correlate sonographic findings with clinical presentation

Report results of the exam

Physics and Instrumentation 26%

Imaging instruments

Adjust beam angle to correct for anisotropy Adjust imaging depth

Adjust overall gain Adjust power output Adjust pulse repetition frequency (PRF) Adjust sound beam and needle angle for proper visualization of needle Evaluate acoustic shadowing and refractile shadowing and identify artifacts **Evaluate Doppler artifacts** Focus the image Identify artifacts (e.g., through transmission, shadowing) Identify potential risks related to performing the exam Manipulate transducer position for optimal image acquisition Perform image measurements Select appropriate transducer Select proper ultrasound imaging mode for examination Use color Doppler Use curvilinear array transducer Use dynamic range Use linear array transducer Use phased array transducer Use power Doppler Use pulsed wave Doppler Use time gain compensation (TGC) Use two-dimensional, real-time, gray-scale imaging (e.g., B-mode)