

# **INTERVENTIONAL MUSCULOSKELETAL ULTRASOUND CADAVER COURSE**

University of Fribourg – Fribourg, Switzerland

## **FACULTY**

**Anatomy:** *Laurent Tatu, Christian Hammer*

**PMR:** *Serdar Koçer, François Droz Bartholet, Gil Pires Rodrigues*

**Radiology:** *Roger Bargoin, Marcos Reginato, Arnaud Kolly*

## **PROGRAM – 16 H**

- Ultrasound Basic Knobology, Injection Technique Under Ultrasound Guidance (1.5 HOURS)

- **SHOULDER** (3 HOURS)

*Key Structures*

- Rotator Cuff Muscles/tendons, Subdeltoid Bursa, Acromio Calvicular and Gleno Humeral Joints, Spinoglenoid and Suprascapular Notches, Suprascapular Nerve

*Indications*

- Presentation on Pathologies of the Shoulder and Indications for Treatment

*Injection Procedures*

- Intra-Articular - Acromio Calvicular and Gleno Humeral Joints
- Tendinopathy - Biceps Tendon Sheath.
- Bursal - Subdeltoid Bursa
- Pain - Suprascapular Nerve Block

- **ELBOW** (1.5 HOURS)

*Key Structures*

- Distal Biceps Tendon, Common Extensor Tendon, Radial Collateral Ligament, Radiocapitellar Joint, Common Flexor Tendon, Medial Collateral Ligament, Triceps Tendon, Olecranon Bursa and Ulnar Nerve in Cubital Tunnel

*Indications*

- Presentation on Pathologies of the Elbow and Indications for Treatment

*Injection Procedures*

- Intra-Articular - Radiocapitellar Joint
- Tendinopathy - Med/Lat Injections, Triceps Tendon
- Bursal - Olecranon Bursal Aspiration/Injection

- **WRIST AND HAND** (3 HOURS)

*Key Structures*

- Contents of Carpal Tunnel, Six Compartments of Wrist, Extensor Retinaculum, Radial Nerve/Artery, Ulnar Nerve/Artery, Finger Flexor Tendons and A1 Pulley

*Indications*

- Presentation on Pathologies of the Wrist and the Hand and Indications for Treatment

*Injection Procedures*

- Tenosynovitis - 1st Extensor Compartment, Trigger Finger
- Neuropathy - Median Nerve in Carpal Tunnel

● **HIP AND PELVIS (2.5 HOURS)**

*Key Structures*

- Hip Joint and Anterior Recess, Femoral Artery/Vein and Nerve, Iliopsoas Muscle/Tendon, Proximal Rectus Femoris and Sartorius Muscles/Tendons, Greater Trochanter, Gluteal Tendons, Trochanteric Bursa, Tensor Fascia Latae and Iliotibial Band, Piriformis Muscle

*Indications*

- Presentation on Pathologies of the Hip and Indications for Treatment

*Injection Procedures*

- Intra-Articular - Hip Joint
- Bursal - Trochanteric Bursa, Iliopsoas Bursa
- Tendinopathy - Gluteal Tendon
- Myofascial Pain - Piriformis

● **KNEE (2 HOURS)**

*Key Structures*

- Quadriceps Muscle/Tendon, Suprapatellar Bursa, Femur, Patella, Joint Lines, Menisci, Medial/Lateral Collateral Ligaments, Patellar Tendon, Tibia, Fibula, Pes Anserine Bursa/Tendons, Distal Iliotibial Band, Baker's Cyst

*Indications*

- Presentation on Pathologies of the Knee and Indications for Treatment

*Injection Procedures*

- Intra-Articular - Suprapatellar Bursal Aspiration/Injection
- Tendinopathy - Quadriceps/Patellar Tendon
- Bursal/Cyst - Pes Anserine, Baker's Cyst, Distal ITB

● **ANKLE AND FOOT (2 HOURS)**

*Key Structures*

- Tibiotalar Joint, Subtalar Joint, Tibialis Anterior, EHL, Tibialis Posterior, FDL, Peroneal Tendons, Neurovascular Bundle, Achilles Tendon, Plantar Flexor Muscles

*Indications*

- Presentation on Pathologies of the Ankle and the Foot and Indications for Treatment

*Injection Procedures*

- Intra-Articular - Tibiotalar Joint, Subtalar Joint
- Tendinopathy - Tibialis Posterior and Peroneal Tendon Sheaths, Achilles Plantar Fascia

● **REVIEW and EVALUATION (0.5 HOURS)**

**DURATION OF TRAINING:** 2 days (Friday morning to Saturday afternoon)

**INTENDED FOR:** Physiatrist, Orthopaedic surgeon, Sports physician, Rheumatologist, Physiotherapist, Pain specialist

**LEARNING OBJECTIVES:**

- Review of MSK anatomy
- Identify on Thiel cadaver the important structures for ultrasound-guided interventions
- Ultrasound-guided injections on the Thiel corpse which allows an excellent visualization of all musculo skeletal structures

**LIMITED PARTICIPATION:** Places will be offered on a first come first served basis. High tutor to participant ratio 1:4