

# MINIMALLY INVASIVE NEURO-ORTHOPEDIC PROCEDURES GUIDED BY ULTRASOUND

University of Fribourg – Fribourg, Switzerland

## FACULTY

**Dr. Serdar Koçer, Course Director, (PMR, Switzerland)**

**Dr. Jonathan Bemporad (PMR, Italy)**

**Dr. François Droz-Bartholet (PMR, France)**

**Dr. Laure Gatin (Orthopedic Surgeon, France)**

**Pr. Christian Hammer (Anatomist, Switzerland)**

## THEORETICAL PROGRAM – 2H 55MIN

- **Assessment of spastic patients and clinical decision-making (adults and children) (30 min)**
- **Dynamic EMG (surface and fine-wire) for therapeutic decision-making (30 min)**
- **Treatment of spasticity in complex cases and injection technique in difficult muscles (30 min)**
- **Selective motor nerve block in the assessment of spasticity (20 min)**
- **Long-acting selective motor nerve block for the treatment of spasticity and pain: Chemical and physical neurolysis (20 min)**
- **Percutaneous muscle tendon lengthening techniques: Indications, advantages and limitations (30 min)**
- **Management of shoulder pain in hemiplegic patients (15 min)**

## HANDS-ON PROGRAM – 7H 45MIN

- **Anatomical review of the muscles and nerves of the upper and lower limbs (1h30 min)**
- **Ultrasound guided injection techniques in the upper and lower limb muscles (1h30 min)**
- **Nerve blocks for assessment and decision-making in neuro-orthopedic procedures (2h)**
- **Ultrasound-guided approaches to muscle and tendon lengthening (upper and lower limbs) (2h 45min)**

**DURATION OF TRAINING:** 1.5 days (Friday morning to Saturday noon)

**INTENDED FOR:** Neurologists, PMR, Physiotherapists, Orthopedic Surgeons, Neurosurgeons, Paediatric Surgeons, Pain Specialists