

# **Lumbopelvic Rehabilitative Ultrasound Imaging: A Clinical Training Course**

Schedule: Two hours of prerecorded videos need to be completed prior to course onset (120)

## **Day one (Central Time Zone)**

8:00-8:30 Review of terminology and quiz over recorded materials (30)

8:30-9:15 Rehabilitative Ultrasound Imaging (RUSI) Basics (45)  
Clinical application of RUSI in physical therapy  
Reliability and validity

9:15-10:15 Ultrasound 101 (60)  
Physics, Image Generation  
Interpreting the US images

10:15-10:45 (30)  
Knobology  
Measurements and annotations

10:45-11:30 Lab I – Knobology (45)  
Image creation, presets, image optimization, PARRT

11:30-12:15 Lecture: Imaging the Anterior Abdominal Wall (45)  
-Sonographic anatomy, morphology, morphometry  
-Application of RUSI for anterior abdominal wall in clinical setting

12:15-1:15 Lunch

1:15-2:15 Lab II – Anterior Abdominal Wall (45)  
-Evaluation and functional training of pressure system management  
-Inner-rectus distance and behavior with curl-up task

2:15-3:00 Lecture: Imaging the Lateral Abdominal Wall (45)  
-Sonographic anatomy, morphology, morphometry  
-Application of RUSI for lateral abdominal wall in clinical setting

3:00-4:00 Lab III - Lateral Abdominal Wall (60)  
-Evaluation and functional training, motor control, co-activation with PFM for core control and pressure management for continence, lumbopelvic dysfunction and the postpartum tummy

4:00-4:30 Lecture: Imaging the Respiratory Diaphragm (30)  
-Sonographic anatomy, morphometry  
-M-mode ultrasound imaging for diaphragm excursion

4:30-5:30 Lab IV – Respiratory diaphragm (60)  
-Evaluation of diaphragm excursion  
-Measurement of diaphragm excursion with B-mode and M-mode ultrasound



# Lumbopelvic Rehabilitative Ultrasound Imaging: A Clinical Training Course

## Day two

8:00-9:00 Lecture: Transabdominal Imaging of the Bladder and Pelvic Floor (60)

- Sonographic anatomy, morphology, morphometry of the PFM and pelvic contents
- Application of RUSI for PFM wall in clinical setting

9:00-10:00 Lab V: Transabdominal imaging of the bladder and PFM (60)

- Evaluation and functional training, motor control, pressure management, load transfer in supine and standing
- RUSI for bladder volumes, post void residual, bladder wall thickness,

10:00-10:45 Lecture: Imaging of the deep lumbar multifidus (45)

- Sonographic anatomy, morphology, morphometry
- Application of RUSI for lumbar multifidus in clinical setting

11:00-12:00 Lab VI: Deep lumbar multifidus muscle (60)

- Evaluation and functional training of voluntary and involuntary motor control
- Observation of asymmetry

12:00-1:00 Lunch and Lecture (60)

Marketing RUSI

1:00-1:30 TPUS Male Lecture (30)

- Sonographic anatomy, morphology, morphometry
- Application of RUSI for transperineal assessment of pelvic floor in clinical setting

1:30-2:30 Lab VII: TPUS Male (Arrange for male models to arrive at 1:15) (60)

- Evaluation and functional training of voluntary and involuntary motor control
- Observation of discrete motor control patterns for continence

2:30-3:30 Lab VI: Transperineal Female (60)

- Evaluation and functional training of voluntary and involuntary motor control
- Observation of anterior compartment, bladder neck, prolapse, puffer training
- Observation of posterior compartment, anorectal angle, anal canal, defecation disorders

3:30-4:30 Transperineal/urogenital diaphragm applications for female (60)

- Sonographic anatomy, morphology, morphometry
- Application of RUSI for transperineal assessment of pelvic floor in clinical setting
- Anterior and posterior compartments

Total time: 18.5 hours

