

MUSCULOSKELETAL ULTRASOUND COURSE
- BASIC LEVEL -
Graz, May 4th – 6th, 2022

GENERAL INFORMATION

Course opening

Wednesday, May 4th, 2022 - h 17.00

Course closing

Friday, May 6th, 2022 - h 19.00

Official course language

English

Congress Venue

Hotel Novapark

Fischeraustraße 22,
8051 Graz

www.novapark.at

Scientific Organizer

Christian Dejaco, MD, PhD, MBA

Medical University Graz; Department of Rheumatology and Immunology;
Rheumatology service; South Tyrol Health Trust; Hospital of Bruneck

Rusmir Husic, MD

Medical University Graz; Department of Rheumatology and Immunology;

Faculty

Christina Duftner, MD, PhD (Innsbruck, Austria) – EULAR teacher

Peter Mandl, MD, PhD (Vienna, Austria) – EULAR teacher

Christian Dejaco, MD, PhD, MBA (Bruneck, Italy) – EULAR teacher

Wolfgang Hartung, MD (Bad Abbach, Germany) – EULAR teacher

Wolfgang Schmidt, MD (Berlin, Germany) – EULAR teacher

Rusmir Husic, MD (Graz, Austria) – EULAR teacher

Alen Zabotti, MD (Udine, Italy)

Organizing Secretariat

Noelle Tybery

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Course registration

Course applications (no specific form required) containing a contact e-mail address should be e-mailed to noelle.tybery@klinikum-graz.at or faxed to +43-316-38517813. For questions, please call +43-316-38517779

Registration is open for all attendees from EULAR member countries.

The course fee is **1000 EUR** per participant (tax, lodging and food included).

OBJECTIVES

- To learn basic normal musculoskeletal ultrasonographic (MSUS) anatomy
- To learn basic pathological MSUS findings
- To learn the systematic standardized sonographic scanning method of each anatomical region
- Applications, indications and limitations of MSUS in rheumatology
- Image documentation
- Basics of Colour and Power Doppler application to detect synovial and enthesal inflammation

MAIN TOPICS

- Ultrasound physics and technology, technical characteristics of ultrasound equipments in rheumatology, applications, indications and limitations of MSUS
- MSUS anatomy, artefacts and misinterpretation of MSUS findings
- Standardized sonographic scanning method of each anatomical region (shoulder, elbow, wrist and hand, hip, knee, ankle and foot) according to EULAR guidelines
- Basic pathological sonographic findings (tendinosis, tenosynovitis, partial and complete tendon tear, entesopathy, bursitis, calcifications, articular cartilage lesions, cortical abnormalities and joint synovitis).
- Reporting US findings and diagnosis

LIVE DEMONSTRATIONS

- To demonstrate standard scans according to EULAR guidelines
- To discuss common artefacts and pitfalls

WORKSHOPS

- Practical handling of the ultrasound system settings
- Supervised identification of musculoskeletal sonoanatomy
- Supervised standardized sonographic scanning of the shoulder, elbow, wrist and hand, hip, knee, ankle and foot
- Supervised hands-on scanning of patients with basic musculoskeletal lesions
- Supervised assesment of the basic somographic symptoms or inflammation severity in grades

REQUIREMENTS OF ATTENDEES

- There is no experience in musculoskeletal sonography required to attend the basic level ultrasound course

SCIENTIFIC PROGRAMME

Day 1

16:00-17:00 **Registration**

17:00-17:15 Welcome (*R. Husic, C. Dejaco*)

Application, indications and limitations of ultrasound in rheumatology

Chairperson: *P. Mandl*

17:15-17:45 Applications and limitations of ultrasound in rheumatology (*R. Husic*)

Ultrasound physics and technology

Chairperson: *A. Zabotti*

17:45-18:00 Technical requirements, physics (*W. Hartung*)

18:00-18:30 How to optimize grey-scale and Doppler settings (*W. Hartung*)

18:30-19:15 **Workshop 1:** optimizing ultrasound settings (*all faculty*)

19:30 **Dinner**

Day 2

Sonographic pattern of the different musculoskeletal tissues and standard sonographic scans of the wrist and hand

Chairperson: R. Husic

8:30-8:50 Sonographic pattern of the different musculoskeletal tissues (C. Duftner)

8:50-9:20 Systematic investigation of wrist and hand – normal MSUS anatomy (C. Duftner)

9:20-9:30 **Live demonstration:** Standard scans and normal MSUS anatomy of wrist and hands (C. Duftner)

9:30-10:30 **Workshop 2:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of wrist and hands (*all faculty*)

10:30-11.00 **Coffee break**

Standard sonographic scans and normal MSUS anatomy of the elbow and shoulder

Chairperson: W. Schmidt

11:00-11:30 Systematic investigation of the elbow – normal MSUS anatomy (C. Dejaco)

11:30-11:45 **Live demonstration:** Standard scans and normal MSUS anatomy of the elbow (C. Dejaco)

11:45-13:00 **Workshop 3:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of elbow (*all faculty*)

13:00-14.00 **Lunch**

14:00-14:30 Systematic investigation of the shoulder – normal MSUS anatomy (W. Hartung)

14:30-14:45 **Live demonstration:** Standard scans and normal MSUS anatomy of the shoulder (W. Hartung)

14:45-16:00 **Workshop 4:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of shoulder (*all faculty*)

16:00-16.30 **Coffee break**

Standard sonographic scans and normal MSUS anatomy of the hip and knee

Chairperson: C. Duftner

- 16:30-16:45 Systematic investigation of the hip – normal MSUS anatomy (*W. Schmidt*)
- 16:45-17:00 **Live demonstration:** Standard scans and normal MSUS anatomy of the hip (*W. Schmidt*)
- 17:00-17:45 **Workshop 5:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of hip (*all faculty*)
- 17:45-18:15 Systematic investigation of the knee – normal MSUS anatomy (*A. Zabotti*)
- 18:15-18:30 **Live demonstration:** Standard scans and normal MSUS anatomy of the knee (*A. Zabotti*)
- 18:30-19:30 **Workshop 6:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of knee (*all faculty*)
- 19:30- 20:15 Satellite symposium (sponsored by TBN)
- 20:30 ***Dinner***

Day 3

Standard sonographic scans and normal MSUS anatomy of the ankles and feet

Chairperson: *W. Hartung*

8:30-9:00 Systematic investigation of the ankles and feet – normal MSUS anatomy (*P. Mandl*)

9:00-9:15 **Live demonstration:** Standard scans and normal MSUS anatomy of the ankles and feet (*P. Mandl*)

9:15-10:30 **Workshop 7:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of ankles and feet (*all faculty*)

10:30-11.00 **Coffee break**

Basic pathologies, Image documentation, MSUS artefacts and pitfalls

Chairperson: *C. Dejaco*

11:00-11:30 Basic course pathologies part 1: Synovitis, Bursitis, Tenosynovitis (*R. Husic*)

11:30-12:00 Basic course pathologies part 2: Erosions, Osteophytes, Enthesitis (*W. Schmidt*)

12:15- 12:30 Image documentation and Reporting ultrasound findings and diagnosis (*A. Zabotti*)

12:30- 13:00 MSUS artefacts and pitfalls (*P. Mandl*)

13:00- 14:00 **Lunch**

14:00- 15:00 **Workshop 9:** Supervised practical session on patients: Basic course pathologies (*all faculty*)

What we learnt so far....

Chairperson: *P. Mandl*

15:00-15:30 **Live demonstration:** Standard scans and normal MSUS anatomy of wrists, hands, elbow and shoulder (*W. Hartung*)

15:30-16:00 **Live demonstration:** Standard scans and normal MSUS anatomy of hips, knees, ankle and feet (*W. Schmidt*)

16:00-16.30

Coffee break

16:30-18:30

Workshop 7: Supervised practical session on healthy subjects:
Standard scans and normal MSUS anatomy of wrist, hands,
elbow, shoulder, hips, knees (*all faculty*)

18:30- 19:00

Closing remarks and evaluation (R. Husic, C. Dejaco)