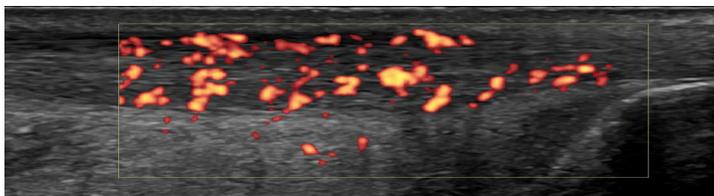




**MUSCULOSKELETAL ULTRASOUND
COURSE
- BASIC LEVEL -
Graz, April 17th – 19th, 2024**



This course has been scientifically endorsed by:



Dear colleague,

musculoskeletal ultrasound is increasingly used by rheumatologist and other health professionals for diagnostic and monitoring purposes. In order to achieve high quality results, a structured training in normal anatomy and pathology is needed.

In this basic level ultrasound course, we will introduce you into the standard scans and anatomy of joints and other musculoskeletal structures. Besides, we will discuss basic but common pathological findings in rheumatic diseases.

This course is composed of clinical lectures, live demonstrations and hands on sessions in small groups. Most speakers and tutors are certified EULAR teachers. This course has been endorsed by EFSUMB as an EUROSON School course as well as by EULAR.

We invite all physicians and health care professionals interested to learn the applications of sonography in rheumatology to this ultrasound course, basic level. We hope to welcome you in April 2024 in Graz, Austria

Christian Dejaco and Rusmir Husic

GENERAL INFORMATION

Course opening

Wednesday, April 17th, 2024 – h 17.00

Course closing

Friday, April 19th, 2024 - 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 (EFSUMB level 3, EULAR teacher)

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

Rusmir Husic, MD (EULAR teacher)

Medical University Graz; Department of Rheumatology and Immunology;

Faculty

Luis Coronel, Spain (EULAR teacher),

Wolfgang Schmidt, Germany (EFSUMB level 3, EULAR teacher)

Christian Dejaco, Austria (EFSUMB level 3, EULAR teacher),

Christina Duftner, Austria (EULAR teacher)

Rusmir Husic, Austria (EULAR teacher)

Peter Mandl, Austria (EFSUMB level 3, EULAR teacher),

Raphael Micheroli, Switzerland, (EULAR teacher)

Sarah Ohrndorf, Germany, (EULAR teacher, EFSUMB level 3)

Giorgio Tamborini, Switzerland (EFSUMB level 3, EULAR teacher)

Tobias DeZordo, Italy,

Tutor for practical workshops

Tommaso Buzzegoli, Italy, radiologist

Organizing Secretariat

Noelle Tybery

Department of Rheumatology and Immunology

8036 Graz, Austria

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 number of participants is limited to 25; for workshops, there will be a maximum of 5 participants per tutor.

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 sonographic symptoms or inflammation severity in grades

REQUIREMENTS OF ATTENDEES

- Successful participation in the EULAR Online Introductory US course

SCIENTIFIC PROGRAMME

Day 1

16:00-17:00	Registration
17:00-17:15	Welcome (<i>R. Husic</i>)
Application, indications and limitations of ultrasound in rheumatology <i>Chairperson: P. Mandl</i>	
17:15-17:45	Applications and limitations of ultrasound in rheumatology (<i>R. Husic</i>)
Ultrasound physics and technology <i>Chairperson: C. Dejaco</i>	
17:45-18:15	Technical requirements, physics (T. Dezordo)
18:15-18:45	How to optimize grey-scale and Doppler settings (T. Dezordo)
18:45-19:30	Workshop 1: optimizing ultrasound settings (W. Schmidt, C. Dejaco, T. Dezordo, T. Buzzegoli, P. Mandl, R. Micheroli))
19:30 – 20:00	Satelite Symposium: to be named
20:15	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 (<i>C. Duftner</i>)
8:50-9:20	Systematic investigation of wrist and hand – normal MSUS anatomy (<i>S. Ohrndorf</i>)
9:20-9:30	Live demonstration: Standard scans and normal MSUS anatomy of wrist and hands (<i>S. Ohrndorf</i>)
9:30-10:30	Workshop 2: Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of wrist and hands (W. Schmidt, P. Mandl, C. Dejaco, Micheroli, T. Buzzegoli, T. Dezordo)
10:30-11.00	Coffee break
Standard sonographic scans and normal MSUS anatomy of the elbow and shoulder <i>Chairperson: W. Schmidt</i>	
11:00-11:30	Systematic investigation of the elbow – normal MSUS anatomy (<i>C. Dejaco</i>)
11:30-11:45	Live demonstration: Standard scans and normal MSUS anatomy of the elbow (<i>C. Dejaco</i>)

11:45-13:00 **Workshop 3:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of elbow (*W. Schmidt, C. Dejaco, T. Buzzegoli, C. Duftner, T. Dezordo, S. Ohrndorf*)

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

14:00-14:45 Systematic investigation of the shoulder – normal MSUS anatomy (*G. Tamborrini*)

14:45-15:00 **Live demonstration:** Standard scans and normal MSUS anatomy of the shoulder (*G. Tamborrini*)

15:00-16:00 **Workshop 4:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of shoulder (*G. Tamborrini, T. Buzzegoli, S. Ohrndorf, R. Husic, C. Duftner, W. Schmidt*)

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*)

16:45-16:55 **Live demonstration:** Standard scans and normal MSUS anatomy of the hip (*W. Schmidt*)

16:55-17:20 Systematic investigation of the knee – normal MSUS anatomy (*L. Coronel*)

17:20-17:30 **Live demonstration:** Standard scans and normal MSUS anatomy of the knee (*L. Coronel*)

17:30-18:30 **Workshop 5:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of hip and knee (*C. Duftner, T. Dezordo, L. Coronel, P. Mandl, R. Husic, T. Buzzegoli*)

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

Chairperson: L. Coronel

18:30-19:10 Systematic investigation of the ankles and feet – normal MSUS anatomy (*P. Mandl*)

19:10-19:20 **Live demonstration:** Standard scans and normal MSUS anatomy of the ankles and feet (*P. Mandl*)

19:20-19:50 **Satelite Symposium:** to be named

20:30 **Dinner**

Day 3

8:15-9:30 **Workshop 6:** Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of ankles and feet (*R. Husic, R. Micheroli, C. Duftner, T. Buzzegoli, T. Dezordo, S. Ohrndorf*)

Basic pathologies

Chairpersons: *C. Duftner*

9:30-10:00 Basic course pathologies part 1: Synovitis, Bursitis, Tenosynovitis (*R. Husic*)

10:00-10:30 Basic course pathologies part 2: Erosions, Osteophytes, Entesitis (*R. Micheroli*)

10:30-11:00 **Coffee break**

Image documentation, MSUS artefacts and pitfalls

Chairperson: *G. Tamborrini*

11:00- 11:15 Image documentation and Reporting ultrasound findings and diagnosis (*S. Ohrndorf*)

11:15- 11:45 MSUS artefacts and pitfalls (*P. Mandl*)

What we learnt so far.... (1)

Chairperson: *P. Mandl*

11:45-12:20 **Live demonstration:** Standard scans and normal MSUS anatomy of wrists,

hands, elbow and shoulder (*L. Coronel*)

12:20-13:00

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

13:00- 14:00

Lunch

14:00- 15:00

Workshop 7: Supervised practical session on patients: Basic course pathologies (*R. Micheroli, W. Schmidt, S. Ohrndorf, C. Duftner, R. Husic, P. Mandl*)

What we learnt so far.... (2)

Chairperson: *S. Ohrndorf*

15:05- 15:30

Case series/Quiz 1: (*R. Micheroli*)

15:30- 16:00

Case series/Quiz 2: (*W. Schmidt*)

16:00-16.30

Coffee break

16:30-19:00

Workshop 8: Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of wrist, hands, elbow, shoulder, hips, knees (*T. Buzzegoli, T. Dezordo, C. Duftner, P. Mandl*)

19:00- 19:05

Closing remarks and evaluation (*C. Dejaco*)

