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 EUROSON School 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 experienced sonographers and certified EULAR teachers.

We invite all physicians and health care professionals interested to learn the applications of sonography in rheumatology to this EUROSON School course, basic level. We hope to welcome you in Mai 2022 in Graz, Austria.

Christian Dejaco and Rusmir Husic
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](http://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**  
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@uniklinikum.kages.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 anatomy (MSUS)
- 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 entheseal 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 in MSUS
- 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 assessment of the basic sonographic symptoms or inflammation severity in grades

REQUIREMENTS OF ATTENDEES

- There is no experience in musculoskeletal sonography required to attend the basic level ultrasound course
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 (*R. Husic*)

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*)
REGISTRATION FORM

MUSCULOSKELETAL SONOGRAPHY COURSE FOR RHEUMATOLOGISTS - Basic Level -

Fax: (+43)316-385-17813 or Mail: noelle.tybery@uniklinikum.kages.at

Name: _________________________________________________
First name: _________________________ Titel: _______________
Institution: ______________________________________________
Address:________________________________________________
Tel.: ___________________ Fax: ____________________________
Email: __________________________________________________
ÖÄK-Nummer: ___________________________________________

Please pay the registration fee not later than 1.2.2022

IBAN: AT46 3800 0000 0571 7087 (ACHTUNG NEUE KONTONUMMER!)
BIC: RZSTAT2G
Titled: “Sonography Course 2022 – your Name”