MUSCULOSKELETAL SONOGRAPHY COURSE FOR RHEUMATOLOGISTS - BASIC LEVEL -

October 9th – 11th, 2019
Innsbruck, Austria

This course is scientifically endorsed by:

[Logos of ÖGR, EuroSol School, and ÖGUM]
**Course opening:** Wednesday, October 9th, 2019 – 16.00
**Course closing:** Friday, October 11th, 2019 – 18.15

**Official course language:** English

**Congress Venue:**
Hotel Grauer Bär
Universitätsstraße 5-7
6020 Innsbruck, Austria
www.innsbruck-hotels.at/hotel-grauer-baer/das-hotel

**Scientific Organizers:**

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*Managed by Punctata GmbH andric.punctata@icloud.com in the name of the “Verein zur Förderung der Hämatologie, Onkologie und Immunologie”, Innsbruck, Austria*
Faculty / Instructors

Peter Balint, MD (Budapest, Hungary), EULAR teacher
Christian Dejaco, MD, PhD, MBA (Graz, Austria), EULAR teacher
Christina Duftner, MD, PhD (Innsbruck, Austria), EULAR teacher
Wolfgang Hartung, MD (Bad Abbach, Germany), EULAR teacher
Annamaria Iagnocco, MD (Torino, Italy), EULAR teacher
Andrea Klauser, MD (Innsbruck, Austria), EFSUMB teacher
Peter Mandl, MD, PhD (Vienna, Austria), EULAR teacher
Johannes Strunk, MD (Köln, Germany), EULAR teacher

Participants
The number of participants is limited to 25.

Practical sessions
The number of participants per teacher in practical sessions is five at maximum.

Course registration:
Course applications (with contact E-mail address, no specific form required) should be E-mailed to margit.bonatti@chello.at or faxed to +43-512-504-23415. For questions, please call +43-512-934148 or +43-650-8626301.

Registration is open for all attendees specifically from EULAR member countries.

The course fee is 990 EUR per participant (excl. taxes; lodging and food included).
OBJECTIVES (in accordance with EULAR guidelines)

- 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 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, enthesitis, 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
**SCIENTIFIC PROGRAMME**

**Wednesday, October 9th, 2019**

16:00 - 17:00  *Registration*

17:00 - 17:15  Welcome (C. Duftner, G. Weiss, M. Schirmer)

**Application, indications and limitations of ultrasound in rheumatology**  
*Chairperson:*  C. Dejaco

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

**Ultrasound physics and technology**  
*Chairperson:*  J. Strunk

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

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

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

**Satellite symposium (to be named)**  
*Chairperson:*  to be named

19:15 - 19:45

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

Chairperson: W. Hartung

08:30 – 08:50 Sonographic pattern of the different musculoskeletal tissues (C. Duftner)

08:50 – 09:20 Systematic investigation of wrist and hand – normal MSUS anatomy (C. Duftner)

09:20 – 09:30 Live demonstration: Standard scans and normal MSUS anatomy of wrist and hands (C. Duftner)

09:30 – 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: C. Duftner

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 (*J. Strunk*)

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

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:*  *J. Strunk*

16:30 - 16:45  Systematic investigation of the hip – normal MSUS anatomy (*W. Hartung*)

16:45 - 17:00  **Live demonstration**: Standard scans and normal MSUS anatomy of the hip (*W. Hartung*)

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 (*P. Balint*)
18:15 - 18:30  **Live demonstration**: Standard scans and normal MSUS anatomy of the knee *(P. Balint)*

18:30 - 19:30  **Workshop 6**: Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of knee *(all faculty)*

**Satellite symposium (to be named)**
*Chairperson*: to be named
19:30 - 20:00  ....

20:15  **Dinner**
Friday, Oktober 11th, 2019

**Standard sonographic scans and normal MSUS anatomy of the ankles and feet**  
*Chairperson:* P. Mandl

08:30 - 09:00  Systematic investigation of the ankles and feet – normal MSUS anatomy (*P. Mandl*)

09:00 - 09:15  **Live demonstration**: Standard scans and normal MSUS anatomy of the ankles and feet (*P. Mandl*)

09:15 - 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. Duftner

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

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

12:00 – 12:15  Image documentation and reporting ultrasound findings and diagnosis (*C. Dejaco*)

12:15 - 12:45  MSUS artefacts and pitfalls (*J. Strunk*)
12:45 - 14:00  *Lunch*

14:00 - 15:00  **Workshop 8**: Supervised practical session on patients: Basic course pathologies *(all faculty)*

**What we learnt so far....**  
*Chairperson:  C. Dejaco*

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

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

16:00 - 18:00  **Workshop 9**: Supervised practical session on healthy subjects: Standard scans and normal MSUS anatomy of wrist, hands, elbow, shoulder, hip, knee *(all faculty)*

18:00 - 18:15  *Summary, closing remarks and evaluation (M. Schirmer)*
This course is supported by: