MUSCULOSKELETAL SONOGRAPHY COURSE
FOR RHEUMATOLOGISTS
- INTERMEDIATE LEVEL -

April 26th – 28th, 2023
Innsbruck, Austria

This course is scientifically endorsed by:
Course opening: Wednesday, April 26th, 2023 – 16.00
Course closing: Friday, April 28th, 2023 - 18.30

Official course language: English

Congress Venue:
AC Mariott Innsbruck
Salurner Straße 15
6020 Innsbruck, Austria

Scientific Organizers:

Christina Duftner, MD/PhD
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Managed by Punctata GmbH in the name of the “Verein zur Förderung der Hämatologie, Onkologie und Immunologie”, Innsbruck, Austria
GENERAL INFORMATION

Faculty / Instructors
Luis Coronel Tarancón, MD (Barcelona, Spain), EULAR teacher
Christian Dejaco, MD/PhD, MBA (Bruneck, Italy), EULAR/EFSUMB teacher
Tobias De Zordo, MD (Brixen, Italy), EFSUMB teacher
Christina Duftner, MD/PhD (Innsbruck, Austria), EULAR teacher
Annamaria Iagnocco, MD (Turin, Italy), EULAR teacher
Wolfgang Hartung, MD (Bad Abbach, Germany), EULAR/EFSUMB teacher
Johannes Strunk, MD/Prof. (Germany), EULAR teacher
Sara Zandonella-Callegher, MD/PhD (Bruneck, Italy)

Participants
The number of participants is limited to 30.

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 from EULAR member countries.

The course fee is 1100 EUR per participant without taxes (lodging and food included).
OBJECTIVES (in accordance with EULAR guidelines)
To learn
- physics/technique, applications, use and limitations of colour and power Doppler sonography in rheumatology
- intermediate level pathologies including B-mode and Doppler findings of inflammation at joints, tendons and entheses
- detection and quantification of structural changes at bones, cartilage, tendons and entheses in rheumatology
- characteristic findings in crystal arthropathies
- basics about ultrasound guided injections

MAIN TOPICS
- colour and power Doppler physics and technology; applications, use and limitations (including artifacts) of colour and power Doppler sonography
- intermediate level pathological findings (B-mode and colour/power Doppler) at joints, tendons, bursae and entheses
- structural changes at bones, tendons and entheses in rheumatology
- characteristic changes in crystal arthropathies
- ultrasound guided injections

LIVE DEMONSTRATIONS
- to demonstrate standard scans and intermediate level pathologies in patients with rheumatic diseases
- to discuss common colour and power Doppler artefacts and pitfalls
WORKSHOPS
- optimization of colour and power Doppler settings
- supervised standardized sonographic scanning of the shoulder, elbow, wrist and hand, hip, knee, ankle and foot in patients with rheumatic diseases
- supervised hands-on scanning with identification of intermediate level pathologies
- supervised training of ultrasound guided injections using phantoms

TIMETABLE
Musculoskeletal Sonography Course in Rheumatology, Intermediate Level, consists of >20 hours of activities within 3 days

REQUIREMENTS OF ATTENDEES
Previous performance of >100 sonographies is strongly recommended before participating at the intermediate-level course.
SCIENTIFIC PROGRAMME

Wednesday, April 26th, 2023

16:00 - 17:00   Registration

17:00 - 17:15   Welcome (M. Schirmer)

Application, indications and limitations of B-mode and color/power Doppler sonography in rheumatology
Chairperson: W. Hartung

17:15 - 17:45   Colour and power Doppler physics, settings and artifacts (T. De Zordo)

17:45 - 18:30   Use of B-mode and colour/power Doppler to detect and quantify synovial inflammation in rheumatology; differentiation of synovitis from ganglia and cysts (L. Coronel Tarancón)

18:30 - 19:00   Live demonstration: B-mode and colour/power Doppler findings in rheumatology (L. Coronel Tarancón)

19:00 - 19:30   Workshop 1: Supervised practical session: Doppler settings as well as B-mode and Doppler changes in patients with rheumatic diseases (all faculty)

20:00   Dinner (sponsored by TBN)
**Thursday, April 27th, 2023**

**Structural joint lesions in rheumatology**  
*Chairperson: C. Duftner*

- **08:30 - 09:15** Morphology and quantification of bone erosions, osteophytes and cartilage damage (*S. Zandonella-Callegher*)

- **09:15 - 09:30** **Live demonstration**: Structural lesions in patients with rheumatic diseases (*S. Zandonella-Callegher*)

- **09:30 - 11:00** **Workshop 2**: Supervised practical session: Structural lesions in patients with rheumatic diseases (*all faculty*)

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

**Tendon and bursal pathologies: Inflammatory and structural lesions**  
*Chairperson: J. Strunk*

- **11:30 - 12:30** Tendon and bursal pathologies at shoulder: tendinosis, paratenonitis, tendon subluxation/luxation, intrasubstance tendon lesions, tendon impingement, tendon tears (*W. Hartung*)

- **12:30 - 13:15** **Live demonstration**: Standard scans and tendon/bursal pathologies at shoulder in rheumatic diseases (*W. Hartung*)

- **13:15 - 14:15** **Lunch**
14:15 - 15:30  **Workshop 3**: Supervised practical session: Shoulder pathologies in patients with rheumatic diseases (*all faculty*)

**Sonography-guided periarticular and articular injections**  
*Chairperson:* C. Dejaco

15:30 - 16:00  Performance and value of sonography guided periarticular and articular injections (*T. DeZordo*)

16:00 - 16:15  **Live demonstration**: Sonography guided injections using a phantom (*T. DeZordo*)

16:15 - 16:45  **Coffee break**

16:45 - 18:15  **Workshop 4**: Supervised practical session using phantoms: Ultrasound guided injections (*all faculty*)

**Satellite symposium (sponsored by TBN)**  
*Chairperson:* TBN  
18:15 - 19:15

19:30  **Dinner (sponsored by TBN)**
Tenosynovitis, Enthesitis, Tendonitis

Chairperson: A. Iagnocco

08:30 - 09:00 Detection and quantification of tenosynovitis and tendon tears (C. Duftner)

09:00 - 09:30 Enthesitis: B-mode and Doppler findings (C. Dejaco)

09:30 - 10:00 Live demonstration: Tenosynovitis, Enthesitis (C. Duftner, C. Dejaco)

10:00 - 11:00 Workshop 5: Supervised practical session: Tenosynovitis and Enthesitis (all faculty)

11:00 - 11:30 Coffee break

Microcrystal deposits and calcifications of ligaments, muscles, cartilage and synovia

Chairperson: T. De Zordo

11:30 - 12:00 Gout: characteristic ultrasound findings (J. Strunk)

12:00 - 12:30 CPPD-disease and soft tissue calcifications: ultrasound findings (A. Iagnocco)

12:30 - 13:00 Live demonstration: Ultrasound findings in gout and CPPD disease (J. Strunk, A. Iagnocco)
13:00 - 14:00  *Lunch*

14:00 - 15:15  **Workshop 6**: Supervised practical session: Crystal arthropathies (*all faculty*)

**Review of intermediate course learning objectives**
*Chairperson*: C. Dufner

15:15 - 16:15  What have we learnt in this course – key messages from all presentations (*W. Hartung*)

16:15 - 17.00  Image Quiz (*T. De Zordo*)

17:00 - 17:15  *Coffee break*

17:15 - 18:30  **Workshop 7**: Supervised practical session: Standard scans and intermediate course pathologies (*all faculty*)

18:30 - 18:45  *Summary, closing remarks and evaluation* (*M. Schirmer*)
This course is supported by: