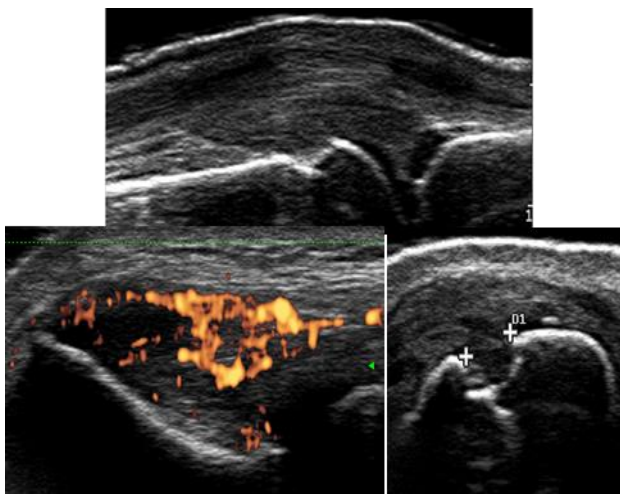


**MUSCULOSKELETAL SONOGRAPHY COURSE  
FOR RHEUMATOLOGISTS  
- INTERMEDIATE LEVEL -**

**April 26<sup>th</sup> – 28<sup>th</sup>, 2023  
Innsbruck, Austria**



**This course is scientifically endorsed by:**

## GENERAL INFORMATION

**Course opening:** Wednesday, April 26<sup>th</sup>, 2023 – 16.00

**Course closing:** Friday, April 28<sup>th</sup>, 2023 - 18.30

**Official course language:** English

**Congress Venue:**

AC Marriott Innsbruck

Salurner Straße 15

6020 Innsbruck, Austria

<https://www.marriott.com/en-us/hotels/innac-ac-hotel-innsbruck/overview/>

**Scientific Organizers:**

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**Senior-Organizer:**

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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](mailto: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 26<sup>th</sup>, 2023**

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

17:00 - 17:15 Welcome

### **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 27<sup>th</sup>, 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. De  
Zordo*)

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)**



**Friday, April 28<sup>th</sup>, 2023**

**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. Duftner*

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:**