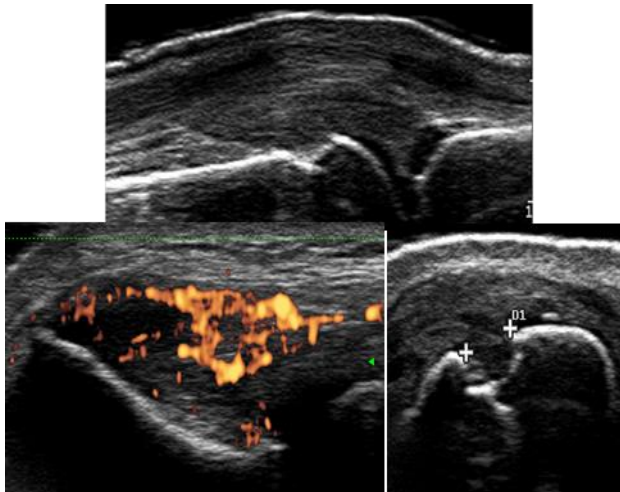


**MUSCULOSKELETAL SONOGRAPHY COURSE  
FOR RHEUMATOLOGISTS  
- INTERMEDIATE LEVEL -**

**September 5<sup>th</sup> – 7<sup>th</sup>, 2018  
Innsbruck, Austria**



**This course is scientifically endorsed by:**

## GENERAL INFORMATION

**Course opening:** Wednesday, September 5<sup>th</sup>, 2017 – 16.00

**Course closing:** Friday, September 16<sup>th</sup>, 2017 - 18.30

**Official course language:** English

**Congress Venue:**

Hotel Grauer Bär

Universitätsstraße 5-7

6020 Innsbruck, Austria

[www.innsbruck-hotels.at/hotel-grauer-baer/das-hotel](http://www.innsbruck-hotels.at/hotel-grauer-baer/das-hotel)

**Scientific Organizers:**

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***Managed by MAW, Vienna, supported by the Austrian Society of Rheumatology and Rehabilitation, Vienna; and the “Verein zur Förderung der Hämatologie, Onkologie und Immunologie”, Innsbruck, Austria***

## GENERAL INFORMATION

### **Faculty / Instructors**

*Peter Balint, MD (Budapest, Hungary), EULAR teacher*

*George Bruyn, MD (Lelystad, The Netherlands), EULAR teacher*

*Christian Dejaco, MD, PhD, MBA (Graz, Austria), EULAR teacher*

*Christina Duftner, MD, PhD (Innsbruck, Austria), EULAR teacher*

*Peter Mandl, MD, PhD (Vienna, Austria), EULAR teacher*

*Ingrid Möller, MD (Barcelona, Spain), EULAR teacher*

*Wolfgang Schmidt, MD (Berlin, Germany), EULAR teacher*

### **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 **900 EUR** per participant (**excl.** 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 is strongly recommended before participating the intermediate-level course

## SCIENTIFIC PROGRAMME

**Wednesday, September 5<sup>th</sup>, 2018**

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

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

### **Application, indications and limitations of B-mode and colour/power Doppler sonography in rheumatology**

*Chairperson: I. Möller*

17:15 - 17:45 Colour and power Doppler physics, settings and artifacts (*G. Bruyn*)

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 (*G. Bruyn*)

18:30 - 19:00 **Live demonstration:** B-mode and colour/power Doppler findings in rheumatology (*C. Dejaco*)

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*)

### **Satellite symposium (sponsored by NN)**

*Chairperson: M. Schirmer*

19:30 - 20:00 .....

20:00 **Dinner (sponsored by NN)**

**Thursday, September 6<sup>th</sup>, 2018**

### **Structural joint lesions in rheumatology**

*Chairperson: C. Duftner*

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

09:15 - 09:45 **Live demonstration:** Structural lesions in patients with rheumatic diseases (*P. Mandl*)

09:45 - 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: P. Balint*

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

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

13:15 - 14:15 **Lunch**

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

### **Sonography-guided periarticular and articular injections**

*Chairperson: I. Möller*

15:45 - 16:15 Performance and value of sonography guided  
periarticular and articular injections (*P. Balint*)

16:15 - 16:30 **Live demonstration:** Sonography guided  
injections using a phantom (*P. Balint*)

16:30 - 17:00 **Coffee break**

17:00 - 18:30 **Workshop 4:** Supervised practical session  
using phantoms: Ultrasound guided injections  
(*all faculty*)

### **Satellite symposium (sponsored by NN)**

*Chairperson: NN*

18:30 - 19:30 .....

20:00 **Dinner (sponsored by NN)**



**Friday, September 7<sup>th</sup>, 2018**

**Tenosynovitis, Enthesitis, Tendonitis**

*Chairperson: W. Schmidt*

- 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**

*Chairpersons: P. Mandl*

- 11:30- 12:00 Gout: characteristic ultrasound findings (*W. Schmidt*)
- 12:00- 12:30 CPPD-disease and soft tissue calcifications: ultrasound findings (*I. Möller*)
- 12:30- 13:00 **Live demonstration:** Ultrasound findings in gout and CPPD disease (*W. Schmidt, I. Möller*)
- 13:00 - 14:00 **Lunch**

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

**Review of intermediate course learning objectives**

*Chairpersons: C. Dejaco*

15:00- 16:00    What have we learnt in this course –  
key messages from all presentations  
(*W. Schmidt*)

16:00- 16.45    Image Quiz (*P. Balint*)

16:45 - 17:15    **Coffee break**

17:15 - 18:45    **Workshop 7:** Supervised practical session:  
Standard scans and intermediate course  
pathologies (*all faculty*)

18:45-19:00    **Summary, closing remarks and  
evaluation (*M. Schirmer*)**

**This course is supported by:**