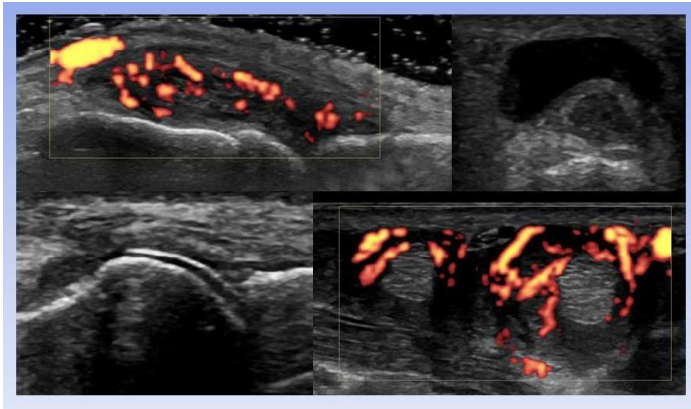




**MUSCULOSKELETAL SONOGRAPHY  
COURSE IN RHEUMATOLOGY  
- INTERMEDIATE LEVEL -  
Graz, October 4th – 6th 2020**



This course has been scientifically endorsed by:



Dear colleague,

We are happy to announce our intermediate level ultrasound course in rheumatology.

This course will introduce you into the main ultrasound pathologies in the field of rheumatology following the EULAR and EFSUMB recommendations.

Physicians and health care professionals with an interest in musculoskeletal sonography are going to learn the ultrasound characteristics of arthritis, tenosynovitis and enthesitis in patients with rheumatic diseases. Besides, specific findings in crystal arthropathies as well as structural changes in inflammatory and degenerative joint diseases will be discussed. We will also introduce you into the ultrasound guided infiltration technique.

As all our courses, this course will be composed of clinical lectures, live demonstrations and hands on sessions in small groups. All speakers and tutors are experienced sonographers and certified EULAR teachers. The majority of speakers are also EFSUMB level 3 sonographers.

This course is endorsed by EFSUMB, the ÖGR and the ÖGUM.

We invite all physicians and health care professionals with an interest in sonography in rheumatology to this EUROSON School course, intermediate level in Graz.

We hope to welcome you in October 2020 in Graz, Austria

**Christian Dejaco and Rusmir Husic**

## GENERAL INFORMATION

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#### Course opening

Sunday, 4th October 17:00 h

#### Course closing

Tuesday, 6th October 20:00 h

#### 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 (Graz, Austria / 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**

#### Organizing Secretariat

##### **Noelle Tybery**

Department of Rheumatology and Immunology  
8036 Graz, Austria

#### Course registration

Course applications (using the form at the end of this document) containing a contact e-mail address should be e-mailed to [noelle.tybery@klinikum-graz.at](mailto:noelle.tybery@klinikum-graz.at) or faxed to +43-316-38517813. For questions, please call +43-316-38517779

The course fee is **990 EUR** per participant (tax, lodging and food included).

## OBJECTIVES

- To learn physics/technique, applications, use and limitations of colour and power Doppler sonography in rheumatology.
- To learn intermediate level pathologies including B-mode and Doppler findings of inflammation at joints, tendons and entheses
- To learn detection and quantification of structural changes at bones, cartilage, tendons and entheses in rheumatology
- To learn characteristic findings in crystal arthropathies
- To learn 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

**Dieser Kurs wird für das Fach Rheumatologie für das DFP-Diplom anerkannt.**

## SCIENTIFIC PROGRAMME

**Sunday, 4th October 2020**

- 17:00 – 18:00      **Registration**
- 18:00 – 18:15      Welcome (*R. Husic*)
- Application, indications and limitations of B-mode and color/power Doppler sonography in rheumatology**  
*Chairperson: W. Schmidt*
- 18:15-18:45      Color and power Doppler physics, settings and artifacts (*W. Hartung*)
- 18:45-19:30      Use of B-mode and color/power Doppler to detect and quantify synovial inflammation in rheumatology; differentiation of synovitis from ganglia and cysts (*R. Husic*)
- 19:30-19:45      **Live demonstration:** B-mode and color/power Doppler findings in rheumatology (*R. Husic*)
- 19:45 - 20:00      **Satelite Symposium:** to be named
- 20:00                **Dinner**

**Monday, 5th October 2020**

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

*Chairperson: W. Hartung*

- 8:30-9:15            Morphology and quantification of bone erosions, osteophytes and cartilage damage (*P.Mandl*)
- 9:15-9:45            **Live demonstration:** Structural lesions in patients with rheumatic diseases (*P.Mandl*)
- 9:45-11:00          **Workshop 1:** 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: R. Husic*

- 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**

14:15-15:45

**Workshop 2:** Supervised practical session: Shoulder pathologies in patients with rheumatic diseases (*all faculty*)

**Sonography-guided periarticular and articular injections**

*Chairperson: C. Duftner*

15:45-16:15

Performance and value of sonography guided periarticular and articular injections (*W. Hartung*)

16:15-16:30

**Live demonstration:** Sonography guided injections using a phantom (*W. Hartung*)

16:30-17:00

*Coffee break*

17:00-19:00

**Workshop 3:** Supervised practical session using phantoms: Ultrasound guided injections (*all faculty*)

19:00-19:45

**Satellite Symposium:** *to be named*

20:00

*Dinner*

**Tuesday, 6th October 2020**

**Tenosynovitis, Enthesitis, Tendonitis,**

*Chairperson: W. Hartung*

8:30-9:00

Detection and quantification of tenosynovitis and tendon tears (*C. Duftner*)

9:00-9:30

Enthesitis: B-mode and Doppler findings (*C. Dejaco*)

9:30-10:00

**Live demonstration:** Tenosynovitis, Enthesitis (*C. Duftner, C. Dejaco*)

10:00-11:00

**Workshop 4:** 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 (*W. Schmidt*)

12:30- 13:00

**Live demonstration:** Ultrasound findings in gout and CPPD disease (*W. Schmidt*)

13:00- 14:00

*Lunch*

14:00- 15:00

**Workshop 5:** 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 Quizz (*W. Hartung*)

16:45- 17:15

*Coffee break*

17:15- 18:45

**Workshop 6:** Supervised practical session: Standard scans and intermediate course pathologies (*all faculty*)

18:45-19:00

*Summary, closing remarks and evaluation (C. Dejaco)*

Sponsors

