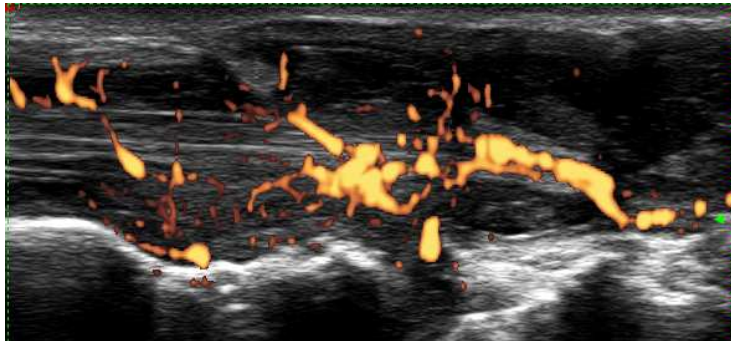


**MUSCULOSKELETAL SONOGRAPHY  
COURSE IN RHEUMATOLOGY  
- INTERMEDIATE LEVEL -  
Graz, October 18th – 20th, 2017**



This course has been scientifically endorsed by:



Dear colleague,

Following the great success of the basic course last year, we are glad to announce the next course of our series, which is an intermediate level ultrasound course.

This course will introduce you into the main ultrasound pathologies in the field of rheumatology.

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 of 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.

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 2017 in Graz, Austria

**Christian Dejaco and Rusmir Husic**

## GENERAL INFORMATION

### Course opening

Wednesday, October 18th, 2017 - h 17.00

### Course closing

Friday, October 20th, 2017 - h 19.00

### Official course language

English

### Congress Venue

Hotel Weitzer  
Grieskai 12-16,  
8020 Graz, Austria  
[www.weitzer.com](http://www.weitzer.com)

### Scientific Organizer

Christian Dejaco, MD, PhD, MBA  
Medical University Graz; Rheumatology service; South Tyrol  
Health Trust;  
Rusmir Husic, MD  
Medical University Graz

### Faculty

Christina Duftner, MD, PhD (Innsbruck, Austria) – EULAR  
teacher;  
Peter Mandl, MD, PhD (Vienna, Austria) – EULAR teacher,  
EFSUMB Level 3  
Christian Dejaco, MD, PhD, MBA (Graz, Austria / Bruneck,  
Italy) – EULAR teacher, EFSUMB Level 3  
Wolfgang Hartung, MD (Bad Abbach, Germany) – EULAR  
teacher, EFSUMB Level 3  
Wolfgang Schmidt, MD (Berlin, Germany) – EULAR teacher,  
EFSUMB Level 3  
Giorgio Tamborrini, MD (Basel, Switzerland) – EULAR  
teacher, EFSUMB Level 3

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 below) 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 **900 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

*Wednesday, October 18<sup>th</sup> 2017*

16:00-17:00	<b>Registration</b>
17:00-17:15	Welcome ( <i>C.Dejaco</i> )
	<b>Application, indications and limitations of B-mode and color/power Doppler sonography in rheumatology</b> <i>Chairperson: W. Schmidt</i>
17:15-17:45	Color and power Doppler physics, settings and artifacts ( <i>W. Hartung</i> )
17:45-18:30	Use of B-mode and color/power Doppler to detect and quantify synovial inflammation in rheumatology; differentiation of synovitis from ganglia and cysts ( <i>R. Husic</i> )
18:30-19:00	<b>Live demonstration:</b> B-mode and color/power Doppler findings in rheumatology ( <i>R. Husic</i> )
19:00-19:30	<b>Workshop 2:</b> Supervised practical session: Doppler settings as well as B-mode and Doppler changes in patients with rheumatic diseases ( <i>all faculty</i> )
20:00	<b>Dinner</b>

**Thursday, October 19<sup>th</sup> 2017**

**Structural joint lesions in rheumatology**

*Chairperson: G. Tamborrini*

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 (*G. Tamborrini*)

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

13:15-14:15

**Lunch**

14:15-15:45

**Workshop 3:** 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 4:** Supervised practical session using phantoms: Ultrasound guided injections (*all faculty*)

19:00-19:45

**Satelite Symposium:** to be named

20:00

**Dinner**

**Friday, October 20<sup>th</sup> 2017**

**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 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 (*G. Tamborrini*)
- 12:30- 13:00 **Live demonstration:** Ultrasound findings in gout and CPPD disease (*G. Tamborrini*)
- 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 Quizz (*W. Hartung*)

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** (*C. Dejaco*)



**SIEMENS**



## REGISTRATION FORM

MUSCULOSKELETAL SONOGRAPHY COURSE FOR  
RHEUMATOLOGISTS - Intermediate Level -

Fax: (+43)316-385-17813 or Mail: [noelle.tybery@klinikum-graz.at](mailto:noelle.tybery@klinikum-graz.at)

Name: \_\_\_\_\_

First name: \_\_\_\_\_ Titel: \_\_\_\_\_

Institution: \_\_\_\_\_

Address: \_\_\_\_\_

Tel.: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

**Please pay the registration fee not later than**

**30.6.2017 on account : 20241086373,**

**BLZ: 56.000 to Hypo Bank Styria**

**IBAN: AT55 5600 0202 4108 6373**

**BIC: HYSTAT2G**

**Titled : "Sonography Course 2017 – your Name"**