Dear colleague,

ultrasound is increasingly used in rheumatology for diagnostic and monitoring purposes: It is valuable to detect subclinical inflammation in arthritis and may support the exclusion of active inflammation in patients with chronic joint pain. Sonography may also be useful in patients with suspected large vessel arteritis, Sjögren’s syndrome, carpal tunnel syndrome and several other rheumatic conditions. In this advanced level EUROSON School course we will present the state of the art of ultrasound findings in inflammatory and non-inflammatory musculoskeletal conditions, connective tissue diseases and vasculitis. In addition, we will teach the application of sonography for the investigation of nerves, trauma and tumours. This course is 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 professionals interested to learn the applications of sonography in rheumatology to this EUROSON School course.

We hope to welcome you in November 2018 in Graz, Austria

Christian Dejaco and Rusmir Husic
**GENERAL INFORMATION**

**Course opening**
Wednesday, November 7th, 2018 - h 17.00

**Course closing**
Friday, November 9th, 2018 - h 19.00

**Official course language**
English

**Congress Venue**
Hotel Weitzer
Grieskai 12-16,
8020 Graz, Austria
www.weitzer.com

**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**
Wolfgang Hartung, Germany (EFSUMB level 3, EULAR teacher),
Wolfgang Schmidt, Germany (EFSUMB level 3, EULAR teacher),
Lene Terslev, Denmark (EFSUMB level 3, EULAR teacher),
Christian Dejaco, Austria (EFSUMB level 3, EULAR teacher),
Christina Duftner, Austria (EULAR teacher)
Rusmir Husic, Austria (EULAR teacher),
Peter Mandl, Austria (EFSUMB level 3, EULAR teacher),
Annamaria Iagnocco, Italy (EFSUMB level 3, 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 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 (in accordance with EULAR guidelines)

- To refresh basic and intermediate level course contents
- To learn advanced level pathologies including characteristic B-mode and Doppler findings in inflammatory rheumatic diseases
- To learn findings in patients with peripheral nerve entrapment syndromes
- To learn characteristic findings in vasculitis and connective tissue diseases
- To get an introduction into the recognition of soft tissue tumours, sports injuries and pediatric rheumatology
- To learn about new developments and their relevance in the field of musculoskeletal ultrasound

MAIN TOPICS

- Basic, intermediate and advanced level pathologies and ultrasound based differential diagnosis of rheumatic diseases
- Peripheral nerve entrapment syndromes
- Ultrasound in vasculitis and connective tissue diseases
- Sonographic findings in patients with tumours, sports injuries and children with rheumatic diseases
- New developments: sonoelastography, 3D/4D ultrasound

LIVE DEMONSTRATIONS

- To demonstrate standard scans, basic, intermediate and advanced level pathologies
- To demonstrate sonography of peripheral nerves and vessels
- To discuss common artefacts and pitfalls

WORKSHOPS

- Supervised hands-on scanning of patients with rheumatic diseases

- Supervised introduction into sonography of peripheral nerves
- Supervised hands-on scanning of temporal arteries

REQUIREMENTS OF ATTENDEES

- Previous participation in basic and intermediate-level courses as well as previous performance of >400 ultrasound scans is recommended

EXAM OF PRACTICAL SKILLS

- A final practical exam will be offered to participants by international faculty members

COURSE REGISTRATION

The course is open for all attendees from EULAR and EFSUMB member countries. Applications should be e-mailed to noelle.tybery@klinikum-graz.at
Wednesday, November 7th, 2018

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

17:00-17:15  Welcome (C. Dejaco)

**Optimisation of technical settings**
*Chairperson: C. Duftner*

17:15-17:25  What the rheumatologist needs to know about Power Doppler settings (R. Husic)

**Refresher: standard scans and specific pathologies of hands and feet**
*Chairperson: C. Duftner*

17:25-17:50  Standard scans; basic, intermediate and advanced level pathologies at hands and feet (A. Iagnocco)

17:50-18:10  Quantification and scoring systems of synovitis and tenosynovitis, minimal requirements of documentation (A. Iagnocco)

18:10-18:25  **Live demonstration:** B-mode and Power Doppler findings in Rheumatoid Arthritis (A. Iagnocco)

18:25-18:45  Case series: Differentiation of rheumatoid arthritis, psoriatic arthritis, and osteoarthritis by sonography (R. Husic)

18:45-19:30  **Workshop 1:** Supervised practical session: Hands and feet in patients with rheumatic diseases *(all faculty)*

19:30-20:00  **Satelite Symposium:**
*Sponsered bei UCB*

20:00  **Dinner**
Refresher: standard scans and specific pathologies at large joints of upper limbs
Chairperson: A. Iagnocco

8:30-9:00 Standard scans; basic, intermediate and advanced level pathologies of elbow (C. Dejaco)

9:00-9:20 Live demonstration: Standard scans and pathologies of elbow (C. Dejaco)

9:20-9:50 Standard scans; basic, intermediate and advanced level pathologies of shoulder (W. Schmidt)

9:50-10:10 Live demonstration: Standard scans and pathologies of the Shoulder (W. Schmidt)

10:10-10:30 Case series: Specific pathologies in shoulders of patients with polymyalgia rheumatica, rheumatoid arthritis and degenerative disorders (C. Duftner)

10:30-11:00 Coffee break

11:00-13:00 Workshop 2: Supervised practical session: large joints of upper limbs in patients with rheumatic diseases (all faculty)

13:00-14:00 Lunch

Refresher: standard scans and specific pathologies at large joints of lower limbs
Chairperson: R. Husic

14:00-14:30 Standard scans; basic, intermediate and advanced level pathologies of hip and knee (W. Hartung)

14:30-14:50 Live demonstration: Standard scans and pathologies of hip and knee (W. Hartung)

14:50-15:10 Standard scans; basic, intermediate and advanced level pathologies of ankle (P. Mandl)

15:10-15:30 Live demonstration: Standard scans and pathologies of ankle (P. Mandl)

15:30-15:45 Case series: Specific pathologies in crystal arthropathies and sarcoidosis (C. Duftner)

15:45-16:15 Coffee break

16:15-17:45 Workshop 3: Supervised practical session: large joints of lower limbs in patients with rheumatic diseases (all faculty)

Refresher: enthesal and ligament lesions
Chairperson: P. Mandl

17:45-18:05 Enthesitis: specific findings and quantification (L. Terslev)
18:05-18:30  Ligament lesions including sport injuries (L. Terslev)

18:30-19:15  **Workshop 4:** Supervised practical session: Supervised practical session on entheses and ligaments of lower limb (*all faculty*)

19:15 – 19:45  **Satellite Symposium:**
sponsored bei BMS

20:00  *Dinner*

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**Friday, November 9th, 2018**

**Role of ultrasound in vasculitis**
*Chairperson:*  L. Terslev

8:30-9:10  Evaluation of vessels and detection of vasculitis by sonography: Diagnostic value in clinical practice, ultrasound settings and possible pitfalls (*W. Schmidt*)

9:10-9:30  **Live demonstration:** Ultrasound of temporal arteries and large vessels (*W. Schmidt*)

9:30-10:30  **Workshop 5:** Supervised practical session of temporal arteries and large vessels (*all faculty*)

10:30-11:00  *Coffee break*

**Special indications of sonography in rheumatology**
*Chairpersons:*  C. Dejaco

11:00-11:20  Muscle sonography: Myositis, Myopathy and (sports related) muscle injury (*P. Mandl*)

11:20-11:40  Specific aspects of ultrasound in pediatric rheumatology (*W. Schmidt*)

11:40-12:00  Sonography of salivary glands in patients with Sjögren’s syndrome (*C. Dejaco*)
12:00-12:20 Soft tissue masses, loose bodies, foreign bodies and common tumours (L. Terslev)

12:20-12:40 Value of ultrasound-guided interventions in clinical practice (C. Duftner)

12:40-13:00 Scanning of sacroiliac joints (W. Hartung)

13:00-13:15 Live demonstration: Sacroiliac joint sonography (W. Hartung)

13:15-14:15 Lunch

Peripheral nerve sonography for the rheumatologist
Chairperson: W. Schmidt

14:15-15:00 Sonoanatomy and pathology of peripheral nerves (W. Hartung)

15:00-15:20 Live demonstration: Sonography of peripheral nerves (W. Hartung)

15:20-16:00 Workshop 6: Supervised practical session: Sonography of peripheral nerves (all faculty)

16:00-16:30 Coffee break

Research of sonography in rheumatology
Chairpersons: W. Hartung

16:30-16:45 What are the upcoming ultrasound technologies in rheumatology? (sonoelastography, 3- and 4-dimensional MSUS) (A. Iagnocco)

16:45-17:00 How to improve your ultrasound skills (courses, e-learning) (P. Mandl)

17:00-17:30 Case series/Quiz: Uncommon sonographic pathological findings in rheumatology (L. Terslev)

Practical skills examination

17:30-18:50 Workshop 7/ exam: Examination of practical ultrasound skills and discussion of images and cases (all faculty)

18:50-19:00 Summary and closing remarks (C. Dejaco)
REGISTRATION FORM

MUSCULOSKELETAL SONOGRAPHY COURSE FOR RHEUMATOLOGISTS
-Advanced Level-

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

Name: ________________________________________________
First name: ____________________________
Titel: ___________________________________
Institution: _________________________________________
Address: ____________________________________________
Tel.: __________________ Fax: _______________________
Email: _____________________________________________

Please pay the registration fee not later than 30.6.2018 on account: 20241086373,
BLZ: 56.000 to Hypo Bank Styria
IBAN: AT55 5600 0202 4108 6373
BIC: HYSTAT2G
Titled: “Sonography Course 2018 – your Name”