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.

We invite all physicians and health care professionals interested to learn the applications of sonography in rheumatology to this EUROSON School course.

We hope to welcome you in March 2015 in Graz, Austria

Christian Dejaco and Wolfgang Hartung
GENERAL INFORMATION

ORGANIZATION AND COMMITTEE

Scientific Organizers
Christian Dejaco, Austria
Wolfgang Hartung, Germany

Local Co-Organizer
Winfried Graninger, Austria

Local Secretary
Noelle Tybery, Austria

Faculty / Instructors
Wolfgang Hartung, Germany (EFSUMB level 3, EULAR teacher), rheumatologist
Marina Backhaus, Germany (EFSUMB level 3, EULAR teacher), rheumatologist
Wolfgang Schmidt, Germany (EFSUMB level 3, EULAR teacher), rheumatologist
Tobias DeZordo, Austria, radiologist
Lene Terslev, Denmark (EFSUMB level 3, EULAR teacher), rheumatologist
G. Tamborrini, Switzerland (EFSUMB level 3, EULAR teacher), rheumatologist
Claudia Schüller-Weidekamm, Austria, radiologist
Christian Dejaco, Austria (EULAR teacher), rheumatologist
Christina Dufnert, Austria (EULAR teacher), rheumatologist
Rusmir Husic, Austria (EULAR teacher), rheumatologist

Course opening
Thursday, March 19th, 2015 - h 12:00

Course closing
Saturday, March 21st, 2015 - h 13:45

Participants
The number of participants is limited to 30

Practical sessions
The number of participants per teacher in practical sessions is four at maximum.

Official course language
English

Congress Venue
Hotel Novapark
Fischeraustraße 22
8051 Graz, Austria
www.novapark.at/

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Registration Fees

Participants: 1300 EUR (includes participation, all course materials, lodging and food). Hotel accommodation will be organized for each participant as registration process is completed.

Accompanying Persons should directly contact the congress venue (Hotel Novapark) for booking and prices

Course applications should be e-mailed to
noelle.tybery@klinikum-graz.at, or
christian.dejaco@medunigraz.at

Bank details and conditions of payment will be communicated upon receipt of the course application.

GENERAL INFORMATION

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 and salivary glands

TIMETABLE
• Musculoskeletal Sonography Course in Rheumatology, Advanced Level, consists of >20 hours of activities within 3 days:
  • 9 hours and 10 minutes for lectures
  • 2 hours and 50 minutes for live demonstrations
  • 9 hours and 5 minutes for supervised hands-on scanning of models and/or patients with musculoskeletal disorders including the final (voluntary) exam

REQUIREMENTS OF ATTENDEES
• The number musculoskeletal ultrasound scans performed will be questioned. Previous performance of >400 is strongly recommended before participating the advanced-level course

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 EFSUMB member countries. Applications should be e-mailed to noelle.tybery@klinikum-graz.at or christian.dejaco@medunigraz.at

SCIENTIFIC PROGRAMME

Thursday, March 19th, 2015

12:00-12:00 Registration
13:00-13:05 Welcome (C. Dejaco)

Optimisation of technical settings
Chairperson: C. Duftner
13:05-13:15 What the rheumatologist needs to know about Power Doppler settings (T. DeZordo)

Refresher: standard scans and specific pathologies of hands and feet
Chairperson: C. Duftner
13:15-13:50 Standard scans; basic, intermediate and advanced level pathologies of joints and periarticular structures (M. Backhaus)
13:50-14:10 Quantification and scoring systems of synovitis and tenosynovitis, minimal requirements of documentation (M. Backhaus)
14:10-14:30 Live demonstration: B-mode and Power Doppler findings in Rheumatoid Arthritis (M. Backhaus)
14:30-14:50 Case series: Differentiation of rheumatoid arthritis, psoriatic arthritis, crystal arthropathies and osteoarthritis by sonography (R. Husic)
14:50-15:50  **Workshop 1:** Supervised practical session: Hands and feet in patients with rheumatic diseases *all faculty*

15:50-16:00  **Coffee break**

**Refresher: standard scans and specific pathologies at large joints of upper limbs**  
*Chairperson:* C. Dejaco

16:00-16:30  Standard scans; basic, intermediate and advanced level pathologies of elbow *(G. Tamborrini)*

16:30-16:50  **Live demonstration:** Standard scans and pathologies of elbow *(G. Tamborrini)*

16:50-17:20  Standard scans; basic, intermediate and advanced level pathologies of shoulder *(W. Schmidt)*

17:20-17:45  **Live demonstration:** Standard scans and pathologies of large joints of upper limbs *(W. Schmidt)*

17:45-18:00  Case series: Specific pathologies in shoulder scans of patients with polymyalgia rheumatica, rheumatoid arthritis and degenerative disorders *(C. Duftner)*

18:00-19:30  **Workshop 2:** Supervised practical session: large joints of upper limbs in patients with rheumatic diseases *all faculty*

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19:30-20:15  **Satellite-Symposium (R. Husic)**

20:30  **Dinner**

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Friday, March 20th, 2015

**Refresher: standard scans and specific pathologies at large joints of lower limbs**  
*Chairperson:* M. Backhaus

08:30-09:00  Standard scans; basic, intermediate and advanced level pathologies of hip and knee *(L. Terslev)*

09:00-09:20  **Live demonstration:** Standard scans and pathologies of hip and knee *(L. Terslev)*

09:20-09:40  Standard scans; basic, intermediate and advanced level pathologies of ankle *(G. Tamborrini)*

09:40-10:00  **Live demonstration:** Standard scans and pathologies of ankle *(G. Tamborrini)*

10:00-10:15  Case series: Specific pathologies in crystal arthropathies and sacroidosis *(C. Dejaco)*

10:15-10:30  **Coffee break**
Refresher: Ultrasound-guided musculoskeletal interventional procedures  
Chairperson:  T. DeZordo
10:30-10:45 Value of ultrasound-guided interventions in clinical practice (C. Duftner)

Refresher: enthesal and ligament lesions  
Chairperson:  T. DeZordo
10:45-11:05 Enthesitis: specific findings and quantification (L. Terslev)
11:05-11:30 Ligament lesions including sport injuries (C. Schüller-Weidekamm)
11:30-11:45 Scanning of sacroiliac joints (W. Hartung)
11:45-12:00 Live demonstration: Sacroiliac joint sconography (W. Hartung)

12:00-13:00 Lunch

13:00-14:30 Workshop 3: Supervised practical session on large joints, entheses and ligaments of lower limb (all faculty)

Role of ultrasound in vasculitis  
Chairperson:  L. Terslev
14:30-15:00 Evaluation of vessels and detection of vasculitis by sonography: Diagnostic value in clinical practice, ultrasound settings and possible pitfalls (W. Schmidt)

15:00-15:20 Live demonstration: Ultrasound of temporal arteries and large vessels (W. Schmidt)

15:20-16:00 Workshop 4: Supervised practical session of temporal arteries and large vessels (all faculty)

16:00-16:15 Coffee break

Special indications of sonography in rheumatology  
Chairpersons:  G. Tamborrini
16:15-16:40 Muscle sonography: Myositis, Myopathy and (sports related) muscle injury (C. Schüller-Weidekamm)

16:40-16:50 Specific aspects of ultrasound in pediatric rheumatology (C. Schüller-Weidekamm)

16:50-17:10 Sonography of salivary glands in patients with Sjögren’s syndrome (C. Dejaco)

17:10-17:30 Soft tissue masses, loose bodies, foreign bodies and common tumours (T. DeZordo)

17:30-19:30 Workshop 6: Supervised practical session of muscles and salivary glands (all faculty)

20:00 Dinner
### Peripheral nerve sonography for the rheumatologist

**Chairperson:** W. Schmidt

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:30-09:30</td>
<td>Sonoanatomy and pathology of peripheral nerves and (W. Hartung)</td>
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<tr>
<td>09:30-10:00</td>
<td><strong>Live demonstration:</strong> Sonography of peripheral nerves (W. Hartung)</td>
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<tr>
<td>10:00-11:00</td>
<td><strong>Workshop 5:</strong> Supervised practical session: Sonography of peripheral nerves (all faculty)</td>
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#### Coffee break

#### Research of sonography in rheumatology

**Chairpersons:** W. Hartung

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<th>Time</th>
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<tbody>
<tr>
<td>11:15-11:35</td>
<td>What are the upcoming ultrasound technologies in rheumatology? (sonoelastography, 3- and 4-dimensional MSUS) (T. DeZordo)</td>
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<td>11:35-11:50</td>
<td>How to improve your ultrasound skills (courses, e-learning) (G. Tamborrini)</td>
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<tr>
<td>11:50-12:10</td>
<td>Case series/Quiz: Uncommon sonographic pathological findings in rheumatology (M. Backhaus)</td>
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<tr>
<td>12:10-12:30</td>
<td>Case series/Quiz: Uncommon sonographic pathological findings in rheumatology (W. Schmidt)</td>
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### Practical skills examination

**Workshop 7/ exam:** Examination of practical ultrasound skills and discussion of images and cases (all international faculty)

**13:35-13:45** Summary and closing remarks (C. Dejaco)

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**Weitere Sponsoren:**

Sonoarena, GE healthcare, Siemens

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**Practical skills examination**

12:35-13:35  **Workshop 7/ exam**: Examination of practical ultrasound skills and discussion of images and cases (all international faculty)

13:35-13:45  **Summary and closing remarks (C. Dejaco)**