

29th EULAR Sonography Course – MSUS Intermediate

Denmark, Copenhagen

Sunday, 29 May 2022 – Wednesday, 1 June 2022



The 29th EULAR Sonography Course will be run simultaneously at three levels, basic, intermediate and advanced, each of them being a combination of lectures and hands-on scanning of models and/or patients with musculoskeletal disorders in small groups with experienced tutors. The course has been designed following the recommendations for the content and conduct of EULAR musculoskeletal ultrasound courses (Naredo E, Bijlsma JW, Conaghan PG, et al. *Ann Rheum Dis* 2008; 67:1017-22).

ORGANISATION & COMMITTEE

Scientific Organisers

- Lene Terslev (Denmark)
- Marcin Szkudlarek (Denmark)
- Uffe Møller Døhn (Denmark)

Faculty Members

- Alessandra Bruns (Canada)
- Andrea Delle Sedie (Italy)
- Andreas Diamantopoulos (Norway)
- Anna Ciechomska (UK)
- Alojzija Hocevar (Slovenia)
- Andrew Filer (UK)
- Carlo Martinoli (Italy)
- David Bong (Spain)
- David Kane (Ireland)
- Esperanza Naredo (Spain)
- Emilio Filippucci (Italy)
- Georgios Filippou (Italy)
- George Bruyn (The Netherlands)
- Hilde Berner Hammer (Norway)
- Ingrid Möller (Spain)
- Jacqueline Uson (Spain)
- Maria Antonietta D'Agostino (France)
- Marina Backhaus (Germany)
- Marion Kortekaas (The Netherlands)
- Maria Stoenoiu (Belgium)
- Nemanja Damjanov (Serbia)
- Peter Mandl (Austria)
- Peter Balint (Hungary)
- Richard Wakefield (UK)
- Sarah Ohrndorf (Germany)
- Søren Torp-Pedersen (Denmark)
- Stavros Chyridis (Denmark)
- Stephanie Finzel (Germany)
- Ulrich Fredberg (Denmark)
- Wolfgang Schmidt (Germany)
- Zunaid Karim (UK)

Special Guest Faculty

- Annamaria Iagnocco (Italy)
- Daniel Windschall (Germany)
- Mikael Boesen (Denmark)
- Jørgen Arendt Jensen (Denmark)

Organising Secretariat

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EULAR Committee

EULAR Education Committee, Live Courses & Meetings Sub-Committee

COURSE DESCRIPTION

The **INTERMEDIATE COURSE** will focus on a wide spectrum of rheumatic and musculoskeletal pathologies.

It is designed for participants with previous performance of a minimum of 10 standardised MSUS examinations of each joint region (i.e. shoulder, elbow, wrist & hand, hip, knee, ankle & foot) and attendance to a basic MSUS course (either a EULAR MSUS Basic course, or a EULAR scientifically endorsed basic course, or a national MSUS Basic course).

This course is one of the criteria for EULAR Competency Assessment in MSUS in Rheumatology – Level 1:

- criterion 1, EULAR Online Introductory Ultrasound Course
- criterion 2, Basic EULAR MSUS Course
- criterion 3, Intermediate EULAR MSUS course
- criterion 4, Advanced EULAR MSUS course

(or other equivalent level of MSUS courses by other national societies / EULAR scientifically endorsed MSUS Courses)

For more details, please follow this link: <https://esor.eular.org/course/view.php?id=94>

Learning objectives

- To know the Doppler physics, technology, settings and artefacts.
- To know the application, indications and limitations of Doppler in rheumatology.
- To identify the spectrum of rheumatic and musculoskeletal abnormalities in each anatomic area (e.g. joint synovitis, tenosynovitis, enthesopathy, tendinosis, paratenonitis, tendon sub/luxation, tendon impingement, tendon tears, bone erosions, osteophytes, ganglia and cysts, articular cartilage lesions, peri- and intra-articular microcrystal deposit, soft tissue calcifications).
- To detect and quantify synovial, tenosynovial, and enthesal inflammation.
- To detect and quantify structural joint damage (i.e. bone, tendons, cartilage).
- To perform sonographic-guided periarticular and intra-articular injections.

GENERAL INFORMATION

Course venue

Tivoli Hotel & Congress Center

Arni Magnussons Gade 2, Copenhagen, 1577, Denmark

Web: <https://www.tivolihotel.com/meetings>

Course dates

Sunday, 29 May 2022 (Start at 14:30) – Wednesday, 1 June 2022 (End at 12:30)

Official language

English

Maximum participants

60

Certification

After the course, all participants who have successfully completed the course will receive a certificate of attendance on their EULAR School user account. 100% course attendance is required.

Course fee

1000 € (VAT included), package includes:

Sunday, 29 May 2022

- Full access to the Course
- Afternoon coffee break

Monday, 30 May 2022

- Full access to the Course
- Morning & Afternoon coffee break
- Lunch

Tuesday, 31 May 2022

- Full access to the Course
- Morning & Afternoon coffee break
- Lunch

Wednesday, 1 June 2022

- Full access to the Course
- Morning coffee break

***Note:** hotel/accommodation is not included in the course fee. EULAR will provide preferred rates for hotel/s.

REGISTRATION

Application requirements

Regular participants:

- 6 PowerPoint files with 1 normal examination each of the following joint regions:
 - shoulder,
 - elbow,
 - wrist & hand,
 - hip,
 - knee,
 - ankle & foot (i.e. in total 6 normal examinations, one of each joint region).
- Certification proofs for either:
 - Basic EULAR MSUS Course certificate
Or
 - Basic EULAR scientifically endorsed MSUS course attendance
Or
 - Other equivalent level of Basic MSUS course by other national societies.
- Completion of EULAR Online Introductory Ultrasound Course is highly recommended, but not mandatory for course participation. However, it is a requirement for EULAR Competency Assessment – Level 1. For more details, please follow this link: <https://esor.eular.org/course/view.php?id=94>

Application process

Online: [link to registration page tba](#)

Please login to your EULAR School of Rheumatology account to register. If you do not have a School account, you will need to create one before applying.

Registration deadline: 31 March 2022

Early registration is advisable. Number of participants is limited.

Notification: 2-6 weeks after the receipt of your application.

Your application will be reviewed by a faculty member of the course.

Bursary

EULAR grants **5 bursaries** in the amount of **EUR 1000 each**. The amount of the bursary will be deducted from the course fee. Please apply with your motivation letter, CV and (if any) publication list within the registration system.

Bursary application deadline: 31 March 2022

Notification: mid-April 2022

Detailed Programme

Day 1 - Sunday, 29 May 2022

[intermediate]

Time	Type of session & Title	Speakers
12:00 – 14:30	Check In & Registration	
14:30 – 14:45	Welcome and overview <ul style="list-style-type: none"> Objectives and content of the course EULAR Competency assessment in MSUS 	M. Szkudlarek MA. D'Agostino
Chairs: M. Szkudlarek and S. Torp-Pedersen		
14:45 – 15:15	Doppler physics and technology <ul style="list-style-type: none"> Doppler setting optimization Doppler artefacts and pitfalls 	S. Torp-Pedersen
15:15 – 15:45	Applications, indications and limitations of Doppler in rheumatic and musculoskeletal diseases	M. Szkudlarek
15:45 – 16:15	B-mode and Doppler synovitis and tenosynovitis <ul style="list-style-type: none"> Definition, detection, quantification, and pitfalls 	E. Filippucci
16:15 – 16:45	COFFEE BREAK	
16:45 – 18:30	Workshop [Models] <ul style="list-style-type: none"> Supervised practical handling of Doppler US machine settings and Doppler artefacts. Supervised hands-on scanning of patients with synovitis and tenosynovitis. 	Faculty & Tutors 1) E. Filippucci 2) H. Rezaei 3) J. Kitchen 4) K. Ellegraad 5) M. Stoenoiu 6) M. Ziegelash 7) S. Torp-Pedersen 8) T. Møller 9) Z. Karim 10) W. Schmidt
Chair: M. Stoenoiu		
18:30 – 19:00	US tendon lesions <ul style="list-style-type: none"> (e.g. tendinosis, tears, sub/luxation, impingement) Definition, detection, quantification, and pitfalls 	Z. Karim

Day 2 - Monday, 30 May 2022

[intermediate]

Time	Type of session & Title	Speakers
Chairs: G. Filippou and S. Finzel		
08:30 – 09:15	B-mode and Doppler enthesopathy and dactylitis <ul style="list-style-type: none"> Definition, detection, quantification, and pitfalls (30 mins) Live demo (15 mins) 	MA. D'Agostino
09:15 – 09:35	US bone abnormalities <ul style="list-style-type: none"> Definition, detection, quantification, and pitfalls 	S. Finzel
09:35 – 09:55	US cartilage abnormalities <ul style="list-style-type: none"> Definition, detection, quantification, and pitfalls 	P. Mandl
09:55 – 10:45	US assessment of crystal arthropathies <ul style="list-style-type: none"> gout, CPPD disease (30 mins) live demo (20 mins) 	G. Filippou A. Hocevar
10:45 – 11:15	COFFEE BREAK	
11:15 – 13:00	Workshop <ul style="list-style-type: none"> Supervised hands-on scanning of patients with enthesopathy, dactylitis, tendon lesions, bone and cartilage abnormalities, and crystal arthropathies. 	Faculty & Tutors 1) A. Hocevar 2) E. Filippucci 3) G. Filippou 4) H. Rezaei 5) J. Kitchen 6) K. Ellegaard 7) MA. D'Agostino 8) M. Ziegelash 9) P. Mandl 10) S. Finzel
13:00 – 14:30	LUNCH	
Chairs: A. Diamantopoulos and P. Balint		
14:30 – 15:10	US diagnosis of hip pathology Live demo of pathological hip (20 mins)	G. Filippou M. Kortekaas
15:10 – 15:50	US diagnosis of knee pathology Live demo of pathological knee (20 mins)	P. Balint A. Diamantopoulos
15:50 – 16:30	US diagnosis of elbow pathology Live demo of pathological elbow (20 mins)	W. Schmidt J. Uson
16:30 – 17:00	COFFEE BREAK	

17:00 – 19:00	<p>Workshop</p> <ul style="list-style-type: none"> Supervised hands-on scanning of patients with elbow, hip and knee inflammatory and degenerative diseases 	<p>Faculty & Tutors</p> <ol style="list-style-type: none"> 1) A. Diamantopoulos 2) E. Qvistgaard 3) J. Uson 4) K. Ellegraad 5) M. Kortekaas 6) M. Ziegelash 7) N. Damjanov 8) S. Chrysidis 9) T. Møller 10) W. Schmidt
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Day 3 - Tuesday, 31 May 2022

[intermediate]

Time	Type of session & Title	Speakers
Chairs: S. Chrysidis		
08:30 – 09:30	<p>US diagnosis of wrist and hand pathology (40mins) Live demo of pathological wrist and hand (20 mins)</p>	M. Szkudlarek A. Ciechomska
09:30 – 10:30	<p>US diagnosis of ankle and foot pathology (40 mins) Live demo of pathological ankle and foot (20 mins)</p>	R. Wakefield S. Chrysidis
10:30 – 11:00	COFFEE BREAK	
11:00 – 13:00	<p>Workshop</p> <ul style="list-style-type: none"> Supervised hands-on scanning of patients with wrist/hand and ankle/foot inflammatory and degenerative diseases 	<p>Faculty & Tutors</p> <ol style="list-style-type: none"> 1) A. Filer 2) E. Qvistgaard 3) G. Bryun 4) G. Filippou 5) H. Rezaei 6) J. Kitchen 7) K. Ellegaard 8) M. Ziegelash 9) S. Chrysidis 10) S. Finzel
13:00 – 14:30	LUNCH	
Chairs: N. Damjanov and Z. Karim		
14:30 – 15:00	How to write and publish a paper on MSUS?	A. Iagnocco
15:00 – 16:30	<p>US diagnosis of shoulder pathology (40 mins) Live demo of pathological shoulder (20 mins)</p>	Z. Karim N. Damjanov

16:30 – 17:00	COFFEE BREAK	
17:00 – 19:00	<p>Workshop</p> <ul style="list-style-type: none"> Supervised hands-on scanning of patients with shoulder inflammatory and degenerative diseases. 	<p>Faculty & Tutors</p> <ol style="list-style-type: none"> 1) A. Bruns 2) E. Qvistgaard 3) H. Rezaei 4) J. Kitchen 5) J. Guldborg-Møller 6) K. Ellegaard 7) M. Ziegelash 8) S. Kjær 9) T. Møller 10) Z. Karim

Day 4 - Wednesday, 1 June 2022

[intermediate]

Time	Type of session & Title	Speakers
Chairs: A. Bruns and H.B. Hammer		
08:30 – 10:00	<p>US-guided periarticular and intra-articular injections</p> <p>Demo of US guided injections (45 mins)</p>	<p>A. Bruns H.B. Hammer</p>
10:00 – 10:30	COFFEE BREAK	
10:30 – 12:15	<p>Workshop</p> <ul style="list-style-type: none"> Supervised US-guided injections 	<p>Faculty & Tutors</p> <ol style="list-style-type: none"> 1) A. Filer 2) A. Hocevar 3) E. Qvistgaard 4) H.B. Hammer 5) H. Rezaei 6) J. Kitchen 7) K. Ellegaard 8) M. Ziegelash 9) S. Kjær 10) T. Møller
12:15 – 12:30	Closing Remarks	M. Szkudlarek

Any changes to the scientific programme or to the list of speakers are possible until the beginning of the course. Further updates will be published on the [EULAR School of Rheumatology](#) homepage [link to registration page tba](#)