# 23<sup>RD</sup> EULAR SONOGRAPHY COURSE



5 – 7 June 2016 Leeds, United Kingdom

eular



# ORGANISATION AND COMMITTEE

### Scientific organiser

Dr Richard Wakefield, United Kingdom

### **Local Organiser**

Dr Richard Wakefield, Dr Zunaid Karim, Dr Andrew Brown

#### Scientific content.

The 23<sup>rd</sup> EULAR Sonography Course will be run simultaneously at two levels: 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 JWJ, et al. Ann Rheum Dis 2008; 67:1017-1022*).

#### **Faculty**

Peter Balint, Hungary; Michael Benjamin, UK; David Bong, Spain; Jose Antonio Bouffard, USA; Andrew Brown, UK; George A.W. Bruyn, The Netherlands; Paz Collado, Spain; Maria Antonietta D´Agostino, France; Nemanja Damjanov, Serbia; Andrea Delle Sedie, Italy; Emilio Filippucci, Italy; Frédérique Gandjbakhch, France; Andrew Grainger, UK; Walter Grassi, Italy; Hilde Berner Hammer, Norway; Annamaria Iagnocco, Italy; Fred Joshua, Australia; Sandrine Jousse-Joulin, France; David Kane, Ireland; Zunaid Karim, UK; Stephen Kelly, UK; Juhani M. Koski, Finland; Peter Mandl, Hungary; Ingrid Möller, Spain; Esperanza Naredo, Spain; Philip O'Connor, UK; Jordi Palau, Spain; Wolfgang Schmidt, Germany; Nanno Swen, The Netherlands; Marcin Szkudlarek, Denmark; Lene Terslev, Denmark; Richard J. Wakefield, UK.

### **Hands On Tutors**

Ishmail Atchia, UK; Artur Bachta, Poland; Sarang Chitale, UK, Anna Ciechomska, UK; Cristina Estrach UK; Dana Fodor, Romania; Jane Freeston, UK; Dana Georgescu, France; Adham Khalil, Egypt; Marion Kortekaas, the Netherlands; Rodina Liceva-Nestorova, Bulgaria; Mihaela Micu, Romania; Gael Mouterde, France; Margarida Oliveira, Portugal; Carlos Pineda, Mexico; Johannes Roth, Canada; Carlo Alberto Scire, Italy; Alistair Taggart. Ireland, Giorgio Tamborrini, Switzerland; Robert Thompson, UK; Violeta Vlad, Romania; Ahmed Zayat, UK; Sibel Aydin, Canada,

#### **Organising secretariat**

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# GENERAL INFORMATION

#### Course venue

The Queens Hotel
City Square, Leeds, West Yorkshire LS1 1PJ,
United Kingdom
W: www.qhotels.co.uk/our-locations/the-queens

### Official language

T: + 44 113 243 1323

English

#### **Course certification**

A certificate of attendance will be supplied to all participants and certificates corresponding to each level will be supplied to all participants having successfully passed the courses.

### **Course survey**

You will be asked to evaluate the courses with respect to educational content, organisation and venue. It is mandatory to fill out the online survey.

# REGISTRATION FEES

#### £ 1650 (incl. VAT) including:

#### Sunday, 5 June 2016

- Full access to the 23<sup>rd</sup> EULAR Sonography Course
- 1 night accommodation
- Afternoon coffee break
- Dinner

### Monday, 6 June 2016

- Full access to the 23<sup>rd</sup> EULAR Sonography Course
- 1 night accommodation
- Morning & Afternoon coffee breaks
- Lunch & Dinner

### Tuesday, 7 June 2016

- Full access to the 23<sup>rd</sup> EULAR Sonography Course
- Morning & Afternoon coffee breaks
- Lunch

## **Course opening**

Sunday, 5 June 2016, 09:00

# **Course closing**

Tuesday, 7 June 2016, 18:00

For local participants without hotel accommodation (upon request): £1500 (incl. VAT) including:

### Sunday, 5 June 2016

- Full access to the 23<sup>rd</sup> EULAR Sonography Course
- Afternoon coffee break
- Dinner

#### Monday, 6 June 2016

- Full access to the 23<sup>rd</sup> EULAR Sonography Course
- Morning & Afternoon coffee breaks
- Lunch & Dinner

# Tuesday, 7 June 2016

- Full access to the 23<sup>rd</sup> EULAR Sonography Course
- Morning & Afternoon coffee breaks
- Lunch



# COURSE DESCRIPTION

The **INTERMEDIATE COURSE** will focus on a wide spectrum of rheumatic pathologies. Previous performance of >100 musculoskeletal ultrasound scans and attendance of a basic musculoskeletal ultrasound course (either as a EULAR course, a EULAR scientifically endorsed course, or a national course) is mandatory before participating in an intermediate-level course.

### **Learning objectives**

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

The **ADVANCED COURSE** will focus on more complex or uncommon pathologies, newer technological developments, pathological findings in other musculoskeletal fields such as nerve, ligament, and muscle lesions and research related aspects of musculoskeletal ultrasound. It will include also paediatrics, vasculitis and sport related lesions. Previous performance of > 300 musculoskeletal ultrasound scans and attendance to an intermediate musculoskeletal EULAR ultrasound course is mandatory before participating in an advanced-level course.

#### **Learning objectives**

- To assess and score synovial, tenosynovial, subcutaneous and entheseal inflammatory activity
- To assess and score structural joint damage (i.e. bone, tendons, cartilage)
- To perform sonographic-guided complex musculoskeletal interventional procedures
- To know the role of ultrasound in connective tissue diseases (e.g. joint, salivary gland, skin, and lung involvement)
- To know the role of ultrasound in vasculitis and other vessel pathologies (e.g. atherosclerosis, thrombosis)
- To learn musculoskeletal ultrasound anatomy and pathological findings in paediatric rheumatic diseases
- To assess skin lesions involved in rheumatic disease
- To know and acquire hands-on experience with new technological developments in rheumatological ultrasound (e.g. 3D ultrasound, fusion imaging, sono-elastography).
- To detect peripheral nerve, ligament, and fibrocartilage lesions, myositis, muscle injury, soft tissue masses, and bone fractures
- To update evidence-based knowledge and emerging research fields on musculoskeletal ultrasound in rheumatology



# INTERMEDIATE COURSE PROGRAMME

SUNDAY, 5 JUNE 2016					
Time	Lecture, workshop session	Speaker	Room		
09:30 - 13:15	Registration				
13:15 - 13:25	Welcome	Dr Wakefield	Palm Court		
	Chair: Dr Bruyn				
13:30 - 14:00	<b>Lecture:</b> Doppler physics, technology and artefacts. Doppler setting optimization	Dr Terslev	Palm Court		
14:00 - 14:30	<b>Lecture:</b> B-mode and Doppler synovitis. Definition, detection and pitfalls	Dr Joshua	Palm Court		
14:30 - 15:00	<b>Lecture:</b> B-mode and Doppler tenosynovitis. Definition, detection and pitfalls	Dr Bruyn	Palm Court		
15:00 - 17:00	Workshop - Supervised practical handling of the colour and power Doppler US machine settings.  Doppler artefacts. Supervised hands-on scanning of patients with synovitis and tenosynovitis	All Faculty	Palm Court		
17:00 - 17:30	Coffee Break		Ark Royal		
	Chair: Dr Joshua				
17:30 – 17:50	Lecture: US cartilage abnormalities. Definition, detection and pitfalls	Prof Iagnocco	Palm Court		
17:50 - 18:10	<b>Lecture;</b> B-mode and Doppler tendinosis and tendon tear. Definition, detection and pitfalls	Prof Moller	Palm Court		
18:10 - 18:30	<b>Lecture:</b> US bone abnormalities. Definition, detection and pitfalls	Dr Szkudlarek	Palm Court		
19:30	Dinner		Queens Grill		



MONDAY, 6 JUNE 2016					
Time	Lecture, workshop session	Speaker	Room		
Chair: Prof D'Agostino					
08:30 - 08:55	Lecture: B-mode and Doppler enthesopathy and enthesitis. Definition, detection and pitfalls	Dr Gandjbakhch	Palm Court		
08:55 - 09:15	Lecture: Validity and role of US in crystal-related arthropathies	Dr Filippucci	Palm Court		
09:15 - 11:15	<b>Workshop -</b> Supervised hands-on scanning of patients with enthesopathy/enthesitis, tendinosis and tendon tear, bone and cartilage abnormalities, and crystal-related arthropathies	All Faculty	Palm Court		
11:15 - 11:40	Coffee Break		Queens Grill		
11:40 - 12:30	Lecture: US diagnosis of wrist and hand pathology Live demo	Prof Kane Dr Filippou	Palm Court		
12:30 - 12:50	Lecture: US diagnosis of elbow pathology Live demo	Dr Damjamov Dr Balint	Palm Court		
12:50 - 13:50 Lunch					
13:50 - 16:00	<b>Workshop -</b> Supervised hands-on scanning of patients with wrist/hands, elbow and hip inflammatory and degenerative disorders.	All Faculty	Palm Court		
16:00 - 16:20	Coffee Break		Ark Royal		
	Chair: Dr Hammer				
16:20 – 17:10	Lecture: US diagnosis of hip and knee pathology. Live demo	Dr Bruyn Dr Balint	Palm Court		
17:10 - 17:55	Lecture: US diagnosis of ankle and foot pathology Live demo	Dr Mandl Dr Koski	Palm Court		
17:55 - 18:30	Feedback/ Questions	Dr Wakefield	Palm Court		
19:00	Dinner		Queens Grill		



TUESDAY, 7 JUNE 2016					
Time	Lecture, workshop session	Speaker	Room		
09:00 - 11:00	Workshop - Supervised hands-on scanning of patients with wrist/hand and ankle/foot inflammatory and degenerative disorders	All Faculty	John Charles Suite		
11:00 - 11:20	11:00 - 11:20 Coffee Break		Ark Royal		
	Chair: Dr Swen				
11:20 - 11:50	<b>Lecture.</b> Validity and role of US in psoriatic arthritis: dactylitis, enthesitis, and synovial involvement	Prof D'Agostino	John Charles Suite		
11:50 - 12:40	Lecture: US diagnosis of shoulder pathology Live Demo	Dr Bouffard Dr Bruyn	John Charles Suite		
12:40 - 13:40	12:40 - 13:40 <b>Lunch</b>		Queens Grill		
13:40 - 15:40	<b>Workshop -</b> Supervised hands-on scanning of patients with shoulder inflammatory and degenerative disorders	All Faculty	John Charles Suite		
15:40 - 16:00 Coffee Break					
	Chair: Dr Mandl				
16:00 - 16:30	Lecture: Sonographic-guided periarticular and articular injections Live demo	Dr Koski Dr Mandl	John Charles Suite		
16:30 - 17:30	Workshop - Supervised sonographic-guided injections	All Faculty	John Charles Suite		
17:30 - 18:00	Closing Remarks/ Next Steps	Dr Wakefield	John Charles Suite		



# ADVANCED COURSE PROGRAMME

SUNDAY, 5 JUNE 2016				
Time	Lecture, workshop session	Speaker	Room	
09:15 - 13:00	Registration			
13:00 - 13:10	Welcome	Dr Wakefield	Queens Ballroom	
Chair: Dr Karim				
13:10 - 13:50	<b>Lecture:</b> Anatomy of the entheses, bursae, synovial recesses and synovial sheaths. Sonoanatomy, vascularization, tricks and pitfalls	Prof Benjamin and Prof Moller	Queens Ballroom	
13:50 - 14:20	<b>Lecture:</b> US of RA: B-mode and Doppler: validation, scoring and future research agenda	Dr Balint	Queens Ballroom	
14:20 - 14:40	Lecture: US bone abnormalities in rheumatoid arthritis and healthy subjects: validation, scoring and research agenda	Dr Filippucci	Queens Ballroom	
14:40 - 15:05	Lecture: B-mode and Doppler tenosynovitis in rheumatoid patients: validation, scoring and future research agenda	Dr Naredo	Queens Ballroom	
15:05 - 17:05	<b>Workshop -</b> Supervised hands-on scanning with focus on scoring synovitis, and tenosynovitis in patients with inflammatory arthritis	All Faculty	Queens Ballroom	
17:05 – 17:30	Coffee Break		Ark Royal	
	Chair: Prof Kane			
17:30 - 17:50	<b>Lecture:</b> Colour versus power Doppler. Semi-quantitative versus quantitative Doppler scoring	Dr Terslev	Queens Ballroom	
17:50 - 18:10	Lecture: US abnormalities in degenerative and crystal arthritis Validation and scoring	Dr Hammer	Queens Ballroom	
18:10 - 18:35	Lecture: B-mode and Doppler enthesopathy and enthesitis. Validation and scoring	Prof D'Agostino	Queens Ballroom	
18:35 - 19:00	<b>Lecture:</b> US of PsA joint involvement. B-mode and Doppler: validation and scoring	Prof Grassi	Queens Ballroom	
19:30	Dinner		Queens Grill	



MONDAY, 6 JUNE 2016			
Time	Lecture, workshop session	Speaker	Room
	Chair: Dr Kelly		
08:30 - 09:10	<b>Lecture:</b> US diagnosis of tendon, ligament, muscle, and bone traumatic and sport related lesions	Dr Bouffard	Queens Ballroom
09:10 - 11:00	Workshop - Supervised hands-on scanning with focus on scoring enthesopathy and enthesitis, bone and cartilage abnormalities. Supervised hands-on scanning of patients with traumatic and sport related musculoskeletal lesions	All Faculty	Queens Ballroom
11:00 - 11:20	Coffee Break		Ark Royal
	Chair: Dr Jousse-Joulin		
11:20 - 11:40	<b>Lecture:</b> US of joints and salivary glands in Sjorgren-Syndrome and other connective tissues diseases	Dr Jousse- Joulin	Queens Ballroom
11:40 - 12:00	Lecture: US of the skin and lungs in connective tissue diseases	Dr Delle Sedie	Queens Ballroom
12:00 - 12:20	<b>Lecture:</b> Role of ultrasound in vasculitis and other vessel pathologies (e.g. atherosclerosis, thrombosis), including Horton disease and polymyalgia rheumatica	Prof Schmidt	Queens Ballroom
12:20 - 12:40	Lecture: Sonographic-guided complex musculoskeletal interventional procedures	Dr Kelly	Queens Ballroom
12:40 - 13:15	Workshop - Supervised sonographic-guided interventional procedures	All Faculty	Queens Ballroom
13:15 - 14:10 <b>Lunch</b>			Queens Grill
14:10 - 15:40	<b>Workshop -</b> Supervised hands-on scanning of patients with connective tissue diseases, and representative skin and vessel abnormalities	All Faculty	Queens Ballroom
	Chair: Dr Bong		
15:40 - 16:00	Lecture: Complex anatomic areas and difficult US diagnosis in the knee Live demo	Dr Karim Prof Schmidt	Queens Ballroom
16:00 - 16:20	Lecture: Complex anatomic areas and difficult US diagnosis in the elbow Live demo	Dr Möller Dr Palau	Queens Ballroom
16:20 - 16:40 <b>Coffee Break</b>			Ark Royal
16:40 – 17:00	Lecture: Complex anatomic areas and difficult US diagnosis in the wrist and hand Live demo	Dr Bong Dr Palau	Queens Ballroom
17:00 - 17:20	Lecture: Complex anatomic areas and difficult US diagnosis in the hip and sacroiliac region Live demo	Dr Bong Dr Möller	Queens Ballroom
17:20 - 17:40	Lecture: Complex anatomic areas and difficult US diagnosis in the shoulder Live demo	Dr O'Connor Dr Grainger	Queens Ballroom
17:40 - 18:30	Lecture: Complex anatomic areas and difficult US diagnosis in the ankle Live demo	Dr Grainger Dr O'Connor	Queens Ballroom
19:00	Dinner		Queens Grill



TUESDAY, 7 JUNE 2016					
Time	Lecture, workshop session	Speaker	Room		
	Chair: Dr Möller				
08:30 - 09:00	Lecture: Anatomy and US scanning technique of peripheral nerves: validity and role of US in peripheral nerve lesions. Live demo	Dr Bong Dr Filippou	Queens Ballroom		
09:00 - 11:00	<b>Workshop</b> - Supervised hands-on scanning of complex anatomic areas	All Faculty	Queens Ballroom		
11:00 - 11:25	<b>Lecture:</b> New technological developments in US. Validity and role in rheumatology (e.g. 3D ultrasound, fusion imaging, sonoelastography)	Prof Grassi	Queens Ballroom		
11:25 - 12:05	Coffee Break and Workshop (with options) - hands-on scanning of peripheral nerves, 3D ultrasound, sonoelastography	All Faculty	Queens Ballroom		
	Chair: Dr Roth				
12:05 - 12:35	Lecture: MSUS anatomy and scanning in paediatrics	Dr Jousse-Joulin	Queens Ballroom / Ark Royal		
12:35 - 13:00	<b>Lecture:</b> Validity and role of US in paediatric rheumatic diseases	Dr Collado	Queens Ballroom		
13:00 - 14:00	13:00 - 14:00 <b>Lunch</b>		Queens Grill		
14:00 - 15:30	Coffee Break and Workshop - Miscellaneous cases (revision workshop)	All Faculty	Queens Ballroom / Ark Royal		
15:30 - 17:00	Assessment	All Faculty	Queens Ballroom		
17:00 - 17:30	Faculty Discussion	All Faculty	Queens Ballroom		
17:30 - 18:00	Closing remarks, next steps and certification	Dr Wakefield	Queens Ballroom		