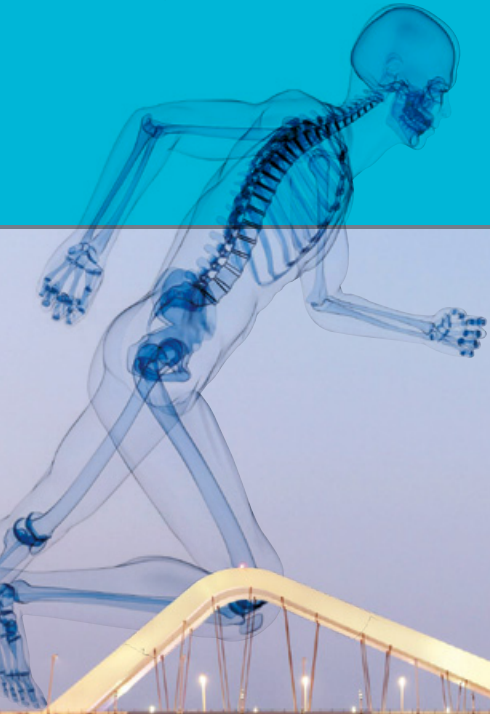


# *Musculoskeletal Sonography Course* *Basic level*

**December, 14-17, 2012**

Abu Dhabi, United Arab Emirates

EULAR  
Scientifically Endorsed Course



Under care of  
Medical Services Administration of Abu Dhabi Police G.H.Q.

## Introduction:

Musculoskeletal UltraSound (MSUS) is increasingly being used by Rheumatologists, Orthopaedics, and Sport and Medical Physicians for the diagnosis and management of musculoskeletal disorders in daily practice worldwide. The European League Against Rheumatism (EULAR) has promoted education in MSUS for the last 15 years with very successful results. Currently, there is a great need and demand for education on MSUS in Gulf and Middle East.

This basic course on MSUS course aims to give the participants the opportunity to learn the sonoanatomy, the ultrasound scanning technique of the musculoskeletal system, and the basic MSUS lesions and abnormalities under the guidance of expert rheumatologist and radiologist ultrasonographers.

## Course Structure:

The course has been designed following the recommendations for the content and conduct of EULAR musculoskeletal ultrasound courses (1). The course will be run for 4 days. It will focus on musculoskeletal examination technique, normal musculoskeletal sonoanatomy and detection of the principal musculoskeletal pathologies. It will consist of lectures with demonstrations and hands-on scanning in small groups (5-6 participants per tutor and ultrasound machine) with experienced tutors.

## Learning Objectives:

- To learn the basic principles and physics of MSUS.
- To learn the indications and limitations of MSUS.
- To identify the ultrasound pattern of the musculoskeletal tissues and normal sonoanatomy.
- To perform an ultrasound assessment of each musculoskeletal anatomical region using a standardized examination method.
- To identify basic pathologic MSUS findings (i.e. synovitis, bursitis, tenosynovitis, enthesopathy, tendinopathy, tendon calcification, tendon tears, cortical bone and cartilage abnormalities, peripheral nerve entrapment, basic muscle and ligament lesions).
- To report ultrasound findings and diagnosis.

## Reference:

- (1) E Naredo, J W J Bijlsma, P G Conaghan, C Acebes, P Balint, H Berner-Hammer, IG A W Bruyn, P Collado, M A D'Agostino, J J de Agustin, E de Miguel, E Filippucci, W Grassi, A Iagnocco, D Kane, J M Koski, B Manger, L Mayordomo, I Möller, C Moragues, E Rejón, M Szkudlarek, L Terslev, J Uson, R J Wakefield and W A Schmidt. Recommendations for the content and conduct of musculoskeletal ultrasound courses European League Against Rheumatism (EULAR). *Ann Rheum Dis* 2008; 67:1017-1022

## Course content

- Application, indications and limitations of musculoskeletal US; MSUS artefacts and pitfalls.
- US physics and technology.
- Principles of MSUS examination.
- Ultrasound pattern of the musculoskeletal tissues.
- Sonoanatomy and standard ultrasound scans of the shoulder, elbow, wrist and hand, hip, knee, ankle and foot.
- Sonographic identification of the principal musculoskeletal lesions and abnormalities and diagnosis of the most frequent musculoskeletal pathologies.
- Image documentation; reporting US findings and diagnosis

## Hands on content

- Supervised practical handling of the probe and the US machine settings.
- Supervised identification of musculoskeletal sonoanatomy.
- Supervised acquisition of images of normal musculoskeletal structures.
- Supervised standardised ultrasound scanning of the shoulder, elbow, wrist and hand, hip, knee, ankle and foot in normal models.
- Supervised ultrasound scanning of pathologic models (i.e. patients) with basic musculoskeletal lesions.

## Number of Delegates

Number of Participants: Maximum 72 participants (12 small groups of 5 - 6 participants each).

## Official Language

English

## CME

The Course is CME accredited

## Registration

Registration is open to all EULAR member countries. This course is recommended for Rheumatologists, Orthopaedics, Sport Surgeons and Medical Physicians, Radiologists, Anaesthetists, Physiatrist, Physiotherapists and other specialties who are interested in incorporating MSUS into their clinical practice.

We offer two options for registration:

**Option 1:** Course, Educational material, Coffee Breaks & Meals announced within the program (Fee: 950€).

**Option 2:** Course, Educational material, Coffee Breaks & Meals announced within the program, Standard Accommodation (3 nights in Fairmont Bab Al Bahr Hotel, Abu Dhabi, United Arab Emirates) (Fee: 1250€).

# Scientific Program

## Friday, December 14th, 2012

14.00 -15.00	Registration –Welcome Reception
15.00 -15.15	Welcome - Introduction A. Fahim, E. Naredo, I. Möller
15.15 -15.30	History and development of musculoskeletal ultrasound (MSUS). A. Fahim
15.30 -16.10	US physics and techniques, artefacts and limitations of MSUS. J.A. Bouffard
16.10-16.45	Scanning technique: ultrasound machine settings, image optimization, probe handling, and image acquisition. W. Schmidt
16.45-17.00	Coffee break
17.00-18.00	Clinical applications of MSUS. E. Naredo (inflammatory arthritis, osteoarthritis) and P. O'Connor (traumatic, degenerative and sport lesions).
18.00-18.40	Basic sonoanatomy: musculoskeletal tissues. G. Bruyn (joint space, cartilage, joint recesses, joint capsules and bony cortex) and C. Martinoli (muscles, tendons, bursae, ligaments, nerves).
18.40-20.00	Hands on. Holding the probe and handling the ultrasound machine setting. Normal musculoskeletal tissues and sonoanatomy.
20.30	Dinner

## Saturday, December 15th, 2012

08.30-09.30	Basic ultrasound semiology. P. Peetrons (bursitis, tendinopathy, tendon tear, tendon calcification, ligament rupture, cortical bone abnormalities, peripheral nerve entrapment, muscle rupture, myositis) and Annamaria Iagnocco (synovitis, tenosynovitis, enthesitis, bone erosions, cartilage abnormalities).
09.30-10.45	Standardised scanning of the elbow. Basic pathological findings. G. Bruyn. Live demo with normal models. D. Bong
10.45-11.15	Coffee break
11.15-12.30	Hands on. Supervised US scanning of the elbow
12.30-13.30	Standardised scanning of the wrist and hand. Basic pathological findings. I. Möller. Live demo with normal models. M.A. D'Agostino
13.30-15.00	Lunch
15.00-17.00	Hands on. Supervised US scanning of the wrist and hand
17.00-17.30	Coffee break
17.30-18.15	Standardised scanning of the hip. Basic pathological findings. I. Möller. Live demo with normal models. C. Martinoli
18.15-19.30	Hands on. Supervised US scanning of the hip
20.00	Dinner

## Scientific Program

### Sunday, December 16th, 2012

08.30-9.30	Standardised scanning of the knee. Basic pathological findings. P. Peetrons. Live demo with normal models. J.A. Bouffard
09.30- 11.00	Hands on. Supervised US scanning of the knee
11.00-11.30	Coffee break
11.30-12.30	Standardised scanning of the shoulder. Basic pathological findings. J.A. Bouffard. Live demo with normal models. P. O'Connor
12.30-13.30	Standardised scanning of the ankle and foot. Basic pathological findings. D. Bong. Live demo with normal models. P. Peetrons
13.30-15.00	Lunch
15.00-16.45	Hands on. Supervised US scanning of the shoulder
16.45-17.15	Coffee break
17.15-19.00	Hands on. Supervised US scanning of the foot and ankle
20.00	Dinner

### Monday, December 17th, 2012

08.30-9.15	Reporting ultrasound findings and diagnosis. P. O'Connor (technical aspects) and N. Damjanov (clinical aspects).
9.15- 10.15	MSUS in rheumatoid arthritis and spondyloarthritis. Validity and clinical use. M.A. D'Agostino. Live demo with pathologic models. W. Schmidt
10.15-10.30	Coffee break
10.30-11.30	MSUS in osteoarthritis. Validity and clinical use. A. Iagnocco. Live demo with pathologic models. E. Naredo
11.30-12.30	MSUS in regional painful syndromes and sport related disorders. Validity and clinical use. C. Martinoli
12.30-13.00	Education in MSUS. N. Damjanov
13.00-13.30	Closing remarks. A. Fahim, E. Naredo, I. Möller
17.00-17.30	Coffee break

## Faculty



David Bong (United States),



Jose Antonio Bouffard (United States),



George Bruyn (Netherlands),



Maria Antonietta D'Agostino (France),



Nemanja Damjanov (Serbia),



Ayman Fahim (United Arab Emirates),



Annamaria Iagnocco (Italy),



Carlo Martinoli (Italy),



Ingrid Möller (Spain),



Esperanza Naredo (Spain),



Philip O'Connor (United Kingdom),



Philippe Peetrons (Belgium),



Wolfgang Schmidt (Germany)

## Scientific Organizers

- **Dr. Ayman M Fahim**  
Board Certified Orthopaedic and Traumatology, Abu Dhabi Police Medical Services
- **Dra. Esperanza Naredo**  
Consultant in Rheumatology and musculoskeletal sonography, Madrid, Spain
- **Dra. Ingrid Möller Parera**  
Consultant in Rheumatology and musculoskeletal sonography, Barcelona, Spain



## Organising Secretary & Contact Person

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## Dates

Course opening: Friday 14th December 2012 at 15:00 hrs.

The programme will be on 14th, 15th, 16th and 17th of December 2012.

Course closing: Monday 17th December 2012 at 13:00 hrs.

## Venue

Fairmont Bab Al Bahr Hotel, Abu Dhabi, United Arab Emirates.

[www.fairmont.com/babalbahr](http://www.fairmont.com/babalbahr)

