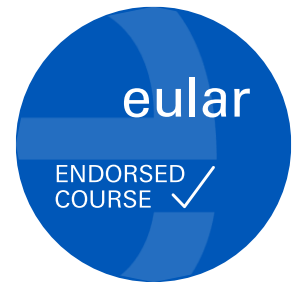




COLEGIO MEXICANO DE REUMATOLOGÍA, A.C.



## **Intermediate Musculoskeletal Ultrasound (MSUS) Course Ciudad de México, México 5-7 September, 2024**

**This course has been scientifically endorsed by EULAR**

### **SCIENTIFIC DIRECTORS**

Esperanza Naredo (Spain)  
Ingrid Möller (Spain)

### **LOCAL SCIENTIFIC ORGANISERS**

Mario Chávez (México)  
Ana Laura Álvarez del Castillo (México)  
Carlos Pineda (México)

### **VENUE**

Hotel Fiesta Americana Reforma  
Av. Paseo de la Reforma 80, Juárez, Cuauhtémoc, 06600 Ciudad de México, CDMX  
Teléfono: 55 5140 4100  
<https://www.fiestamericana.com/hoteles-y-resorts/fiesta-americana-reforma-ciudad-de-mexico/>

### **ORGANISING SECRETARIAT**

COLEGIO MEXICANO DE REUMATOLOGÍA AC  
Paseo del Río No. 157 Col. Barrio Oxtopulco Universidad, Alcaldía Coyoacán,  
Cd. México, CP 04318  
Email: [america@reumatologia.org.mx](mailto:america@reumatologia.org.mx)  
Tel: +55 5662 5983; +55 6382 9894

### **COURSE OPENING**

Thursday, September 5, 2024 at 9:00

### **COURSE CLOSING**

Saturday, September 7, 2024 at 14:00

## **PARTICIPANTS**

40 participants.

This course is recommended for participants with basic experience in MSUS. 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 course, a EULAR scientifically endorsed course, or a national MSUS course) is highly recommended before participating in a EULAR intermediate-level course and mandatory for successfully completing the EULAR Competency Assessment in MSUS in Rheumatology – Level 1. For more details, please follow this link: <https://esor.eular.org/course/view.php?id=94>.

## **OFFICIAL LANGUAGE**

English

## **DESCRIPTION**

The course will consist of lectures and hands-on scanning in small groups (4-5 participants per tutor and ultrasound machine) and will focus on a wide spectrum of rheumatic and musculoskeletal pathologies and ultrasound-guided procedures. The course will be conducted following the recommendations for the content and conduct of EULAR MSUS Courses ([www.eular.org](http://www.eular.org)). The faculty will consist of international teachers highly experienced in MSUS in rheumatology.

The course is supported by COLEGIO MEXICANO DE REUMATOLOGÍA AC

## **APPLICATION REQUIREMENTS**

Applicants should send to the Faculty members a total of 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), following The 2017 EULAR standardised procedures for ultrasound imaging in rheumatology. (Möller I, et al. Ann Rheum Dis. 2017; 76:1974-9). Images should be presented in a power point file. Each slide should include: - One imaged structure each in the longitudinal and transverse plane - A legend with the anatomic area, imaged structure and scanning planes - Parameters of the ultrasound machine - Identity of the person scanned should be removed. The Faculty members need to provide assessment and feedback. Applicants might need to be asked to repeat the ultrasound examinations and submit the images again for assessment by the Faculty. Upon approval of the assessment, the applicant needs to be asked to register for the course. In addition, certification proofs for Basic EULAR MSUS or basic EULAR scientifically endorsed MSUS course attendance.

## **REGISTRATION**

Registration is intended to be opened for all EULAR member countries.

**Applications** should be e-mailed to

America Barrios,

Colegio Mexicano de Reumatología, A.C. Paseo del Río No. 157 Col. Barrio Oxtopulco Universidad, Alcaldía Coyoacán, Cd. México, CP 04318.

Email: america@reumatologia.org.mx

Tel: +55 5662 5983; +55 6382 9894

Mobile: +55 5415 2280

**Payment** instructions will be given by COLEGIO MEXICANO DE REUMATOLOGÍA

## **FACULTY**

Juan Carlos Acebes (UK)

Ana Laura Álvarez del Castillo (México)

George Bruyn (Netherlands)

Mario Chávez (México)

Georgios Filippou (Italy)

Emilio Filippucci (Italy)

Ingrid Möller (Spain)

Esperanza Naredo (Spain)

Fernando Saraiva (Portugal)

Lene Terslev (Denmark)

## **HANDS ON TUTORS**

Juan Carlos Acebes (UK)

Ana Laura Álvarez del Castillo (México)

George Bruyn (Netherlands)

Mario Chávez (México)

Georgios Filippou (Italy)

Emilio Filippucci (Italy)

Citlallyc Gómez-Ruiz (México)

Ana Cecilia Lozada (México)

Ingrid Möller (Spain)

Esperanza Naredo (Spain)

Diana Marcela Padilla (México)

Carlos Pineda (México)

Fernando Saraiva (Portugal)

Lene Terslev (Denmark)

Jessica Villaseñor (México)

## **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 ultrasound-guided periarticular and intra-articular injections.

## **COURSE CONTENT**

- Application, indications, and limitations of Doppler ultrasound in rheumatology.
- Doppler physics, settings, artefacts, and pitfalls.
- Identification of the spectrum of rheumatic and musculoskeletal abnormalities in each anatomic area.
- Detection and quantification of synovial, tenosynovial, and enthesal inflammation.
- Detection and quantification of structural joint damage (i.e. bone, tendons, cartilage).
- Ultrasound-guided periarticular and intra-articular procedures.

## **COURSE CERTIFICATION**

A certificate of attendance will be supplied.

## **COURSE EVALUATION**

The course will be evaluated with respect to educational quality and content, value in clinical practice, organisation and venue.

## **REGISTRATION FEE**

We offer two options for registration fee:

Option A; course, educational material, accommodation (3 nights in hotel, breakfast included), lunches, dinners and coffee breaks- Fee: 1,150 EUR

Option B; course, educational material, lunches and coffee breaks- Fee: 850 EUR

## PROGRAMME

Thursday 5 September, 2024

8.00 - 9.00	Registration	
9.00-9.15	Welcome – Objectives and content of the course. EULAR Competency assessment in musculoskeletal ultrasound (MSUS)	M. Chávez, E. Naredo, I. Möller, AL. Álvarez, C. Pineda
9.15-9.40	Doppler physics and technology. Doppler setting optimization. Doppler artefacts and pitfalls	M. Chávez
9.40-10.10	Applications, indications and limitations of Doppler in rheumatic and musculoskeletal diseases	L. Terslev
10.10-10.40	B-mode and Doppler synovitis and tenosynovitis. Definition, detection, quantification, and pitfalls	E. Naredo
10.40-11.00	B-mode and Doppler enthesopathy/enthesitis. Definition, detection, quantification, and pitfalls	E. Filippucci
11.00 -11.30	Coffee break	
11.30 -13.30	<b>Workshop</b> (patients): Supervised practical handling of Doppler US machine settings and Doppler artefacts. Supervised hands-on scanning of patients with synovitis, tenosynovitis, and enthesopathy/enthesitis	All tutors
13.30 -14.30	Lunch	
14.30-15.00	Ultrasound tendon lesions (e.g. tendinosis, tears, sub/luxation, impingement). Definition, detection, quantification, and pitfalls	AL. Álvarez
15.00-15.30	Ultrasound bone and cartilage abnormalities. Definition, detection, quantification, and pitfalls	F. Saraiva
15.30-16.00	Ultrasound assessment of crystal arthropathies	G. Filippou
16.00-16.30	Coffee break	
16.30-18.30	<b>Workshop</b> (patients). Supervised hands-on scanning of patients with tendon lesions, bone and cartilage abnormalities, and crystal arthropathies	All tutors
20.00	Dinner	

### Friday 6 September, 2024

9.00-9.30	Ultrasound diagnosis of knee pathology	C. Acebes
9.30-11.00	<b>Workshop</b> (patients). Supervised hands-on scanning of patients with knee inflammatory and degenerative diseases	All tutors
11.0-11.30	Coffee break	
11.30-12.00	Ultrasound diagnosis of elbow and hip pathology	I. Möller
12.00-13.30	<b>Workshop</b> (patients). Supervised hands-on scanning of patients with elbow and hip inflammatory and degenerative diseases	All tutors
13.30-14.30	Lunch	
14.30-15.00	Ultrasound diagnosis of wrist/hand pathology	E. Naredo
15.00-17.00	<b>Workshop</b> (patients). Supervised hands-on scanning of patients with wrist/hand inflammatory and degenerative diseases	All tutors
17.00-17.30	Coffee break	
17.30-18.00	Ultrasound diagnosis of shoulder pathology	G. Bruyn
18.00-20.00	<b>Workshop</b> (patients). Supervised hands-on scanning of patients with shoulder inflammatory and degenerative diseases	All tutors
20.30	Dinner	

**Saturday 7 September, 2024**

9.00-09.30	Ultrasound diagnosis of ankle/foot pathology	M. Chávez
9.30-11.00	<b>Workshop</b> (patients). Supervised hands-on scanning of patients with ankle/foot inflammatory and degenerative diseases.	All tutors
11.00-11.15	<b>Coffee break</b>	
11.15-11.45	Ultrasound-guided periarticular and intra-articular injections	F. Saraiva
11.45-13.00	<b>Workshop</b> (phantoms). Supervised ultrasound-guided injections	All tutors
13.00-13.15	Closing Remarks	M. Chávez, E. Naredo, I. Möller, AL. Álvarez, C. Pineda

**Total course duration: 20 h (excluding lunch and coffee break time)**

**Total time for theoretical training: 6.15 h**

**Total time for practical training: 13.45 h**