

Application for intermediate EULAR MSUS Courses

Procedure for assessment of normal ultrasound examinations

- Applicants should upload on the course registration tool a total of 6 normal examinations, i.e. 1 examination in 1 PowerPoint presentation file for each of the following joint regions: shoulder, elbow, wrist & hand, hip, knee, ankle & foot, according to the EULAR Guidelines for Musculoskeletal Ultrasound in Rheumatology (Ref. Backhaus M, et al. Ann Rheum Dis 2001 and EULAR Ultrasound Scanning App, www.eular.org, 2016). Submission of all images is mandatory for course application.
- Images should be presented in a PowerPoint file. Important: Each slide should include:
 - One imaged structure each in longitudinal and transverse plane
 - A legend with the anatomic area, imaged structure, main machine settings used and scanning planes
 - Identity of the person scanned should be removed
- Faculty members will provide assessment and feedback. Applicants might be asked to repeat the ultrasound examinations and submit the images again for assessment by the faculty.
- Upon approval of the assessment the applicant will be asked to register for the course and pay the applicable registration fee.
- After this process, the applicant is also eligible to apply for a EULAR bursary.

Application for advanced EULAR MSUS Courses

1. Procedure for assessment of the pathological ultrasound examinations

- Applicants should upload 30 pathological ultrasound images (i.e. from the full range of conditions included in the basic and intermediate levels, Appendix 1) each in both longitudinal and transverse plane (60 images in total on 30 slides of a PowerPoint file) representative of the following joint regions: . shoulder, elbow, wrist & hand, hip, knee, ankle & foot) . Submission of all images is mandatory for course registration. Important: Each slide should include: - One imaged lesion/abnormality in both longitudinal and transverse plane - A legend with the anatomic area, imaged structure, scanning planes, ultrasound mode and main machine settings used, description of the ultrasound lesion/abnormality, and ultrasound diagnosis. Identity of the person scanned should be removed
- Faculty members will provide assessment and feedback. Applicants might be asked to repeat the ultrasound examinations and submit the images again for assessment by the faculty.
- Upon approval of the assessment the applicant will be asked to register for the course and pay the applicable registration fee.
- After this process, the applicant is also eligible to apply for a EULAR bursary.

Please note that the requirement of performing normal and pathological ultrasound images can be replaced with the achievement of level 1, 2 or 3 of MSUS Competency in Rheumatology as stated by EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology). Ref. Terslev L, et al. Ultraschall in Med; published online May 21, 2013; www.efsumb.org/guidelines. If this is the case, the participants should provide the certificates of EFSUMB competency during the application process.

2. Procedure for the practical exam (advanced EULAR MSUS Course):

- Participants having successfully completed the prior requirements (i.e. evaluation of normal and pathological MSUS images) and who are attending the advanced EULAR MSUS Course are eligible to take the practical exam.

- The exam consists of the ultrasound scanning and evaluation of two anatomic areas (i.e. shoulder, elbow, wrist, hand, hip, knee, ankle, or foot) of a patient with any rheumatic disease within a maximum of 15 minutes.
- Two Faculty members assess the participants on the following: 1) probe holding; 2) ultrasound machine settings adjustment; 3) scanning technique; 4) identification of anatomic structures; 5) description of ultrasound findings; 6) final ultrasound diagnosis.
- Faculty members provide a score from 0 to 5 (0=very poor; 1=poor; 2=fair; 3=good; 4= very good; 5= excellent) for each assessed item. A score of ≥ 3 for each item will be necessary to successfully pass the practical exam. In case of a score < 3 , only a certification of attendance will be handed out. To achieve the competency level 1, the participant will need to re-take the advanced course.

Appendix I: Basic and intermediate course pathologies

Joint effusion

Grey scale and Doppler joint synovial hypertrophy and tenosynovitis

Grey scale and Doppler enthesopathy

Bursitis

Tendinosis

Paratenonitis

Tendon subluxation/luxation

Intrasubstance tendon lesions

Complete tendon tear

Partial tendon tear

Bone erosions

Osteophytes

Enthesophytes

Ganglia and cysts

Articular cartilage lesions

Peri- and intra-articular microcrystal deposit

Tendon, ligament or muscle calcification