

OBJECTIVES:

- To review the systematic standardized sonographic scanning method of each anatomical region, according to the EULAR guidelines
- To learn Colour and Power Doppler physics, application, indications and limitations
- To learn definition, ultrasound presentation and quantification of synovitis, synovial hypertrophy, effusion, erosion, tendinopathy, tenosynovitis, enthesopathy and degenerative lesions
- To assess, quantify and/or score joint lesions
- To learn basic skills to perform sonographic-guided musculoskeletal injections
- To understand the role of musculoskeletal US in clinical and research practice

MAIN TOPICS:

- Role of Colour and Power Doppler in rheumatology
- Colour and power Doppler physics and technology
- Applications, indication and limitations of Colour and Power Doppler
- Ultrasound presentation of synovitis, effusion, erosions, tendinopathies, tenosynovitis, enthesitis and degenerative lesions
- Role of ultrasound in diagnosis and monitoring of metabolic arthritis
- Role of ultrasound in monitoring patients with inflammatory joint diseases
- Standards of safety of ultrasound-guided punctures and injections sonographic system

WORKSHOPS:

- Practical handling of the ultrasound machine settings and use of Colour and Power Doppler technology
- Supervised scanning of the patients with inflammatory and degenerative joint disease focused on detection of synovitis, effusion, erosions, tendinopathies, tenosynovitis, enthesitis and degenerative lesions.
- Supervised basic sonographic-guided musculoskeletal injections

SCIENTIFIC PROGRAM

Thursday, November 28th, 2019

- 12:00 - 14:00 **Registration**
- 12:00 - 13:30 **Lunch**
- 13:30 - 13:45 **Welcome**
G.G. Kakavouli, D. Boumpas, D. Vasilopoulos
- 14:00 - 14:15 Entering test of knowledge - Intermediate Level
J. Raftakis
Chairpersons: **D. Karokis, J.Raftakis**
- 14:15 - 14:45 Sonographic pattern of the musculoskeletal tissues and technical characteristics and setting of ultrasound equipments for rheumatology
J. Raftakis
- 14:45 - 15:00 **Mini break - hall changing**
- 15:00 - 16:45 **Workshop:** Supervised ultrasound scanning. How to use and set the ultrasound equipment. The choice of appropriate probe and of the Doppler modalities. Optimisation of Doppler settings. Doppler ultrasound artefacts
- 16:45 - 17:00 **Coffee break**
Chairpersons: **A. Delle Sedie, G. Filippou**
- 17:00 - 17:25 Doppler physics, technology and artefacts. Doppler setting optimization
G. Filippou
- 17:25 - 17:50 Application, indications and limitations of Doppler in musculoskeletal US
G. Katsifis
- 17:50 - 18:15 Colour Doppler and power Doppler. Correlations between US imaging and histopathological findings
A. Delle Sedie
Chairpersons: **A. Bachta, F. Porta**
- 18:15 - 18:45 US: a tool for diagnosis and outcome measure in Rheumatology
A. Bachta
- 18:45 - 19:15 B-mode and Doppler tenosynovitis. Definition, detection, quantification and pitfalls
F. Porta
- 20:00 **Dinner**

SCIENTIFIC PROGRAM

Friday, November 29th, 2019

- 09:00 - 11:00 **Workshop:** Supervised ultrasound scanning of patients with synovitis and tenosynovitis
Chairpersons: **P. Balint, G.G. Kakavouli**
- 11:00 - 11:25 Tendinosis and tendon tear. Definition, detection, quantification and pitfalls
G.G. Kakavouli
- 11:25 - 11:50 US bone abnormalities. Definition, detection, quantification and pitfalls
C. Siagkri
- 11:50 - 12:15 B-mode and Doppler enthesopathy and enthesitis. Definition, detection, quantification and pitfalls
P. Balint
- 12:15 - 12:45 US cartilage abnormalities. Definition, detection, quantification and pitfalls
A. Bachtá
- 12:45 - 14:15 **Workshop:** Supervised ultrasound scanning of patients enthesopathy/enthesitis, tendinosis and tendon tear, bone and cartilage abnormalities
- 14:15 - 15:00 **Lunch**
Chairpersons: **G.G. Kakavouli, C. Siagkri**
- 15:00 - 15:30 US diagnosis of hip pathology
G. Filippou
Live demo - P. Balint
- 15:30 - 16:00 US diagnosis of knee pathology
G.G. Kakavouli
Live demo - P. Balint
- 16:00 - 16:30 US diagnosis of ankle and foot pathology
C. Siagkri
Live demo - P. Balint
- 16:30 - 17:00 **Coffee Break**
- 17:00 - 19:30 **Workshop:** Supervised hands-on scanning of patients with lower extremity pathology
- 20:00 **Dinner**

SCIENTIFIC PROGRAM

Saturday, November 30th, 2019

Chairpersons: **J. Raftakis, D. Karokis**

09:00 - 09:30 US diagnosis of shoulder pathology
G.G. Kakavouli

Live demo - N. Damjanov

09:30 - 10:00 US diagnosis of elbow pathology
J. Raftakis

Live demo - N. Damjanov

10:00 - 10:30 US diagnosis of wrist and hand pathology
D. Karokis

Live demo - N. Damjanov

10:30 - 10:45 **Coffee Break**

10:45 - 12:45 **Workshop:** Supervised hands-on scanning of patients with upper extremity pathology

12:45 - 13:30 **Light Lunch**

Chairpersons: **S. Prodanovic, N. Damjanov**

13:30 - 14:00 B-mode and Doppler synovitis. Definition, detection, quantification and pitfalls

A. Iagnocco

14:00 - 14:30 US in therapy monitoring

S. Prodanovic

14:30 - 15:00 Basic skills in sonographic-guided arthrocentesis

N. Damjanov

15:00 - 16:15 **Workshop:** Basic skills in sonographic-guided arthrocentesis

16:15 - 16:30 Exit tests of knowledge

16:30 - 16:45 Closing remarks and certificate issues