Basic and Intermediate Levels - Course Program

5th International Musculoskeletal Ultrasound Course

29 Nov - 1 Dec 2018
Wyndham Grand Athens Hotel
Athens, Greece

www.synthesispco.com/mitoscour...
GENERAL INFORMATION

ORGANIZATION AND COMMITTEE

Scientific Director
Prof. Annamaria Iagnocco
Dipartimento Scienze Cliniche e Biologiche, Università degli Studi di Torino, Turin - Italy
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Local Organizer:
M.I.T.O.S. (Musculoskeletal Imaging Techniques: Ongoing Sonography- a Task Force for Greek Rheumatologists)

Faculty
The speakers will come from major European musculoskeletal ultrasound research centers and are rheumatologists mostly involved in previous EULAR courses. The contacted faculties are:

Faculty:

Annamaria Iagnocco, Italy
Amalia Raptopoulou, Greece
Andreas Diamantopoulos, Norway
Artur Bachta, Poland
Caterina Siagkri, Greece
Dimitris Karokis, Greece
Emilio Filippucci, Italy
Francesco Porta, Italy
Georgios Filippou, Italy
Giasna G. Kakavouli, Greece
Goran Radunović, Serbia
Ioannis Raftakis, Greece
Mihaela Micu, Romania
Nemanja Damjanov, Serbia
Peter Balint, Hungary
Peter Mandl, Austria
Slavica Prodanović, Serbia

Instructors:

Amalia Raptopoulou, Greece
Andreas Diamantopoulos, Norway
Artur Bachta, Poland
Caterina Siagkri, Greece
Dimitris Karokis, Greece
Emilio Filippucci, Italy
Francesco Porta, Italy
Georgios Filippou, Italy
Giasna G. Kakavouli, Greece
Nemanja Damjanov, Serbia
Goran Radunović, Serbia
Ioannis Raftakis, Greece
Mihaela Micu, Romania
Peter Balint, Hungary
Peter Mandl, Austria
Slavica Prodanović, Serbia
Theodoros Natskos, Greece
Course’s opening: Thursday, November 29th, 2018 - h 12.00
Course’s closing: Saturday, December 1st, 2018 - h 16:30
Participants: The number of participants in each of the Courses will be limited to 48
Official language: English
Congress Venue: Wyndham Grand Athens, Athens, Greece

Organizer
M.I.T.O.S. GROUP
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Fax:+ 30 210 4190905
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Website: www.synthesispco.com
OBJECTIVES:
• To learn technical characteristics and setting of ultrasound equipment for rheumatology.
• To learn the systematic standardized sonographic scanning method of each anatomical region, according to the EULAR guidelines.
• To learn basic normal musculoskeletal ultrasonographic (MSUS) anatomy.
• To learn basic pathological MSUS findings.

MAIN TOPICS:
• Ultrasound physics and technology, technical characteristics of ultrasound equipments in rheumatology, applications, indications and limitations of MSUS.
• MSUS anatomy, artifacts and misinterpretation in MSUS.
• Standardized sonographic scanning method of each anatomical region (shoulder, elbow, wrist and hand, hip, knee, ankle and foot) according to the EULAR guidelines.
• Basic pathological sonographic findings (tendinosis, tenosynovitis, partial and complete tendon tear, enthesopathy, bursitis, calcifications, articular cartilage lesions, cortical abnormalities, erosions and joint synovitis).
• Reporting MSUS findings and diagnosis.

WORKSHOPS:
• Practical handling of the ultrasound machine settings.
• Supervised identification of musculoskeletal sonoanatomy.
• Supervised standardized sonographic scanning of the shoulder, elbow, wrist and hand, hip, knee, ankle and foot.
• Supervised hands-on scanning of patients with basic musculoskeletal lesions
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<thead>
<tr>
<th>Time</th>
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<tr>
<td>12:00-14:00</td>
<td>Registration</td>
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<tr>
<td>12:00-13:30</td>
<td>Lunch</td>
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<td>13:30-13:45</td>
<td>Welcome</td>
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<td>A. Iagnocco, D. Karokis, D. Boumpas</td>
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<td>13:45-14:00</td>
<td>Entering test of knowledge - Basic Level</td>
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<td>J. Raftakis</td>
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<td>Chairpersons: A. Iagnocco, J. Raftakis</td>
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<tr>
<td>14:15 - 14:45</td>
<td>Technical characteristics and setting of ultrasound equipments for Musculoskeletal diseases</td>
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<td>Live demo - A. Bachta</td>
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<td>14:45 - 15:00</td>
<td>Mini break - Hall changing</td>
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<td>15:00 - 16:45</td>
<td>Workshop: Supervised practical handling of the ultrasound machine settings</td>
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<td>16:45- 17:00</td>
<td>Coffee Break</td>
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<td>Chairpersons: F. Porta, A. Bachta</td>
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<td>17:00 - 17:25</td>
<td>History and basic physics of MSUS</td>
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<td>A. Bachta</td>
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<td>17:25-18:00</td>
<td>Normal tissue and joint anatomy; Sonographic pattern of the musculoskeletal tissues</td>
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<td>P. Mandl</td>
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<td>18:00-18:30</td>
<td>Artifacts and misinterpretation in MSUS</td>
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<td>Live demo - A. Bachta</td>
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<td>18:30-19:30</td>
<td>Workshop: Supervised practical handling of the normal MSUS anatomy</td>
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<td>Chairpersons: G. Radunovic, D. Karokis</td>
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<td>19:30-20:00</td>
<td>Image documentation; reporting US findings and diagnosis</td>
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<td>G. Radunovic</td>
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<td>20:00-21:00</td>
<td>Workshop: Hands - on session; normal MSUS anatomy and basic pathological findings</td>
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<td>21:00</td>
<td>Dinner</td>
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SCIENTIFIC PROGRAM

Friday, November 30th, 2018

Chairpersons: A. Iagnocco, G.G. Kakavouli

09:00 - 09:30  Sonographic semiology; US and correlative anatomy and histology: articular cartilage lesions, cortical abnormalities; Basic pathology of tendons and ligaments (tendinosis, calcifications, tears)
N. Damjanov

Live demo - A. Diamantopoulos

09:30-10:00  Basic synovial US lesions: synovitis, synovial hypertrophy, tenosynovitis and bursitis; Definition, detection and quantification
A. Iagnocco

10:00-10:30  Enthesitis and enthesopathy
P. Balint

10:30 - 11:00  Coffee Break

11:00-12:45  Workshop: US semiology: normal and basic pathological findings
Chairpersons: N. Damjanov, C. Siagkri

12:45 - 13:15  Standardized scanning of shoulder normal and basic pathological findings
C. Siagkri

Live demo - N. Damjanov

13:15-13:45  Standardized scanning of the elbow: normal and basic pathological findings
A. Raptopoulou

Live demo - N. Damjanov

13:45-14:30  Lunch

14:30 - 17:00  Workshop: Supervised scanning technique of shoulder; supervised scanning technique of elbow; Normal and basic pathological findings
Chairpersons: P. Balint, M. Micu

17:00 - 17:30  Standardized scanning of the wrist and hand: normal and basic pathological findings
D. Karokis

Live demo - P. Balint

17:30 - 18:00  Standardized scanning of the hip: normal and basic pathologic findings
M. Micu

Live demo - P. Balint

20:00  Dinner
Saturday, December 1st, 2018

09:00 - 10:45  Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative hand, wrist and hip

10:45 - 11:00  Coffee Break

Chairpersons: A. Diamantopoulos, S. Prodanović

11:00 - 11:30  Standardized scanning of the knee: normal and basic pathological findings
J. Raftakis

Live demo - S. Prodanović

11:30 - 12:00  Standardized scanning of the ankle and foot: normal and basic pathological findings
S. Prodanović

Live demo - A. Diamantopoulos

12:00-12:30  US Application in management of Musculoskeletal Disorders
A. Iagnocco

12:30 -13:15  Light Lunch

12:15-14:45  Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative knee, ankle and foot

Chairpersons: G.G. Kakavouli, N. Damjanov

14:45-15:15  Basic skills in sonographic guided arthrocentesis
N. Damjanov

15:15-15:45  Workshop: Basic skills in sonographic-guided arthrocentesis

15:45 -16:00  Exit test of knowledge

16:00 - 16:30  Closing remarks and certificate issue
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
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<td>Sonographic pattern of the musculoskeletal tissues and technical</td>
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<td>Chairpersons: A. Iagnocco, G. Filippou</td>
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<td>15:00 - 15:20</td>
<td>Doppler physics, technology and artefacts. Doppler setting optimization</td>
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<td>G. Filippou</td>
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<td>15:20 - 15:40</td>
<td>Application, indications and limitations of Doppler in musculoskeletal US</td>
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<td>G. Filippou</td>
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<td>15:40 -16:00</td>
<td>Colour Doppler and power Doppler. Correlations between US imaging</td>
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<td>A. Diamantopoulos</td>
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<td>16:00 - 16:30</td>
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<td>16:30 - 18:15</td>
<td>Workshop: Supervised practical scanning of the different Doppler</td>
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<td>modalities. How to use and set the ultrasound equipment. The choice</td>
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<td>of the appropriate probe. Optimisation of Doppler settings. PDUS</td>
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<td>Chairpersons: A. Iagnocco, P Balint</td>
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<td>18:15 - 18:45</td>
<td>B-mode and Doppler synovitis. Definition, detection, quantification</td>
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<td>18:45 - 19:15</td>
<td>B-mode and Doppler tenosynovitis. Definition, detection, quantification</td>
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Friday, November 30th, 2018

08:00-09:30 Workshop: US semiology- pathological findings
09:30 - 11:00 Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative joint disorders; How to detect and quantify synovitis (including Power Doppler), cartilage and bony lesions

Chairpersons: P. Mandl, G. Kakavouli

11:00-11:25 B-mode and Doppler tendinosis and tendon tear. Definition, detection, quantification and pitfalls
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
G. Radunovic
12:45 - 14:00 Workshop: Supervised hands-on scanning of patients with synovitis and tenosynovitis, enthesopathy/enthesitis, tendinosis and tendon tear, bone and cartilage abnormalities

14:00-15:00 Lunch

Chairpersons: E. Filippucci, C. Siagkri

15:00 - 15:30 US diagnosis of hip pathology
E. Filippucci
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 - 19:00 Workshop: Supervised hands-on scanning of patients with lower extremity pathology

20:00 Dinner
INTERMEDIATE LEVEL

SCIENTIFIC PROGRAM

Saturday, December 1st, 2018

Chairpersons: J. Raftakis, P. Mandl

09:00 - 09:30  US diagnosis of shoulder pathology  
               G.G. Kakavouli  
               Live demo - P. Mandl

09:30 - 10:00  US diagnosis of elbow pathology  
               J. Raftakis  
               Live demo - P. Mandl

10:00 - 10:30  US diagnosis of wrist and hand pathology  
               D. Karokis  
               Live demo - P. Mandl

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: N. Damjanov, D. Karokis

13:30 - 13:50  US: a tool for diagnosis and outcome measure in Musculoskeletal ultrasound  
               P. Mandl

13:50 - 14:20  Role of US in the diagnosis of crystal arthropathy and periartricular tissue (gout, CPPD)  
               E. Filippucci

14:20 - 14:50  Basic skills in sonographic-guided arthrocentesis  
               N. Damjanov  
               Live demo - S. Prodanovic

14:50 - 15:50  Workshop: Basic skills in sonographic-guided arthrocentesis

16:00 - 16:45  Closing Remarks, exit tests of knowledge and certificate issue