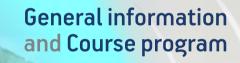
# Basic and Intermediate Levels







30 November - 2 December 2017 Wyndham Grand Athens Hotel

Athens Greece

www.synthesispco.com/mitoscourse2017

Scientifically Endorsed by eular



## 4<sup>th</sup> INTERNATIONAL MUSCULOSKELETAL ULTRASOUND COURSE BASIC AND INTERMEDIATE LEVEL

Athens, November 30th - December 2nd 2017

The 4<sup>th</sup> International Ultrasound Course for Rheumatologists, taking place in Athens, Greece in 2017, intends to be a combination of lectures and practical sessions. It is going to be a two-level course – the basic and the intermediate – consisting of theoretical talks and supervised hands-on scanning of healthy persons and/or patients with musculoskeletal disorders.

**Sponsorship:** ABBVIE, BRISTOL-MYERS SQUIBB, ENORASIS, GLAXOSMITHKLINE, GENESIS PHARMA, JANSSEN CILAG, MSD, NOVARTIS, PFIZER, ROCHE, UCB. The total amount of sponsorship will not exceed 40% of the total cost for the Course. General Electric, Papapostolou, Esaote, Toshiba, Dormed, Medworks will provide ultrasound equipment free of charge. Sponsorships will cover part of the travel and accommodation expenses for the faculty, course venue and organization costs. Sponsors will not have any influence on the course program, scientific and other content, or speakers in any way.

#### **CME Credits**

The course will apply for EACCME/UEMS credits of continuing medical education.

### Registration

Registration is intended to be open to all EULAR member countries. Participants registering for the basic MSUS course endorsed by EULAR will have priority if they have already participated in the EULAR Online Introductory US course.

### **Participation fees**

The basic registration fee of 300 € includes admission to all conference sessions, workshops, conference kit, conference session materials, certificate of attendance. If accommodation (for two nights – single room) and coffee breaks and meals needed, the total course participation fee will be 750 €.

#### ORGANIZATION AND COMMITTEE

#### **Scientific Director**

#### Prof. Annamaria lagnocco

Dipartimento Scienze Cliniche e Biologiche, Università degli Studi di Torino, Turin - Italy

e-mail: annamaria.iagnocco1@gmail.com

#### **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:

#### **Faculties:**

Annamaria lagnocco, Italy Amalia Raptopoulou, Greece **Arthur Bachta**, Poland Caterina Siagkri, Greece Dimitris Karokis, Greece **Emilio Filippucci**, Italy Esperanza Naredo, Spain 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 Slavica Prodanović, Serbia

#### Instructors:

Amalia Raptopoulou, Greece **Arthur Bachta**, Poland **Athanasios Fortis**, Greece Caterina Siagkri, Greece **Dimitris Karokis**, Greece **Emilio Filippucci**, Italy Francesco Porta, Italy **Georgios Filippou**, Italy Giasna G. Kakavouli, Greece Goran Radunović, Serbia **Ioannis Papadopoulos**, Switzerland Ioannis Raftakis, Greece Mihaela Micu, Romania Slavica Prodanović, Serbia **Theodoros Natskos**, Greece **Violeta Maria Vlad**, Romania



#### **GENERAL INFORMATION**

**Course's opening** Thursday, November 30<sup>th</sup>, 2017 - h 12.00 **Course's closing** Saturday, December 02<sup>nd</sup>, 2017 - 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 Hotel

Athens, Greece

#### M.I.T.O.S. GROUP



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phone: +306944443326, +302351079839

### **Contact and Technical Organizer**



### Synthesis Group S.A.

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164 52 Argyroupoli Athens, Greece

Phone: + 30 210 9609400, Fax: + 30 210 4190905

Email: tzombola@synthesispco.com Web site: www.synthesispco.com

### **BASIC LEVEL**

#### **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.



Thursday - No	ovember 30 <sup>th</sup> , 2017		
12.00-14.00	Registration		
12:00-13:45	Lunch		
13:45-14:00	Welcome A. lagnocco, D. Karokis, D. Boumpas		
14:00-14:15	Entering test of knowledge – Basic Level  I. Raftakis		
14.15-14.30	Entering test of knowledge – Intermediate Level  I. Raftakis		
14.30 –15.00	Chairpersons: <b>D. Karokis, I. Raftakis</b> Sonographic pattern of the musculoskeletal tissues and technical characteristics and setting of ultrasound equipment for rheumatology <b>I. Raftakis</b>		
15.00-15.15	Mini break		
15.15-16.45	Workshop: Supervised practical handling of the ultrasound machine settings		
16.45-17.00	Coffee Break		
17.00-17.25	Chairpersons: F. Porta, A. Bachta History and basic physics of MSUS A. Bachta		
17.25-18.00	Normal tissue and joint anatomy. US and correlative anatomy and histology		
18.00-18.30	G. Radunović Artifacts and misinterpretation in MSUS F. Porta		
18.30-19.30	Workshop: Supervised practical handling of the normal MSUS anatomy		
19.30-20.00	Chairpersons: <b>D. Karokis, V.M. Vlad</b> Doppler physics and techniques. Colour and Power Doppler settings and its optimization <b>V.M. Vlad</b>		
20.00-21.00	Workshop: Hands - on session.  The Doppler basics - application		

# Friday, December 1st, 2017

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09.00-09.30	Chairpersons: <b>A. lagnocco, G.G. Kakavouli</b> Sonographic semiology: tendinosis, partial and complete tendon tear, calcifications, articular cartilage lesions, cortical abnormalities, erosions - definition, detection and quantification <b>N. Damjanov</b>	
09:30-10:00	Basic US lesions: synovitis, tenosynovitis and bursitis. Definition, detection and quantification  A. lagnocco	
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	
12.45-13.15	Chairpersons: N. Damjanov, C. Siagkri  Standardized scanning of shoulder normal and basic pathological findings  C. Siagkri	
13.15-13.45	Standardized scanning of the elbow: normal and basic pathological findings  A. Raptopoulou	
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	
17.00-17.30	Chairpersons: A. lagnocco, M. Micu  Standardized scanning of the wrist and hand: normal and basic pathological findings  D. Karokis	
17.30-18.00	Standardized scanning of the hip: normal and basic pathologic findings  M. Micu	



Saturday, December 2 <sup>nd</sup> , 2017			
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		
11.00-11.30	Chairpersons: P. Balint, E. Filippucci Standardized scanning of the knee: normal and basic pathological findings E. Naredo		
11.30-12.00	Standardized scanning of the ankle and foot: normal and basic pathological findings  S. Prodanović		
12.00-12.30	US Application in management of Musculoskeletal Disorders  A. lagnocco		
12.30-14.00	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative knee, ankle and foot		
14.00-14.30	Chairpersons: <b>G.G. Kakavouli, N. Damjanov</b> Basic skills in sonographic guided arthrocentesis  N. Damjanov		
14.30-15.30	<b>Workshop:</b> Basic skills in sonographic-guided arthrocentesis		
15.30-15.45	Exit test of knowledge and closing remarks		
15.45-16.45	Lunch and certificate issuing		

### INTERMEDIATE LEVEL

#### **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, enthesitis 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.

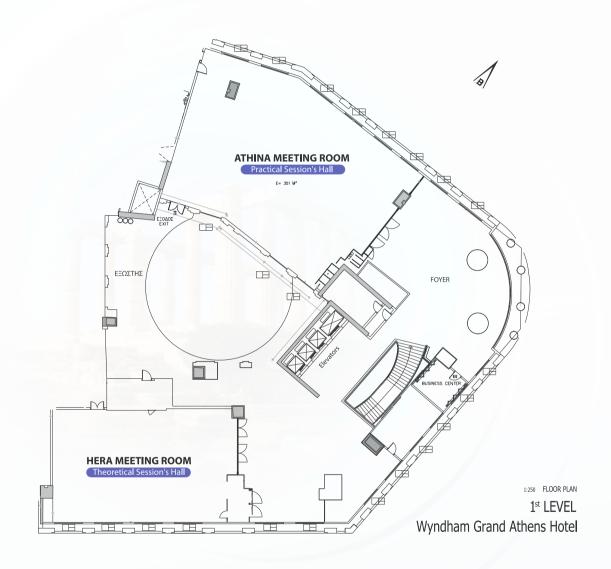


Thursday, November 30th, 2017			
12.00-14.00	Registration		
12.00-13.45	Lunch		
13.45-14.00	Welcome A. lagnocco, D. Karokis, D. Boumpas  HERA MEETING ROOM		
14.00-14.15	Entering test of knowledge - Basic Level  I. Raftakis		
14.15-14.30	Entering test of knowledge - Intermediate Level  I. Raftakis		
14.30-15.00	Chairpersons: <b>D. Karokis, I. Raftakis</b> Sonographic pattern of the musculoskeletal tissues and technical characteristics and setting of ultrasound equipments for rheumatology <b>I. Raftakis</b>		
15.00-15.15	Mini break		
15.15-15.45	Chairpersons: G. Filippou, P. Balint Colour Doppler and Power Doppler (i.e. basis, optimizing setting and applications) G. Filippou		
15.45-16.15	Colour and Power Doppler artifacts  P. Balint		
16.15-16.45	Coffee Break		
16.45-18.30	Workshop: Supervised practical handling on the US machine settings. Sonoanatomy: correct acquisition of images in normal musculoskeletal structures (muscles, tendons, bursae, ligaments, nerves, articular cartilage, joint space, joint recesses, joint capsules and bony profile). Colour and Power Doppler settings and its optimization		
	Chairpersons: A. lagnocco, F. Porta  HERA MEETING ROOM		
18.30-19.00	B-mode and Doppler synovitis, tenosynovitis, tendinosis and tendon tear. Detection and pitfalls  P. Balint		
19.00-19.30	Basic US lesions: cartilage and bone lesions in osteoarthritis  F. Porta		

Friday, December 1st, 2017		
09.00-11.00	Workshop: US semiology: pathological findings. 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	
11.00-11.20	Chairpersons: A. lagnocco, G.G. Kakavouli  Basic US lesions: tendinopathies, tenosynovitis. Validation and scoring of synovial, tenosynovial inflammation  A. lagnocco	
11.20-11.45	Basic US lesions: synovitis, bony cortex and cartilage. Definition, detection and quantification  G. Filippou	
11.45-12.15	Basic US lesions: enthesitis, enthesopathy and validation and scoring of entheseal inflammation  P. Balint	
12.15-12.45	Carpal Tunnel Syndrome & Ultrasound  E. Filippucci	
12.45-14.00	<b>Workshop:</b> Supervised hands-on scanning of patients with inflammatory and degenerative joint and periarticular soft tissues disorders. How to detect and quantify musculoskeletal lesions	
14.00-15.00	Lunch	
15.00-15.30	Chairpersons: P. Balint, G.G. Kakavouli Standardized scanning of the inflammatory and degenerative shoulder G.G. Kakavouli	
15.30-16.00	Standardized scanning of the inflammatory and degenerative elbow  I. Raftakis	
16.00-16.30	Standardized scanning of the inflammatory and degenerative hand and wrist  D. Karokis	
16.30-17.00	Coffee Break	
17.00-19.00	<b>Workshop:</b> Supervised hands-on scanning of patients with inflammatory and degenerative shoulder, elbow, hand and wrist	



Saturday, December 2 <sup>nd</sup> , 2017			
09.00-09.30	Chairpersons: M. Micu, N. Damjanov Role of US in the diagnosis of crystal arthropathy  E. Filippucci		
09.30-10.00	Standardized scanning of the inflammatory and degenerative hip  M. Micu		
10.00-10.30	Standardized scanning of the inflammatory and degenerative knee  G.G. Kakavouli		
10.30-10.45	Coffee Break		
10.45-11.30	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative hip		
11.30-12.30	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative knee, ankle and foot		
12.30-13.00	Chairpersons: C. Siagkri, A. lagnocco Standardized scanning of the inflammatory and degenerative ankle and foot C. Siagkri		
13.00-13.30	US in sport medicine and traumatic conditions  A. Bachta		
13.30-14.00	Basic skills in sonographic-guided arthrocentesis  N. Damjanov		
14.00-15.00	<b>Workshop:</b> Basic skills in sonographic-guided arthrocentesis		
15.00-15.15	Exit tests of knowledge and closing remarks		
15.15-16.45	Lunch and certificate issuing		





### **APPLICATION FORM**

# 4<sup>th</sup> INTERNATIONAL MUSCULOSKELETAL ULTRASOUND COURSE (Basic & Intermediate Level), Athens, November 30<sup>th</sup> – December 2<sup>nd</sup> 2017

Surname				
First name				
Gender	male	female		
Level	basic	intermediate		
Date of Birth				
Medical Specialty				
Country				
Contact phone number				
Fax number		Tri -		
Mobile phone number				
e-mail				
Institution (name and address)				
License Number				
Sponsor contact details (if applicable)				
Please tick appropriately				
	ACCOM	MMODATION		
Single room	2 nights, arrival 30th November	- departure 2 <sup>nd</sup> December 2017		
Double room	2 nights, arrival 30 <sup>th</sup> November	- departure 2 <sup>nd</sup> December 2017		
Fill in total amount of participation€				

**Applicant's Signature** 

Application form should be signed and sent by **fax:** +30 210 4190905 Or scanned and sent by **e-mail:** tzombola@synthesispco.com



