



MITOS

A task force for Greek Rheumatologists
Musculoskeletal Imaging Techniques - Ongoing Sonography

International
Musculoskeletal
ULTRASOUNDCOURSE
BASIC & INTERMEDIATE LEVELS

30 | 02
NOV | DEC
2023

Scientific
Program



Wyndham Grand
Athens

Greece

UNDER THE AUSPICES



ΕΛΛΗΝΙΚΗ ΡΕΥΜΑΤΟΛΟΓΙΚΗ
ΕΤΑΙΡΕΙΑ & ΕΠΑΓΓΕΛΜΑΤΙΚΗ ΕΝΩΣΗ
ΡΕΥΜΑΤΟΛΟΓΩΝ ΕΛΛΑΔΟΣ

<https://mitocourse2023.concopco.com>



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Scientifically Endorsed by



EUROPEAN ALLIANCE
OF ASSOCIATIONS
FOR RHEUMATOLOGY

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)

Organizing Committee

Giasna Giokits

Dimitrios Karokis

Ioannis Raftakis

Caterina Siagkri

Scientific Committee

Giasna Giokits

Dimitrios Karokis

Ioannis Raftakis

Caterina Siagkri

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 Iagnocco, Italy

Ahmed Abogamal, Egypt

Amalia Raptopoulou, Greece

Andrea DelleSedie, Italy

Andreas Diamantopoulos, Norway

Athanasios Fortis, Greece

Carlo Perricone, Italy

Caterina Siagkri, Greece

Dimitris Karokis, Greece

Emilio Filippucci, Italy

Giasna Giokits, Greece

Ioannis Raftakis, Belgium

Nemanja Damjanov, Serbia

Peter Balint, Hungary

Slavica Prodanović, Serbia

Instructors

Ahmed Abogamal, Egypt

Amalia Raptopoulou, Greece

Andrea DelleSedie, Italy

Andreas Diamantopoulos, Norway

Athanasios Fortis, Greece

Carlo Perricone, Italy

Caterina Siagkri, Greece

Christos Georgakopoulos, Greece

Dimitris Karokis, Greece

Dimos Merinopoulos, Greece

Emilio Filippucci, Italy

Giasna Giokits, Greece

Ioannis Raftakis, Belgium

Nemanja Damjanov, Serbia

Pavlos Stamatis, Greece

Peter Balint, Hungary

Slavica Prodanović, Serbia

Theodoros Dimitroulas, Greece

Theodoros Natskos, Greece

GENERAL INFORMATION

Course's opening

Thursday, November 30th, 2023 - h 11.30

Course's closing

Saturday, December 2nd, 2023 - h 16:45

Participants

The number of participants in each of the levels is limited

Official language

English

Congress Venue

Wyndham Grand Hotel, Athens, Greece

Organizer

M.I.T.O.S. GROUP

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Co Organizer

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THE CONFERENCE COMPANY

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SPEAKERS – INSTRUCTORS

Annamaria Iagnocco

Professor of Rheumatology, Dipartimento Scienze Cliniche e Biologiche, Università degli Studi di Torino, Turin, Italy

Ahmed Abogamal

Professor Of Rheumatology, Al-Azhar University, Consultant Rheumatologist, DUBAI-UAE, Scientific Chairman Of EOS, EULAR Certified MSUS trainer, Scientific Director Of the ARLAR MSUS group, Cairo, Egypt

Amalia Raptopoulou

MD, PhD, Rheumatologist, Veroia, Greece

Andrea Delle Sediè

MD, Rheumatologist, Azienda Ospedaliero Universitaria Pisana, Pisa, Italy

Andreas P. Diamantopoulos

MD, Ph.D., MPH, Consultant Rheumatologist, Division of Internal Medicine, Department of Infectious Diseases, Akershus University Hospital, Oslo, Norway

Athanasios Fortis

MD, PhD, FEBOT, Clinical Director Orthop. Dept., Panarkadian Hospital, Tripolis, Greece

Carlo Perricone

Associate Professor in Rheumatology, Rheumatology, Department of Medicine and Surgery, University of Perugia

Caterina Siagri

Rheumatologist, Scientific Associate of Hippocraton Hospital of Thessaloniki, Private Practice Thessaloniki, Greece

Christos Georgakopoulos

MD, MSc, Medical Resident in Rheumatology, KAT General Hospital, Attica, Greece

Dimitris Karokis

MSc, Rheumatologist, General Secretary of the M.I.T.O.S. Group (Musculoskeletal Imaging Techniques: Ongoing Sonography), Patras, Greece

Dimos Merinopoulos

BS, MSc, MD, MRCP, Rheumatologist, Athens, Greece

Emilio Filippucci

Professor, MD, PhD, Clinica Reumatologica, Università Politecnica delle Marche, Jesi (Ancona), Italy

Giasna Giokits

MD, Consultant Rheumatologist, Scientific Associate of Hippocraton Hospital of Thessaloniki, 4th Department of Pathology, Private Practice Katerini, Greece

Ioannis Raftakis

Rheumatologist, Deputy Head of Clinic, Department of Rheumatology, CHUB rugmann, Brussels, Belgium

Nemanja Damjanov

MD, PhD, Full Professor of Internal Medicine, Rheumatology, Belgrade University School of Medicine, Director of Institute of Rheumatology, Belgrade, Serbia

Pavlos Stamatis

MD, MSc, PhD, Consultant Rheumatologist Sunderby Hospital Sweden, Affiliated researcher Lund University, Sweden

Peter V. Balint

FRCP (Glasgow), President of the Hungarian Association of Rheumatologists, Musculoskeletal Radiology Group Medical Imaging Clinic, Semmelweis University, Head of Department, Consultant Rheumatologist, 3rd Rheumatology Department, National Institute of Musculoskeletal Diseases, Budapest, Hungary

Slavica Prodanović

MD, PhD, Specialist of Internal Medicine-Rheumatologist, Chief of the Ultrasound Department, Institute of Rheumatology Klin, Ass. At School of Medicine University of Belgrade, Belgrade, Serbia

Theodoros Dimitroulas

Associate Professor of Rheumatology, School of Medicine, Aristotle University of Thessaloniki, Greece

Theodoros Natskos

Rheumatologist, Veroia, Greece

SCIENTIFIC PROGRAM INFORMATION

CONGRESS SECRETARIAT OPENING HOURS

Thursday, 30 November 2023	11:30 - 21:00
Friday, 1 December 2023	08:30 - 19:00
Saturday, 2 December 2023	08:30 - 17:00

CERTIFICATE OF ATTENDANCE

Participants can receive their certificate of attendance during the closing session on the 2nd of December 2023.

To receive the certificate of attendance, it is mandatory to complete and submit the evaluation form, at the Course Secretariat, before the closing session and to show the congress badge.

CONGRESS HALLS

Theory	Hera Meeting room	1 st floor
Workshop	Athina Meeting room	1 st floor
Exhibition	Foyer	1 st floor

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 equipment 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 sonography.
- 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.

SCIENTIFIC PROGRAM

Thursday - November 30th, 2023

12.00 - 13.30	Registration
13.30 - 13.45	Welcome A. Iagnocco, G. Giokits, D. Karokis
13.45 - 14.00	J. Raftakis Entering test of knowledge - Basic Level
14.15 - 14.45	Chairpersons: A. Iagnocco, J. Raftakis J. Raftakis Technical characteristics and setting of ultrasound equipments for Musculoskeletal diseases
14.45 - 15.00	Mini break - Hall changing
15.00 - 16.30	Workshop: Supervised practical handling of the ultrasound machine settings
16.30 - 17.00	Break
17.00 - 17.25	Chairpersons: C. Perricone, E. Filippucci C. Perricone History and basic physics of MSUS
17.25 - 18.00	E. Filippucci Normal tissue and joint anatomy; Sonographic pattern of the musculoskeletal tissues
18.00 - 18.30	C. Perricone Artifacts and misinterpretation in MSUS
18.30 - 19.30	Workshop: Supervised practical handling of the normal MSUS anatomy Chairperson: A. Iagnocco
19.30 - 20.00	A. Iagnocco US Application in management of Musculoskeletal Disorders
20.00 - 21.00	Workshop: Hands - on session; normal MSUS anatomy and basic pathological findings

SCIENTIFIC PROGRAM

Friday, December 1st, 2023

Chairpersons: **A. Iagnocco, G.Giokits**

- 09.00 - 09.30** **N. Damjanov** Sonographic semiology; US and correlative anatomy and histology: articular cartilage lesions, cortical abnormalities; Basic pathology of tendons and ligaments (tendinosis, calcifications, tears)
- 09.30 - 10.00** **A. Iagnocco** Basic synovial US lesions: synovitis, synovial hypertrophy, tenosynovitis and bursitis; Definition, detection, and quantification
- 10.00 - 10.30** **P. Balint** Enthesitis and enthesopathy
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- 10.30 - 11.00** Break
-
- 11.00 - 12.45** **Workshop:** US semiology: normal and basic pathological findings
- Chairpersons: **N. Damjanov, C. Siagkri**
- 12.45 - 13.15** **C. Siagkri** Standardized scanning of shoulder normal and basic pathological findings
- 13.15 - 13.45** **A. Raptopoulou** Standardized scanning of the elbow: normal and basic pathological findings
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- 13.45 - 14.30** Break
-
- 14.30 - 17.00** **Workshop:** Supervised scanning technique of shoulder; supervised scanning technique of elbow; Normal and basic pathological findings
- Chairpersons: **D. Karokis, A. Fortis**
- 17.00 - 17.30** **D. Karokis** Standardized scanning of the wrist and hand: normal and basic pathological findings
- 17.30 - 18.00** **A. Fortis** Standardized scanning of the hip: normal and basic pathologic findings

SCIENTIFIC PROGRAM

Saturday, December 2nd, 2023

09.00 - 10.45	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative hand, wrist and hip
10.45 - 11.00	Break
11.00 - 11.30	Chairpersons: A. Iagnocco, J. Raftakis J. Raftakis Standardized scanning of the knee: normal and basic pathological
11.30 - 12.00	S. Prodanović Standardized scanning of the ankle and foot: normal and basic pathological findings
12.00 - 12.30	C. Perricone Image documentation; reporting US findings and diagnosis
12.30 - 13.15	Break
13.15 - 14.30	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative knee, ankle and foot Chairpersons: G. Giokits, N. Damjanov
14.30 - 15.00	N. Damjanov Basic skills in sonographic guided arthrocentesis
14.15 - 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.

SCIENTIFIC PROGRAM

Thursday - November 30th, 2023

12.00 - 13.30	Registration
13.30 - 13.45	Welcome A. Iagnocco, G. Giokits, D. Karokis
14.00 - 14.15	J. Raftakis Entering test of knowledge - Intermediate Level
14.15 - 14.45	Chairpersons: A. Iagnocco, J. Raftakis J. Raftakis Technical characteristics and setting of ultrasound equipment for Musculoskeletal diseases.
14.45 - 15.00	Mini break -Hall changing
15.00 - 15.20	Chairpersons: A. Iagnocco, A. Delle Sedie A. Diamantopoulos Doppler physics, technology and artefacts. Doppler setting optimization
15.20 - 15.40	A. Diamantopoulos Application, indications and limitations of Doppler in musculoskeletal US
15.40 -16.00	A. Delle Sedie Colour Doppler and power Doppler. Correlations between US imaging and histopathological findings
16.00 - 16.30	Break
16.30 - 18.30	Workshop: Supervised practical scanning of the different Doppler modalities. How to use and set the ultrasound equipment. The choice of the appropriate probe. Optimization of Doppler settings. PDUS artefacts
18.30 - 19.00	Chairpersons: A. Iagnocco, E. Filippucci A. Iagnocco B-mode and Doppler synovitis. Definition, detection, quantification and pitfalls
19.00 - 19.30	E. Filippucci B-mode and Doppler tenosynovitis. Definition, detection, quantification and pitfalls

SCIENTIFIC PROGRAM

Friday, December 1st, 2023

- 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. Balint, G. Giokits**
- 11.00 - 11.25** **N. Damjanov** B-mode tendinosis and tendon tear. Definition, detection, quantification and pitfalls
- 11.25 - 11.50** **A. Abogamal** US bone abnormalities. Definition, detection, quantification and pitfalls
- 11.50 - 12.15** **A. Abogamal** US cartilage abnormalities. Definition, detection, quantification and pitfalls
- 12.15 - 12.45** **P. Balint** B-mode and Doppler enthesopathy and enthesitis. Definition, detection, quantification and pitfalls
- 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
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- 14.00 - 15.00** Break
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- Chairpersons: **G. Giokits, C. Siagkri**
- 15.00 - 15.30** **A. Diamantopoulos** US diagnosis of hip pathology
- 15.30 - 16.00** **G. Giokits** US diagnosis of knee pathology
- 16:00 - 16:30** **C. Siagkri** US diagnosis of ankle and foot pathology
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- 16.30 - 17.00** Break
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- 17.00 - 19.00** **Workshop:** Supervised hands-on scanning of patients with lower extremity pathology

SCIENTIFIC PROGRAM

Saturday, December 2nd, 2023

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

09.00 - 09.30	G. Giokits US diagnosis of shoulder pathology
09.30 - 10.00	J. Raftakis US diagnosis of elbow pathology
10.00 - 10.30	D. Karokis US diagnosis of wrist and hand pathology
10.30 - 10.45	Break
10.45 - 12.45	Workshop: Supervised hands-on scanning of patients with upper extremity pathology
12.45 - 13.30	Break
	Chairpersons: E. Filippucci, A. Iagnocco
13.30 -13.50	A. Iagnocco US: a tool for diagnosis and outcome measure in RA
13.50 - 14.20	E. Filippucci Role of US in the diagnosis of crystal arthropathy and periarticular tissue (gout, CPPD)
14.30 - 15.00	N. Damjanov Basic skills in sonographic-guided arthrocentesis
15.00 - 16.00	Workshop: Basic skills in sonographic-guided arthrocentesis
16.00 - 16:15	Exit tests of knowledge and
16:15 - 16.45	Closing remarks and certificate issues