



General information and Course programme of the

**4th MUSCULOSKELETAL
SONOGRAPHY COURSE
FOR RHEUMATOLOGISTS
- BASIC LEVEL -**

**2nd MUSCULOSKELETAL
SONOGRAPHY COURSE
FOR RHEUMATOLOGISTS
- INTERMEDIATE LEVEL -**

Zagreb, September 28th- September 30th 2017.



This course has been scientifically endorsed by **EULAR**



Naslovna fotografija je vlasništvo arhive Hrvatske turističke zajednice (HTZ). Autor: Damir Fabijanić

ORGANIZATION AND COMMITTEE

Scientific Director

Prof. Annamaria Iagnocco

Executive director of the Course

Assist. Prof. Porin Perić, MD, PHD

Faculty

The speakers will come from major European musculo-skeletal ultrasound research centers and are rheumatologists mostly involved in previous EULAR courses. The contacted faculty is:

Peter Balint Hungary, **Nemanja Damjanov** Serbia, **Annamaria Iagnocco** Italy, **Nadica Laktašić-Žerjavić** Croatia, **Mihaela Micu** Romania, **Georgios Filippou** Italy, **Levent Oczakar** Turkey, **Francesco Porta** Italy, **Porin Perić** Croatia, **Goran Radunović** Serbia, **Violeta Vlad** Romania, **Marco Matucci-Cerinic** Italy

Instructors

Mislav Cerovec Croatia, **Nemanja Damjanov** Serbia, **Darija Granec** Croatia, **Tatjana Kehler** Croatia, **Nadica Laktašić-Žerjavić** Croatia, **Miroslav Mayer** Croatia, **Mihaela Micu** Romania, **Tomislav Nemčić** Croatia, **Levent Oczakar** Turkey, **Francesco Porta** Italy, **Porin Perić** Croatia, **Goran Radunović** Serbia, **Violeta Vlad** Romania

GENERAL INFORMATION

Course opening

Thursday, September 28th
2017. - 12:00 h

Course closing

Saturday, September 30th
2017. - 15:00 h

Participants

The number of participants is limited to 30 for each Course (basic and intermediate)

Official language

English

Congress Venue: **Hotel Sheraton**, Kneza Borne 2, 10000 Zagreb, Croatia, www.hotel-sheratonzagreb.com/hr

Reservations: phone: +385 1 48 111 55, Fax: +385 1 48 189 14, e-mail: zagreb@atlantis-travel.hr, www.atlantis-travel.hr

Scientific Organizer: **Prof. Annamaria Iagnocco**

Executive director of the Course: **Porin Perić, MD, PHD**
Assistant Professor - Department of Rheumatology, Clinical Hospital Center, Zagreb, Kišpatičeva 12, 10000 Zagreb, Croatia e-mail: porin.peric@gmail.com

Organizing Secretariat: **Croatian Society for Rheumatology**
Šubičeva 9, 10000 Zagreb, Croatia
Phone: +385 1 2388-171, Fax: +385 1 2388-289
e-mail: porin.peric@gmail.com
www.reumatologija.org

**Institutional
Organizer:**

Clinical Hospital
Center Zagreb,
Department of
Rheumatology,
University of
Zagreb, Croatia.

**Scientific
Indorsement:**

European League
Against Rheumatism
(EULAR)
Croatian Medical
Association
Croatian Society for
Rheumatology

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Musculoskeletal sonography course for rheumatologists, Zagreb 2017 is intended to be a combination of lectures and practical sessions. The course is consisted of theoretical talks and supervised hands-on scanning of healthy persons and/or patients with musculoskeletal disorders.

Sponsorship: Esaote, Olympus, Philips, MSD, GE, Abbvie, Pfizer, Novartis. Esaote, Olympus, Phillips and GE will provide ultrasound equipment free of charge.

Sponsors will not have any influence on the course programme, scientific and other content, or speakers in any way.

The Course is in a proces of CME accreditation at the Croatian Ministry of Health.

Registration is intended to be opened for all EULAR member countries.

Formal evaluation of the course will be performed by all attendees at the end of the Course.

Registration fee: **1000 EUR** per person (three days course). Food and accomodation are included in the price.

The number of participants will be 30 people for each Course.

OBJECTIVES

- To learn technical characteristics and setting of ultrasound equipments for rheumatology
- To learn basic normal musculoskeletal ultrasonographic anatomy (MSUS).
- To learn basic pathological MSUS findings
- To learn the systematic standardized sonographic scanning method of each anatomical region, according to the EULAR guidelines
- Applications, indications and limitations of MSUS in rheumatology
- Image documentation
- Basics of Colour and Power Doppler application to detect synovial and enthesal inflammation

MAIN TOPICS

- Ultrasound physics and technology, technical characteristics of ultrasound equipments in rheumatology, applications, indications and limitations of MSUS
- MSUS anatomy, artefacts 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, entesopathy, bursitis, calcifications, articular cartilage lesions, cortical abnormalities and joint synovitis).
- Reporting US findings and diagnosis

WORKSHOP

- Practical handling of the ultrasound system 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
- Supervised assesment of the basic somographic symptoms or inflammation severity in grades

TIMETABLE

- Musculoskeletal Sonography Course for Rheumatologists, Basic Level, consists of 20 hours of activities within 3 days (lectures: 30% of total time; practical training on models and/or patients with musculoskeletal disorders : 70%)

SPONSORSHIP



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GE Healthcare

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SCIENTIFIC PROGRAMME

Thursday, September 28th 2017.

TIME	PROGRAMME
12:00-14:00	Registration
12:00-13:30	Lunch
14:00-14:15	Welcome A. Iagnocco, B. Anić, P. Perić
14:15-14:30	Entering test of knowledge
Chairpersons:	P. Balint, P. Perić
14:30-15:00	History and basic physics of MSUS. L Oczakar.
15:00-15:20	Coffee break
15:20-16:00	Normal tissue and joint anatomy. US and correlative gross anatomy and histology. P. Balint

TIME	PROGRAMME
16:00-16:25	Artifacts and misinterpretation in MSUS. P. Balint
16:25-16:50	Technical characteristics and setting of ultrasound equipments for rheumatology. A. Iagnocco
16:50-17:10	Coffee break
17:10-18:40	Workshop: Supervised practical handling of the ultrasound machine settings. Normal MSUS anatomy.
Chairpersons:	F. Porta, P. Perić
18:40-19:10	Reporting ultrasound findings and diagnosis. F. Porta
19:10-20:30	Workshop: Supervised reporting of ultrasound findings and diagnosis.
20:30	Dinner

Friday, September 29th 2017.

TIME	PROGRAMME
Chairpersons: T. Kehler, N. Damjanov	
09:00-09:40	Sonographic semiology (tendinosis, tenosynovitis, partial and complete tendon tear, entesopathy, bursitis, calcifications, articular cartilage erosions, cortical abnormalities and joint synovitis). N. Damjanov
09:40-10:20	Enthesitis and enthesopathy. V. Vlad
10:20-10:40	Coffee break
10:40-11:10	Standardized scanning of the hip: normal and basic pathologic findings. M. Micu
11:10-12:30	Workshop: Supervised scanning technique of hip. Normal and basic pathological findings.
12:30-13:00	Standardized scanning of the knee: normal and basic pathological findings. F. Porta

TIME	PROGRAMME
13:00-14:20	Workshop: Supervised scanning technique of knee. Normal and basic pathological findings.
14:20-15:30	Lunch
Chairpersons: G. Filippou, P. Perić	
15:30-15:50	Standardized scanning of the shoulder: normal and basic pathological findings. G. Filippou
15:50-18:00	Workshop: Supervised scanning technique of shoulder. Normal and basic pathological findings.
20:00	Dinner

Saturday, September 30th 2017.

TIME	PROGRAMME
Chairpersons: N. Laktašić-Žerjavić, P. Perić	
09:00- 09:20	Standardized scanning of the wrist and hand: normal and basic pathological findings. P. Perić
09:20-09:40	Standardized scanning of the elbow: normal and basic pathological findings. N. Laktašić-Žerjavić
09:40-11:00	Workshop: Supervised scanning technique of wrist and hand. Normal and basic pathological findings.
11:00-12:00	Workshop: Supervised scanning technique of wrist and hand. Normal and basic pathological findings.
12:00-12:20	Coffee break

TIME	PROGRAMME
12:20- 12:40	Standardized scanning of the ankle and foot: normal and basic pathological findings. G. Radunović
12:40-13:30	Workshop: Supervised scanning technique of ankle and feet. Normal and basic pathological findings.
13:30-14:00	Test of knowledge
14:00-15:00	Lunch and certificate issuing

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, entesitis 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, entesitis and degenerative lesions
- Role of ultrasound in diagnosis and monitoring of metabolic arthritis
- Role of ultrasound in assessment of skin
- Role of ultrasound in monitoring patients with inflammatory joint diseases
- Standards of safety of ultrasound-guided punctures and injections sonographic system

WORKSHOP:

- 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, entesitis and degenerative lesions.
- Supervised basic sonographic-guided musculoskeletal injections

Thursday, September 28th 2017.

TIME	PROGRAMME
12:00-14:00	Registration
12:00-13:30	Lunch
14:00-14:15	Welcome - A. Iagnocco, P. Peric
14:15-14:40	Entering test of knowledge

Chairpersons: A. Iagnocco, G. Filippou

TIME	PROGRAMME
14.40-15.20	Sonographic pattern of the musculoskeletal tissues and technical characteristics and setting of ultrasound equipments for rheumatology. A. Iagnocco
15.20-16.00	Color Doppler and Power Doppler (i.e. basis, optimizing setting and applications). G. Filippou
16.00-16.20	Coffee break
16.20-17.40	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.
17.40-18.40	Colour and Power Doppler artifacts. G. Filippou

Friday, September 29th 2017.

TIME	PROGRAMME
9.00-10.20	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.
10.20-10.30	Coffee break
Chairpersons: A. Iagnocco, P. Balint	
10.30-11.00	Basic US lesions: synovitis, bony cortex and cartilage. Definition, detection and quantification. G. Filippou
11.00-11.30	Basic US lesions: tendinopathies, tenosynovitis. A. Iagnocco
11.30-12.00	Basic US lesions: enthesitis, enthesopathy. P. Balint
12.00-13.00	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative joint and periarticular soft tissues disorders. How to detect and quantify musculoskeletal lesions.

TIME	PROGRAMME
13.00-14.30	Lunch
Chairpersons: P. Peric, M. Micu	
14.30-14.50	Basic US lesions: cartilage and bone lesions in osteoarthritis. F. Porta
14.50-15.15	Standardized scanning of the inflammatory and degenerative shoulder. P. Peric
15.15-15.40	Standardized scanning of the inflammatory and degenerative elbow. N. Laktašić-Zerjavić
15:40-16.00	Standardized scanning of the inflammatory and degenerative hip. M. Micu
16.00-16.30	Ultrasound in systemic sclerosis. M. Matucci-Cerinic
16.30-16.50	Coffee break
16.50:18:30	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative shoulder, elbow, hip.

Saturday, September 30th 2017.

TIME	PROGRAMME
Chairpersons: V. Vlad, G. Radunovic	
9.00-9.25	Standardized scanning of the inflammatory and degenerative hand and wrist. L. Oczakar
9.25-9.50	Standardized scanning of the inflammatory and degenerative ankle and foot. G. Radunovic
9.50-10.15	Role of US in the diagnosis of crystal arthropathy. N. Laktašić-Zerjavić
10.15-10.40	Standardized scanning of the inflammatory and degenerative knee. V. Vlad
10.40-11.00	Coffee break
11.00-11.40	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative hand, and wrist.

TIME	PROGRAMME
11.40-12.30	Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative knee, ankle and foot.
12.30-13.15	Basic skills in sonographic-guided arthrocentesis. N. Damjanov
13.15-14.30	Workshop: Basic skills in sonographic-guided arthrocentesis.
14.30-15:00	Exit test of knowledge and closing remarks.
15:00-16.00	Lunch and certificate issuing

REGISTRATION

Registration fees:

This 3-day course fee will be **1000 EUR** per participant (lodging and food is included in the course price).

It is recommended to make reservation of accommodation directly to Atlantis Travel agency:

Email: zagreb@atlantis-travel.hr

Phone: +385 1 48 111 55

Fax: +385 1 48 189 14

Registration deadline: **June 30th 2017.**

Registration fee includes:

- 2 nights in single room, BB, hotel Sheraton - 28-30.9.2017.
- Admission to all conference sessions
- Conference KIT
- Conference session materials
- Certificate of attendance and CME certificate
- Coffee breaks and lunches, as specified in the program

Registration instructions:

To register for the Course you must fill in the form and send it, together with the payment of the registration fee to the Organizational Secretariat.

No registrations will be made without payment of the registration fee.

The Organizational Secretariat will inform the participant that he or she has been registered for the Course.

BANK DETAILS:

Raiffeisen bank Austria dd
Address: Petrinjska 59, Zagreb
In favour of : Atlantis Travel d.o.o.
IBAN: HR 4324840081500155209
SWIFT CODE : RZBHHR2X
Reference number : 225-2016

BANK DETAILS:**(for payment in Kunas)**

Atlantis Travel d.o.o.
Petrinjska 59, Zagreb,
Account: HR5524840081100439430
Reference number : 225-2016
Please ask proforma invoice!

**Amount should be net of bank
commission !**

Methods of payment:

The registration fee may be paid by bank transfer. Kuna and foreign currency account of Atlantis Travel.

The copy of bank transfer must be sent together with the registration form to the Organizational Secretariat. No registration will be made without payment.

Cancellations:

The Secretariat must be informed in writing of any cancellations. Eighty percent of the sum paid will be refunded for cancellations made before **June 30th 2017**. No money will be refunded for cancellations made after that date.

General information and Course programme of the

**4th MUSCULOSKELETAL SONOGRAPHY COURSE FOR RHEUMATOLOGISTS
- BASIC LEVEL -**

**2nd MUSCULOSKELETAL SONOGRAPHY COURSE FOR RHEUMATOLOGISTS
- INTERMEDIATE LEVEL -**

Zagreb, September 28th- September 30th 2017.

This course has been scientifically endorsed by EULAR

For more information, please visit the web sites:

www.reumatologija.org | www.eular.org | www.atlantis-travel.hr



eular the european league against rheumatism

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