5th MUSCULOSKELETAL SONOGRAPHY COURSE
INTERMEDIATE LEVEL COURSE – adult rheumatology
BASIC LEVEL - paediatric rheumatology
Belgrade, 5th-7th March, 2015

ORGANIZER
Rheumatology Association of Serbia
www.belgrade-course.org
**Scientific Director**
Prof. Annamaria Iagnocco MD PhD
Rheumatology Unit,
Dipartimento di Medicina Interna e Specialità Mediche,
Sapienza Università di Roma, Roma, Italy
e-mail: annamaria.iagnocco@uniroma1.it

**Executive Director**
Prof. Nemanja Damjanov MD PhD
President of Rheumatology Association of Serbia
Institute of Rheumatology, University of Belgrade Medical School,
Resavska 69, 11000 Belgrade, Serbia
e-mail: nemanjadamjanov@yahoo.com

**Paediatric Course Organizer**
Prof Jelena Vojinović MD PhD
Department for Pediatric Rheumatology, Clinical Center
Faculty of Medicine University of Niš, Serbia
e-mail: vojinovic.jelena@gmail.com

**Organizing Secretariat**
Rheumatology Association of Serbia Resavska 69, 11000 Belgrade, Serbia
Phone: +381/11 3600 802, +381/11 3629 282
Fax: +381/11 3612 376 e-mail: ures@ures.org.rs
www.ures.org.rs

**Contact and Technical organizer:**
Tourist agency „Mondorama“
Cara Dušana 54-72, Dušanov bazar, loc 216, 18000 Niš, Serbia
+381 (0)18/259-500, (0)18/259-501
e-mail: belgrade-course@mondorama.rs
http://www.mondorama.rs/
GENERAL INFORMATION

Congress Venue
Best Western Hotel M
Bulevar Oslobodjenja 56a, 11000 Belgrade

Course opening
Thursday, March 5th, 2015  12.00

Course closing
Saturday, March 7th, 2015  16:00

Participants
The number of participants is limited to 40 per each course

Official language
English

Registration is intended to be opened for all EULAR member countries. This Course is recommended for rheumatologists and/or pediatricians with special interest in pediatric MSUS.

We offer two options for registration fee:

- Option A: course, educational material, 3 lunches, 4 coffee breaks, 2 dinners, accommodation (2 nights in Hotel Best Western Hotel M) - Fee: 800€.
- Option B: course, educational material, 3 lunches, 4 coffee breaks, 1 dinner (6th March) - Fee: 600€.

To register please use on line registration form provided at the web site:

www.belgrade-course.org
FACULTY AND INSTRUCTORS

Annamaria Iagnocco, Italy
Clara Malattia, Italy
Esperanza Naredo, Spain,
Francesco Porta, Italy
Geogre Bruyn, Netherlands
Giasna Kakavouli, Greece
Goran Radunović, Serbia
Gordana Sušić, Serbia
Jelena Vojinović, Serbia
Mihaela Micu, Romania
Miroslav Harjacek, Croatia
Nemanja Damjanov, Serbia
Paz Collado, Spain
Peter Balint, Hungary
Porin Perić, Croatia
Sandrine Jousse-Joulin, France
Silvia Magni Manzoni, Italy
Slavica Prodanović, Serbia
Violeta Vlad, Romania
Viviana Ravagnani, Italy
Vlado Skakić, Serbia
OBJECTIVES:
• To know the principles of MSUS in children.
• To identify the sonographic pattern of the different musculoskeletal tissues in children.
• To know and to identify normal musculoskeletal anatomy of children using ultrasound.
• To learn and perform an ultrasound assessment of each musculoskeletal anatomical region using a standardized examination in children.
• To identify the principal pathological MSUS findings in children.
• To report ultrasound findings and diagnosis.

MAIN TOPICS
• The course will focus on musculoskeletal examination technique, indications and limitations of Paediatric MSUS
• Normal musculoskeletal sonoanatomy in children
• Principal pathologies in children and reporting MSUS findings in children.

WORKSHOP
• Practical handling of the ultrasound machine settings.
• Supervised identification of musculoskeletal structures in children.
• Supervised standardized sonographic scanning of the hip, knee, ankle and foot, shoulder, elbow, wrist and hand in children.
• Supervised hands-on scanning of children with basic musculoskeletal lesions.
March 5th 2014, Thursday
12:00-14:00 Registration
12:00-13:30 Lunch
14:00-14:15 Welcome – A. Iagnocco, N. Damjanov, J. Vojinovic
14:15-14:40 Entering test of knowledge
Chairpersons: A. Iagnocco, E. Naredo
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). (E. Naredo)
16.00 – 16.30 coffee break
Chairpersons: P. Balint, J. Vojinovic
16.30 – 17.00 Clinical use of MSUS in pediatric practice. (J. Vojinovic)
17.00 – 17.40 Sonographic pattern of the musculoskeletal tissues in children. (P. Balint)

March 6th 2015, Friday
Chairpersons: A. Iagnocco, C. Mallatia
9.00 – 9.40 Sonographic semiology (tendinosis, tenosynovitis, partial and complete tendon tear, entesopathy, bursitis, calcifications, articular cartilage lesions, cortical abnormalities and joint synovitis). (A. Iagnocco)
10.20 – 10.30 coffee break
10.30 -12.00 Workshop: Standardized scanning of the hip in children.
12.00 – 13.00 Sonoanatomy of the shoulder and elbow in children. Normal and the principal pathological findings. (V. Ravagnani)
13.00-14.30 Lunch
15.15 – 16.00 Workshop: Standardized scanning of the elbow in children.
16.00 – 16.20 coffee break
Chairpersons: P. Collado, S. Magni Manzoni
16.20 – 16.50 Sonoanatomy of the wrist and hand in children. Normal and principal pathological findings. (S. Magni Manzoni)
16.50 – 17.20 Sonoanatomy of the foot in children. Normal and principal pathological findings. (P. Collado)
17.20 – 18.00 Basic skills in sonographic-guided arthrocentesis. (N. Damjanov)

March 7th 2013, Saturday
9.00 – 9.50 Workshop: Standardized scanning of the hand in children.
10.40 – 11.00 coffee break
Chairpersons: P. Balint, G. Sušić
11.00 – 11.45 Standardized scanning of the enthesis in children. Normal and principal pathological findings (enthesitis, enthesopathy). (P. Balint)
11.45 – 12.30 Sonoanatomy of the knee in children. Normal and principal pathological findings. (M. Hajracek)
12.30 - 13.15 Workshop: Standardized scanning of the knee in children
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
INTERMEDIATE LEVEL MSUS COURSE

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, tendinopahties, tenosynovitis, enthesitis 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

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, enthesitis and degenerative lesions.
• Supervised basic sonographic-guided musculoskeletal injections
March 5th 2014, Thursday
12:00-14:00 Registration
12:00-13:30 Lunch
14:00-14:15 Welcome - A. Iagnocco, N. Damjanov, J. Vojinovic
14:15-14:40 Entering test of knowledge
Chairpersons: A. Iagnocco, E. Naredo,
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) (E. Naredo)
16.00 – 16.20 coffee break
17.40 – 18.40. Colour and Power Doppler artifacts (E. Naredo)

March 6th 2015, Friday
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. (E. Naredo)
11.00-11.30 Basic US lesions: tendinopathies, tenosynovitis. (G. Bruyn)
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
13.00-14.30 Lunch
Chairpersons: P. Peric, V. Skakic
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 (*V. Skakic*)
15:40 – 16:00 Standardized scanning of the inflammatory and degenerative hip. (*M. Micu*)
16.00 – 16.20 coffee break
16.20 – 18.00 Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative shoulder, elbow, hip

**March 7th 2013, Saturday**
Chairpersons: V. Vlad, G. Radunovic
9.00 – 9.25 Standardized scanning of the inflammatory and degenerative hand and wrist. (*G. Kakavouli*)
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. (*S. Prodanovic*)
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
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