MUSCULOSKELETAL ULTRASOUND COURSE

INTERMEDIATE LEVEL

ORGANIZATION AND COMMITTEE

Scientific Organiser
Prof. Annamaria Iagnocco

Local Organisers
Prof Anastas Batalov
Dr Rodina Nestorova
Dr Plamen Todorov
Dr Rositsa Karalilova

Faculty
Annamaria Iagnocco, Italy
Marco Matucci, Italy
Nemanja Damjanov, Serbia
Peter Balint, Hungary
J. Vojinovic, Serbia
Francesco Porta, Italy
Violeta Vlad, Romania
Daniela Fodor, Romania
Mihaela Micu, Romania
Goran Radunović, Serbia
Adham Khalil, Egypt
Anastas Batalov, Bulgaria
Rodina Nestorova, Bulgaria

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Tzvetanka Petranova, Bulgaria
Plamen Todorov, Bulgaria
Rositsa Karalilova, Bulgaria

Instructors
Nemanja Damjanov, Serbia
Peter Balint, Hungary
Francesco Porta, Italy
Goran Radunović, Serbia
Mihaela Micu, Romania
Violeta Vlad, Romania
Daniela Fodor, Romania
Adham Khalil, Egypt
Anastas Batalov, Bulgaria
Rodina Nestorova, Bulgaria
Tzvetanka Petranova, Bulgaria
Plamen Todorov, Bulgaria
Rosica Karalilova, Bulgaria
Nikolay Stoilov, Bulgaria
Silvia Marincheva, Bulgaria

Participants:
The minimum number of planned participants should be 30.

Official language:
English

Venue:
Plovdiv, Bulgaria
Intermediate Musculoskeletal Ultrasound Course for Rheumatologists, 29-31 March 2018 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.

Sponsorships will cover travel and accommodation expenses for the faculty, course venue and organization costs.

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

The Course is under patronage of Bulgarian Association for Musculoskeletal Ultrasound.

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 each course day.

**Registration fee:** 690 Euro per person (three days course).

The organisers of the course are committed to follow the EULAR Competency Assessment system for the MSUS Intermediate courses, which consists of the following requirements:

1. Participants should have attended the EULAR basic MSUS course or a EULAR scientifically endorsed basic MSUS course.

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**Organizing Secretariat**

Prof. Anastas Batalov  
Dr Rodina Nestorova  
Dr Plamen Todorov  
Dr Rositsa Karalilova  

Course closing  
31 March 2018, h 15.00  

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**Bulgarian Society of Rheumatology**
2. Prior to acceptance to the course, applicants should send to the faculty members a total of 6 normal examinations of each joint region in one Power Point file (i.e. of shoulder, elbow, wrist&hand, hip, knee, ankle&foot), according to the EULAR guidelines for Musculoskeletal Ultrasound in Rheumatology (Ref. Backhaus M, et al. Ann Rheum Dis 2001).
3. Images should be presented in a Power Point file. Important: Each slide should include: - one imaged structure each in longitudinal and transvers plane, - a legend with the anatomic area, imaged structure and scanning planes, - parameters of the ultrasound machine, - identity of the person scanned should be removed.
4. Faculty members need to provide assessment and feedback. Applicants might need to be asked to repeat the ultrasound examinations and submit the images again for assessment by the faculty.
5. Upon approval of the assessment, the applicant needs to be asked to register for the course.
6. Participants should be asked to bring a total of 60 normal ultrasound examinations (each in a Power Point Presentation) on a USB stick to the course. The faculty reserves the right to randomly request and audit the full set of ultrasound examinations from each participant.

Official Agent of the Event:
BRANDEA LTD
Contacts for Registration and General Information:
Polina Ilieva, Bulgaria
+359 899 19 64 05
polina@brandea-bulgaria.com

Course opening
h 12.00, 29 March 2018

Course closing
h 15.00, 31 March 2018

SCIENTIFIC PROGRAMME

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OBJECTIVES
✓ to review the systematic standardized sonographic scanning method of each anatomical region, according to eular guidelines
✓ to learn about color and power doppler physics, applications, indications and limitations
✓ to learn definition, ultrasonographic evaluation and quantification of synovitis, synovial hypertrophy, effusion, erosion, tendinopathy, tenosynovitis, enthesitis and degenerative lesions
✓ to learn semiquantitative scoring method application for joints, tendons, enthesitis
✓ to learn performing basic ultrasound guided injections

WORKSHOP (Maximum 6 participants per tutor)
✓ Learning of the main practical issues connected to machine handling regarding Power Doppler and Color Doppler settings
✓ Supervised standardized scanning of the inflammatory and degenerative hip, knee, ankle and foot, shoulder, elbow, wrists and hands
✓ Supervised basic technique of sonographic guided injections

The Course will follow the Recommendations for the Content and Conduct of EULAR MSUS courses (Naredo E, et al, Ann Rheum Dis 2008: 67:1017-22), which include Specific theoretical and practical curriculum.

PROGRAMME

Day 1/ 29 March 2018

12:00-13.15 Registration
13.15-13.45 Welcome and Introduction: A. Iagnocco, A. Batalov

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13.45-14.30  Entering test of knowledge: R. Nestorova,

14:30-15.15  Sonographic pattern of the musculoskeletal tissues and technical characteristics and setting of ultrasound equipment for rheumatology.  A. Iagnocco
15.15 -16.15  Color Doppler and Power Doppler (i.e. basis, optimizing setting and applications).  R. Nestorova
16.15-16.40  Colour and Power Doppler artifact.  R. Nestorova

16.40-17.00  Coffee break

17.00-19.00  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

20.00  Dinner

Day 2/ 30 March 2018

08.30-09:00  Basic US lesions: synovitis, bony cortex and cartilage. Definition, detection and quantification. Tz. Petranova

09.00-09.30  Basic US lesions: tendinopathies, tenosynovitis.  A. Iagnocco

09.30-10.00  Basic US lesions: cartilage and bone lesions in osteoarthritis.  F. Porta

10.00-10.15  Coffee break
10.15-11.30 **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*

11.30-12.00 *Basic US lesions: enthesitis, enthesopathy.* **P. Balint**

12.00-12.30 *Role of US in the diagnosis of crystal induced arthritis* **R. Nestorova**

12.30-14.00 **Workshop:** *Supervised hands-on scanning of patients with inflammatory, degenerative and crystal joint and periarticular soft tissues disorders. How to detect and quantify musculoskeletal lesions.*

14.00-15.30 **Lunch**

15.30-16.00 *Standardized scanning of the inflammatory and degenerative Shoulder* **P. Todorov**

16.00-16.30 *Standardized scanning of the inflammatory and degenerative elbow* **Tz. Petranova**

16.30-18.00 **Workshop:** *Supervised hands-on scanning of patients with inflammatory and degenerative shoulder and elbow*

18.00-18.15 **Coffee Break**

18.15-18.40 *Standardized scanning of the inflammatory and degenerative hand and wrist* **D. Fodor**

18:40-19.40 **Workshop:** *Supervised hands-on scanning of patients with inflammatory and degenerative hand and wrist*
20:30 Official Dinner

Day 3/ 31 March 2018

08.30- 08.55 Standardized scanning of the inflammatory and degenerative ankle and foot. V. Vlad

08.55-09.25 Standardized scanning of the inflammatory and degenerative knee A. Khalil

09.25-09.50 Standardized scanning of the inflammatory and degenerative hip. M. Micu

09.50-10.15 Coffee break

10.15-12.30 Workshop: Supervised hands-on scanning of patients with inflammatory and degenerative hip, knee, ankle and foot

12.30-13.00 Basic skills in sonographic-guided arthrocentesis N. Damjanov

13.00-14.00 Workshop: Basic skills in sonographic-guided arthrocentesis

14.00-14.20 Test of knowledge R. Nestorov

14.20-14.40 Closing Remarks A. Iagnocco, A. Batalov

14.40- 15.00 Certificate issuing and lunch

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