

OCTOBER 15th

DAY 1 - Friday

	Room 1	Room 2	Room 3	Room 4
8.30-10.30	TC1: Extracranial Arteries Examination	TC2: B mode Brain Sonography	TC3: Echocardiography for Neurosonologists	Meeting of the Interna- tional Commission for Certification in Neurosonology
10.30-11.00	Coffee Break, Exibition			
11.00-13.00	Demonstration & Hands-on (TC1)	Demonstration & Hands-on (TC2)	Demonstration & Hands-on (TC3)	Certification Exam Theoretical Exam
13.00-14.00	Lunch Break, Exibition			
14.00-16.00	TC4: Intracranial Vascular Examination	TC5: Nerves and Muscles	TC6: Ocular and Orbital Ultrasound	Certification Exam Practical Exam
16.00-16.30	Coffee Break, Exibition			
16.30-18.30	Demonstration & Hands-on (TC4)	Demonstration & Hands-on (TC5)	Demonstration & Hands-on (TC6)	Angels Initiative Satellite Symposium
18.30-19.00				Special Lecture
20.00-24.00	Opening Ceremony •	Lecture of Excellenc	e • Gala Dinner	

Teaching Course 1

Extracranial Arteries Examination

Chairs: Nathalie Nasr (France), Toplica Lepic (Serbia)

8.30-9.00	Carotid and Vertebral Artery Insonation Protocol (Normal Finding)	Laszlo Olah Hungary
9.00-9.30	Cervical Arteries Atherosclerosis: Carotid Wall Imaging, Plaque Morphology, Stenosis Grading	Nathalie Nasr France
9.30-10.00	Neurosonology Testing in Non-Atherosclerotic Carotid Disease	Arijana Lovrencic Huzjan Croatia
10.00-10.30	Extracranial Vascular Examination in Acute Stroke	Claudio Baracchini Italy
10.30-11.00	Coffee Break	
11.00-13.00	Demonstration and Hands-On	Nathalie Nasr, Claudio Barachini, Dragan Vasic, Toplica Lepic, Tanja Stricevic, Zeljko Krsmanovic, Aleksandar Jovanovic, Predrag Stanarcevic

Teaching Course 2

B-mode Brain Sonography

Chairs: Uwe Walter (Germany), Aleksandra Pavlovic (Serbia)

8.30-9.00	Brain Parenchyma Imaging Basis and Protocol	Aleksandra Pavlovic Serbia
9.00-9.30	Transcranial Sonography in Parkinsonian Syndromes	David Skoloudik Czech Republic
9.30-10.00	Transcranial Sonography is Useful not only in Parkisonian Syndromes	Dzevdet Smajlovic Bosnia and Herzegovina
10.00-10.30	New applications: TCS in Deep Brain Stimulation, Medial Temporal Atrophy Assessment	Uwe Walter Germany
10.30-11.00	Coffee Break	
11.00-13.00	Demonstration and Hands-On	Aleksandra Pavlovic, Dzevdet Smajlovic, Uwe Walter, Nikola Veselinovic

Teaching Course 3

Echocardiography for Neurosonologists

Chairs: Jorge Pagola (Spain), Danijela Zamaklar Trifunovic (Serbia)

8.30-9.00	The Basis of Stroke Focused Echocardiogram	Iria Lopez Dequidt Spain
9.00-9.30	How to detect Ventricular Akinesia and Systolic Dysfunction	Aleksandra Ilic Serbia
9.30-9.45	Coffee Break	
9.45-10.15	Focused Echo Helps to Detect AF and Related Valvulopathies	Jorge Pagola Spain
10.15-10.45	Embolic Source of Stroke Uncovered by Focused Echocardiography	Radim Licenik UK
10.45-11.15	Cardiologist perspective in imaging patients with PFO and stroke	Vlatka Reskovic Luksic Croatia
11.15-11.30	Coffee Break	
11.30-13.00	Demonstration and Hands-On	Aleksandra Ilic, Danijela Zamaklar Trifunovic, Vlatka Reskovic Luksic

Teaching Course 4

Intracranial Vascular Examination

Chairs: João Sargento Freitas (Portugal), Zsolt Garamy (USA/Hungary)

14.00-14.30	Transcranial Insonation Protocol (TCCS/TCD)	João Sargento Freitas Portugal	L
14.30-15.00	Intracranial Stenosis/Occlusion	Eva Bartels Germany	E.
15.00-15.15	Coffee Break		

15.15-15.45	Collateral Pathways	Marek Jauss Germany
15.45-16.15	Challenging TCD Cases	Zsolt Garamy USA/Hungary
16.15-16.45	TCD in Right-to-Left Shunt Diagnosis	Dmitar Vlahovic Serbia
16.45-17.00	Coffee Break	
17.00-18.00	Demonstration and Hands-On	Eva Bartels, Zsolt Garamy, Toplica Lepic, Nevenka Zaric, Bojana Solunac, Maja Stefanovic Budimkic, Janja Pretnar Oblak, Zeljko Zivanovic

Teaching Course 5

Muscle and Nerve

Chairs: Ekaterina Titianova (Bulgaria), Olivera Jovanikic (Serbia)

14.00-14.30	Basic Principles of Muscle and Nerve Ultrasonography	Olivera Jovanikic Serbia
14.30-15.00	Ultrasound of the Muscles	Ekaterina Titianova Bulgaria
15.00-15.30	Ultrasound-Guided Botulinum Toxin Injections in Neurology: Technique And Indications	Uwe Walter Germany
15.30-16.00	Muscle and Nerve Ultrasound in Motor Neuron Disorders	Daniele Coraci Italy
16.00-16.30	Coffee Break	
16.30-18.00	Demonstration and Hands-On	Uwe Walter, Olivera Jovanikic

Teaching Course 6

Ocular And Orbital Ultrasound

Chairs: Branko Malojcic (Croatia), Piergiorgio Lochner (Germany)

14.00-14.30	Why Do We Perform Ultrasound Neuro- ophthalmological Examination?	Piergiorgio Lochner Germany
14.30-15.00	Optic Nerve Sheath Diameter and the Diagnosis of Increased Intracranial Pressure	Fillipo Farina Italy
15.00-15.30	Vascular Orbital Sonography	Jelena Potic Serbia
15.30–16.00	Temporal Artery Examination	Branko Malojcic Croatia
16.00-16.30	Coffee Break	
16.30-16.45	Transbulbar ultrasound: a useful tool in multiple sclerosis?	Fabienne Perren Switzerland
16.45-18.00	Demonstration and Hands-On	Piergiorgio Lochner, Branko Malojcic, Jelena Potic, Ana Podgorac, Tamara Svabic

Certification in Neurosonology exam

11.00-13.00	CERTIFICATION EXAM: Theoretical Exam	Eva Bartels, Germany Claudio Baracchini, Italy
13.00-14.00	Lunch Break	
14.00–16.00	CERTIFICATION EXAM: Practical Exam	Eva Bartels, Germany Claudio Baracchini, Italy Branko Malojcic, Croatia Elsa Azevedo, Portugal Joao Sargento Freitas, Portugal Milija Mijajlovic, Serbia Aleksandra Pavlovic, Serbia

ANGELS Initiative Satellite Symposium

Chair: Natan Bornstein (Israel), Thomas Fischer (Germany), Milija Mijajlovic (Serbia)



16.30-16.40	Welcome and Introduction	Natan Bornstein Israel	L/V
16.40-17.20	Angels Initiative Global Overview on Strategy and Achievements	Thomas Fischer Germany	V
17.20-17.50	The Implementation of Quality Monitoring with RES-Q	Natan Bornstein Israel	L
17.50-18.15	How to implement Angels in Serbia	Tatjana Golubovic, Marjana Vukicevic Savicevic, Milija Mijajlovic Serbia	L
18.15-18.30	Discussion		

Special Lecture

Chairs: Claudio Baracchini (Italy), Natan Bornstein (Israel), Milija Mijajlovic (Serbia)

18.30-18.50 SL1	SHARP-SVDs Trial	Alastair Webb UK
18.15-19.00	Discussion	

Opening Ceremony – Welcoming words • Lecture of excellence • Gala Dinner

20.00-20.30	Opening ceremony Welcoming Words	Milija Mijajlovic & Aleksandra Pavlovic Claudio Baracchini Vladimir S. Kostic Ranko Raicevic Lazar Davidovic Milika Asanin Dragoslav Sokic
20.30-21.00 LoE	Lecture of Excellence Our Journey Through Transcranial Brain Sonography in Neurodegenerative Diseases	Vladimir S. Kostic Serbia
21.00-24.00	Gala Dinner	

DAY 2 - Saturday

	Plenary Hall Tsar Dusan	Poster Hall Danube	Room Belgrade
8.00-9.00	Scientific Session 1: Special Session with Vascular Surgeons		
9.00-10.45	Scientific Session 2: Joint Session with ESO: Stroke/Cerebrovascular Diseases		
10.45-11.00	Coffee Break, Exibition		
11.00–12.30	Scientific Session 3: Novel Methods: Neuroophtalmology and Focused Echocardiography		
12.30-13.30		Guided Poster Tour	ESNCH EC Meeting
13.00-14.00	Lunch Break, Exibition, Poster Viewing		
14.00-15.30	Scientific Session 4: Emerging Topics in Neurosonology		
15.30–17.00	Scientific Session 5: Brain Parenchyma Sonography		
17.00-18.00			Industry Round Table
17.00-17.30	Coffee Break, Poster Viewing		
17.30-19.00	Scientific Session 6: Young Investigators Studies		
19.00-19.30	Takeda Special Lecture		
19.30-20.30	ESNCH General Assembly		
21.30-24.00	Lecturers Dinner		

Scientific Session 1

Special Session with Vascular Surgeons Chairs: Natalie Nasr (France), Lazar Davidovic (Serbia)

8.00-8.15 S1L1	Non-stenotic Carotid Plaques And Ischemic Stroke: How Strong Is The Association?	Tatjana Boskovic Matic Serbia
8.15-8.30 S1L2	When To Treat Asymptomatic Carotid Stenosis?	Lazar Davidovic Serbia
8.30-8.45 \$1L3	Ultrasound Follow-up of Carotid Stenosis (Pre-and Post-revascularization)	Anita Arsovska North Macedonia

Scientific Session 2

Joint Session with ESO: Stroke/Cerebrovascular Diseases

Chairs: Georgios Tsivgoulis (Greece), Kurt Niederkorn (Austria), Aleksandra Pavlovic (Serbia)

9.00-9.15	The Value of Ultrasound After Stroke	Kurt Niederkorn
S2L1	Reperfusion Therapies	Austria
9.15-9.30	Perfusion Augmentation in Acute Stroke	Matthias Reinhard
S2L2	Using Mechanical Counter-Pulsation	Germany
9.30-9.45 \$2L3	Update on Sonothrombolysis	Georgios Tsivgoulis Greece
9.45–10.00 S2L4	Gender Differences in Vascular Ultrasound in Prevention, Treatment and Prognosis of Ischemic Stroke: Does Gender Matter in Vascular Ultrasound?	Christine Kremer Sweden
10.00-10.15	The Value of Microembolic Signals After	Claudio Baracchini
\$2L5	Endovascular Stroke Treatment	Italy
10.15-10.25 S2O1	Ischemic Stroke in Patient with Congenital Agenesis of Internal Carotid Artery with Ipsilaleral Horner's Syndrome and Hipochromia Iridis	Magdalena Konieczna-Brazis Poland
10.25-10.35 \$202	Indices of Carotid Plaque Embologenicity, Juxtaluminal Echodensity, Global Echoden- sity and Heterogeneity	Thomas Tegos Greece
10.35–10.45	What's Persistent Primitive Trigeminal Artery	Caterina Kulyk
\$203	Got To Do With It? - An Ultrasound Approach	Austria

Scientific Session 3

Novel Methods: Neuroophtalmology and Focused Echocardiography

Chairs: Branko Malojcic (Croatia), Jorge Pagola (Spain)

11.00-11.15 \$3L1	Neuropthalmological Examination and Transorbital Sonography in Neurology	Piergiorgio Lochner Germany
11.15–11.30 S3L2	Ultrasound in Giant Cell Arteritis: News, Tips and Tricks	Branko Malojcic Croatia
11.30-11.45 S3L3	Automatic Optic Nerve Measurement (AUTO- NOMA): A New Tool to Standardize the Optic Nerve Assessment by Transorbital Sonography	Andrea Naldi Italy
11.45-12.00 S3L4	The Basis of Focused Echocardiography for Neurologists	Jorge Pagola Spain
12.00-12.15 S3L5	Cardiac Sources of Embolism	Vlatka Reskovic Luksic Croatia
12.15–12.25 \$301	Evolution of Blood-Brain Barrier Permeability and Impact on Clinical Outcome Throughout the Pathological Phases of Ischemic Stroke: an Observational Study and Meta-Analysis	Joao Sargento Freitas Portugal

Scientific Session 4

Emerging Topics in Neurosonology

Chairs: Daniele Coraci (Italy), Susanna Horner (Austria), Zeljko Zivanovic (Serbia)

14.00-14.15 S4L1	Ultrasound Guided Interventions (Steroid Injections, Lumbar Puncture, Muscle Biopsy) & Evaluation of Less Common Nerves and Muscles	Daniele Coraci Italy
14.15–14.30 S4L2	The Treatment of Resistant Chronic Peripheral Neuropathic Pain: Investigation of Various Local Anesthetics Applied by Ultrasound-Guided Perineural Blocks	Olivera Jovanikic Serbia
14.30-14.45 S4L3	Tele-neurosonology	Bojana Zvan Slovenia
14.45-15.00 S4L4	The Role of TCD in PFO Diagnosis and Management	Susanna Horner Austria
15.00-15.15 S4L5	Review of Myosonology in the Field of Neurosonology	Ekaterina Titianova Bulgaria
15.15–15.25 S4O1	Hemodynamic Changes After Carotid Endarterectomy – a Detailed Analysis with Correction for Age of Middle Cerebral Artery Flow Velocity	Arjen Schaafsma The Netherlands

Scientific Session 5

Brain Parenchyma SonographyChairs: Uwe Walter (Germany), David Skoloudik (Czech Republic)

15.30-15.45 S5L1	Digital Image Analysis in Transcranial Sonography	David Skoloudik Czech Republic	
15.45-16.00 S5L2	Fusion Imaging Technique	Uwe Walter Germany	
16.00-16.15 S5L3	Transcranial Brain Sonography in Parkinsonism and Dementia	Dzevded Smajlovic Bosnia and Herzegovina	
16.15-16.30 S5L4	Transcranial Brain Sonography in Psychiatric Diseases and Pain Conditions	Milija Mijajlovic Serbia	
16.30–16.40 \$501	Characteristics of Transcranial Brain Parenchyma Sonography in Patients with Myotonic Dystrophy Type 1 And 2	Ivo Bozovic Serbia	
16.40-16.50 \$502	Mesencephalic Raphe nucleus and third ventricle diameter changes in patients with non-psychotic bipolar mood disorder	Mohammad Malakooti Iran	1
16.50–17.00 \$503	An Ultrasonography-Guided Approach Improves Treatment Efficiency in Dystonia Patients	Gilberto Pereira Portugal	



Scientific Session 6

Young Investigators Studies

Chairs: Eva Bartels (Germany), Claudio Baracchini (Italy), Aleksandra Pavlovic (Serbia)

17.30-17.45 S6L1	TCS Fusion Imaging in the Detection of Cerebral White Matter Lesions	Cornelia Brunner Austria
17.45-18.00 S6L2	Carotid Sonography Findings in Patients with Cerebral Small Vessel Disease	Stefan Stojsavljevic Serbia
18.00-18.15 S6L3	Transcranial Brain Parenchyma Sonography of Basal Ganglia in the Evaluation of the Cli- nical Course of Juvenile Myoclonic Epilepsy	Ivana Djordjevic Serbia
18.15-18.30 S6L4	Transcranial Brain Parenchyma Sonography in Primary Burning Mouth Syndrome- Nigrostriatal Dopaminergic System Matters	Natasa Stojanovski Serbia
18.30-18.45 S6L5	Evaluation of Carotid Intima-Media Thickness in Systemic Rheumatic Disease Patients	Viktor Pasovski Serbia
18.45-19.00 S6L6	Endovascular Treatment of Acute Ischemic Stroke - a Single Comprehensive Stroke Center Experience	Dragan Dragicevic Croatia

Takeda Special Session

Chairs: Marjana Vukicevic (Serbia), Milija Mijajlovic (Serbia)



19.00-19.20	Neuroimaging in Fabry Disease-Focus on	Milija Mijajlovic	L
SSL1	Neurosonology Methods	Serbia	
19.20-19.30	Discuccion		

OCTOBER 17th

DAY 3 - Sunday

	Plenary Hall Tsar Dusan	Poster Hall Danube	Room Belgrade
8.30-10.00	Scientific Session 7: Joint Session with EAN: New Techniques/Neurorehabilitation		
10.00-11.30	Special Session: Neurosonology In our Region and Oral Presentations	Guided Poster Tour	ERNSono Meeting
	Graba Coffee Break, Exibition		
11.30-13.00	Scientific Session 8: Neurosonology in ICU		
13.00-14.30	Scientific Session 9: Miscellaneous		
14.30-15.00	Awards, Closing Ceremony and Introduction of the 26th ESNCH Conference		
15.00-16.00	Exhibition, Lunch and Farewell		

Scientific Session 7

Joint Session with EAN/EFNR: New Techniques/Neurorehabilitation

Chairs: Elsa Azevedo (Portugal), Dafin Muresanu (Romania)

8.30-8.45 \$7L1	Functional TCD in Aquired and Genetic Cerebrovascular Disease and in Precerebral Hypoperfusion	Elsa Azevedo Portugal
8.45-9.00 \$7L2	Functional TCD - Update	Janja Pretnar-Oblak Slovenia
9.00-9.15 \$7L3	Role of Ultrasound in Neurorehabilitation	Dafin Muresanu/Adina Stan Romania (EFNR)
9.15-9.30 S7L4	Acute stroke Hemodynamics	Joao Sargento Freitas Portugal
9.30-9.45 \$7L5	Assessment of Collateral Flow with Ultra- sound and MRA – Complementary Findings	Marek Jauss Germany
9.45–9.55 \$701	Intracranial Pulsatility and Cerebral White Matter Hyperintensity Burden in a Commu- nity-Dwelling Elderly Population	Markus Kneihsl Austria

Special Session

Neurosonology in Our Region and Oral Presentations Chairs: Vida Demarin (Croatia), Zagorka Jovanovic (Serbia)

10.00-10.30 SpSL1	Past, Present and Future of Neurosonology in Our Region	Vida Demarin Croatia
10.30-10.40 SpSO1	Effects of Acute Alcohol Consumption on Neuronal Activity and Cerebral Vasomotor Response	Eszter Balogh Hungary
10.40-10.50 SpSO2	Refining the Concept of ESUS – A Longitudinal 5-Year Follow-Up Study	Carolina Fernandes Portugal
10.50–11.00 SpSO3	Bilateral High-Grade Stenosis of Intracranial Internal Carotid Artery in Patient with Multiple Myeloma	Jurgita Valaikiene Lithuania
11.00–11.10 SpSO4	Successful Embolization of Giant Basilar Aneurysm: Follow-Up by Transcranial Color-Coded Duplex Sonography	Jurgita Valaikiene Lithuania
11.10–11.20 SpSO5	Middle Cerebral Artery Pulsatility Index and Serum Inflammatory Markers in Lacunar Stroke – a Preliminary Report	Grzegorz Kozera Poland
11.20–11.30 SpSO6	The Role of Carotid Duplex Sonography in The Evaluation of Patients with Tinnitus and in the Detection of Dural Arteriovenous Fistulas	Catarina Caldeiras Portugal

Scientific Session 8

Neurosonology in ICU

Chairs: Milan Vosko (Austria), Dejana Jovanovic (Serbia)

11.30-11.45 S8L1	Scientific Evidence and Enhancing Safety in Ultrasound Assisted procedures in ICU	Milan Vosko Austria
11.45-12.00 S8L2	Transcranial Doppler in Subarchnoid Haemorrhage	Zeljko Zivanovic Serbia
12.00-12.15 \$8L3	The Normal Mean Values of ONSD and OND and the Issue of Different Cut-off Values: Application In Neurology and Critical Care Patients	Andrea Naldi Italy
12.15-12.30 \$8L4	Ultrasound in Brain Death	Dejana Jovanovic Serbia
12.30-12.45 \$8L5	Validation of a New Non-Invasive Technique for Cerebral Compliance Assessment	Sergio Brasil Brazil
12.45–12.55 \$801	Intraoperative Ultrasonography in Adult Neurosurgery: our Experience and Literature Review	Vuk Aleksic Serbia

Scientific Session 9

Miscellaneous

Chairs: Laszlo Csiba (Hungary), Joao Sargento Freitas (Portugal)

13.00-13.15 S9L1	Do We Overlook Fibromuscular Dysplasia on Ultrasound Images?	Arijana Lovrencic-Huzjan Croatia
13.15-13.30 S9L2	Effect of 2 Types of Antihypertensive Therapy on Cognition and Vessel Wall	Laszlo Csiba Hungary
13.30-13.45 S9L3	Optic Nerve Sheath Diameter and Diagnosis of Increased Intracranial Pressure	Nicola Carraro Italy
13.45-14.00 S9L4	Transcranial Detection of Microemboli Sig- nals (MES) In Patients with Antiphospholipid Syndrome and Stroke	Zagorka Jovanovic Serbia
14.00-14.10 \$901	Shutting the Door on Migraine	Klaudia Duka Glavor Croatia
14.10-14.20 \$902	Enhanced Hemodynamic and Clinical Response to αCGRP in Migraine Patients – a TCD Study	Bojana Zvan Slovenia

Awards, Closing Ceremony and Farewell

14.30-15.00	Awards, Closing Ceremony and Introduction of the 26th ESNCH Conference	Milija Mijajlovic Aleksandra Pavlovic Claudio Baracchini Branko Malojcic	João Sargento Freitas Victor Oliveira Elsa Azevedo
15.00-16.00	Exhibition, Lunch and Farewell		