Under the auspices of the President of the Republic of Serbia
H.E. Mr. Aleksandar Vucic

WFNS 2019
INTERNATIONAL MEETING
ONE WORLD, ONE NEUROSURGERY
March 21st-24th 2019
Crowne Plaza, Belgrade

ORGANIZED BY
Serbian Neurosurgical Society (SNSS)
Italian Society of Neurosurgery (SINCH)

IN CONJUNCTION WITH
Southeast Europe Neurosurgical Society (SeENS)

ENDORSED BY
Ministry of Health, Republic of Serbia
Ministry of Education, Science and Technological Development, Republic of Serbia
School of Medicine, University of Belgrade
Serbian Academy of Sciences and Arts

TOPICS:
• Neuro-oncology
• Neurovascular
• Neurotrauma and Intensive Care
• Spine and Peripheral Nerve
• Pediatrics
• Functional and Stereotactic Neurosurgery
• Varia

WFNS PRE-MEETING COURSES
• Education
• Endoscopy
• Surgical Anatomy

PRE-MEETING COURSES
• Global Neuro
• AO Spine
• Spine Intraoperative Navigation

MEETING COURSE
• Besta Neurosim Center

96th Anniversary of Neurosurgery in Serbia
81st Anniversary of Clinic for Neurosurgery, Belgrade, Serbia
Under the auspices of the President of the Republic of Serbia
H.E. Mr. Aleksandar Vucic

PRESIDENTS OF THE MEETING

Prof. Dr. Lukas Rasulic, Serbia
SNSS President, SeENS President

Prof. Dr. Marco Cenzato, Italy
SINCH President

Prof. Dr. Paolo Cappabianca, Italy
SINCH Secretary

HONORARY PRESIDENTS OF THE MEETING

Prof. Dr. Franco Servadei, Italy
WFNS President

Prof. Dr. Francesco Tomasello, Italy
WFNS Honorary President

Prof. Dr. Ivanka Popovic, Serbia
Rector, University of Belgrade, Serbia

Academician Vladimir Kostic
Serbian Academy of Sciences and Arts

Prof. Dr. Ivanka Popovic
Rector, University of Belgrade, Serbia

Academician Nebojsa Lalic
Dean, School of medicine, University of Belgrade, Serbia

Prof. Dr. Zoran Radojicic
Mayor of Belgrade

HONORARY COMMITTEE

Ass. Dr. Zlatibor Loncar
Minister of Health of the Republic of Serbia

Mr. Mladen Sarcevic
Minister of Education, Science and Technological Development, Republic of Serbia

H.E. Mr. Carlo Lo Cascio
Ambassador Extraordinary and Plenipotentiary, Embassy of the Republic of Italy
Dear colleagues and friends,

It is my honour, privilege and pleasure to invite you to the upcoming WFNS 2019 International Meeting in Belgrade, Serbia, on March 21-24, 2019.

Hosted by the Serbian Neurosurgical Society (SNSS) and the Italian Society of Neurosurgery (SiNch), in conjunction with the Southeast Europe Neurosurgical Society (SeENS), the WFNS 2019 International Meeting will bring together leading experts who share the vision of “one world, one neurosurgery”. The main topics to be explored include neuro-oncology, neurovascular, neurotrauma & intensive care, spine & peripheral nerve, pediatrics, functional & stereotactic neurosurgery, with the aim of highlighting the state-of-the-art advances and challenges in the field.

The opportunity to hold this event of utmost scientific and social importance in Belgrade is a special honour for the neurosurgical community in Serbia and a much-appreciated acknowledgement of the enhanced regional and international cooperation fostered by the Serbian Neurosurgical Society and the Southeast Europe Neurosurgical Society over the past years. We are delighted to be able to co-host it together with the Italian Society of Neurosurgery, thus reaffirming our strong and long-lasting professional and personal links with neurosurgeons from Italy.

“The noblest pleasure is the joy of understanding”, said the great Leonardo da Vinci. We are convinced that the upcoming WFNS 2019 INTERNATIONAL MEETING in Belgrade will enrich us all with the joy of understanding – in terms of pushing the boundaries of both knowledge and friendship.

Belgrade, the capital of Serbia, at the crossroads between East and West, South and North, is a vibrant city widely reputed for its open heart and mind. Over recent years, it has also proved to be a welcoming host city of a number of international neurosurgical gatherings, and we will do our best to make the WFNS 2019 INTERNATIONAL MEETING in Belgrade a particularly memorable and inspiring intellectual and social experience.

Welcome!

Prof. Dr. Lukas Rasulic,
Serbia
Co-President of the Meeting
SNSS President
SeENS President
Dear colleagues,

It is my great pleasure to announce, on behalf of ITALIAN Society of Neurosurgery (SINCH), the WFNS 2019 International Meeting to be held in Belgrade, Serbia, from March 21st to 24th, 2019, organized with the Serbian Neurosurgical Society (SNSS) in collaboration with the Southeast Europe Neurosurgical Society (SeENS).

Today the exchange of information and the profession updating via Web has become a daily reality, but it is precisely the opportunity for direct confrontation, the construction of fruitful relationships and useful exchanges with colleagues, the comparison and joint verification of results, that project us on a wider scene, facing an international panorama of world experts. This meeting is focused on balancing the experience of young colleagues together with the experts.

All of us have to deal with cases of increasing complexity for which often we have no certain answers and we find ourselves constantly challenged by difficult and complex clinical choices. The opportunity to confront the experts from different countries, will widen the horizon of the younger, while older colleagues will receive the due recognition. But above all it is for everyone an important and instructive moment of professional growth, where competence, experience, preparation and skills always remain a strong drive for all of us.

It is really an important moment that sees the Serbian, Italian and South-Eastern European neurosurgical societies, under the aegis of the World Federation of Neurosurgical Societies (WFNS), committed to sharing all the information and the most advanced resources in training, technology and the practice of neurosurgery.

As a president of the Italian Neurosurgical Society, it is a great honor for me to have the opportunity to share with Serbian colleagues the organization of this meeting and as a neurosurgeon, committed every day in the surgery room, I am sure that this will be a great opportunity to learn.

Prof. Dr. Marco Cenzato, Italy
Co-President of the Meeting
President of the Italian Society of Neurosurgery
Dear colleagues and friends,

It is my honour, privilege and pleasure to invite you to the upcoming WFNS 2019 INTERNATIONAL MEETING in Belgrade, Serbia, on March 21-24, 2019.

Hosted by the Serbian Neurosurgical Society (SNSS) and the Italian Society of Neurosurgery (SINch), in conjunction with the Southeast Europe Neurosurgical Society (SeENS), the WFNS 2019 INTERNATIONAL MEETING will bring together leading experts who share the vision of “one world, one neurosurgery”. The main topics to be explored include neuro-oncology, neurovascular, neurotrauma & intensive care, spine & peripheral nerve, pediatrics, functional & stereotactic neurosurgery, with the aim of highlighting the state-of-the-art advances and challenges in the field.

The opportunity to hold this event of utmost scientific and social importance in Belgrade is a special honour for the neurosurgical community in Serbia and a much-appreciated acknowledgement of the enhanced regional and international cooperation fostered by the Serbian Neurosurgical Society and the Southeast Europe Neurosurgical Society over the past years. We are delighted to be able to co-host it together with the Italian Society of Neurosurgery, thus reaffirming our strong and long-lasting professional and personal links with neurosurgeons from Italy.

“The noblest pleasure is the joy of understanding”, said the great Leonardo da Vinci. We are convinced that the upcoming WFNS 2019 INTERNATIONAL MEETING in Belgrade will enrich us all with the joy of understanding – in terms of pushing the boundaries of both knowledge and friendship.

Belgrade, the capital of Serbia, at the crossroads between East and West, South and North, is a vibrant city widely reputed for its open heart and mind. Over recent years, it has also proved to be a welcoming host city of a number of international neurosurgical gatherings, and we will do our best to make the WFNS 2019 INTERNATIONAL MEETING in Belgrade a particularly memorable and inspiring intellectual and social experience.

Welcome!

Prof. Dr. Franco Servadei, Italy
President WFNS
Past President SINch
Honorary President of the Meeting
WELCOME ADDRESS

The WFNS 2019 INTERNATIONAL MEETING, which will be held in Belgrade on March 21-24, 2019, is expected to be a memorable scientific and networking event!

I have the great honor, as Co-President, to serve this important event which will represent a novelty in the European Neurosurgical Scenario as a result of an exciting and renewed synergy between Serbian, Italian and South east European Neurosurgical Societies.

There is to some extent a common ancient history between Italy and Serbia, named Moesia Superior in the Roman era lasting about 400 years.

It was the birthplace of seventeen Roman Emperors, including Constantine the Great. There is evidence of this Roman presence in some archeological sites as Palace of Galerius, Gamzigrad-Romuliana, inscribed in UNESCO’s world heritage list.

It is noteworthy that the President of WFNS has approved this joint project in order to have an high standing Neurosurgical platform where these Societies will share the latest advances with the global Neurosurgical community!

This event witnesses that the relationships between Serbian, Italian and South eastern Neurosurgery were strengthened in recent years and their role was growing up in the EANS as well in the WFNS initiatives.

All these scientific organizations are working hard to join the best resources and promote the most advanced opportunities in the area of Education, Research and Care in order to benefit patients worldwide!

Belgrade, with its great neurosurgical tradition and its geographical position of cultural connection between East and West, is an ideal venue for this Meeting. This will open new perspectives in sharing neurosurgical knowledge and meeting the healthcare demands in different settings.

I would like to emphasize the educational impact of the pre-meeting Courses with learning objectives which will be fulfilling the expectations of the young Neurosurgeons and even more the Mission of WFNS.

I had the privilege to appreciate the warm hospitality of Belgrade Neurosurgical Team since the time of my participation at the first SeENS Congress. I am absolutely confident that colleagues and friends will find the nice atmosphere I always appreciated in Belgrade!

Definitely, there are all the ingredients to make the WFNS 2019 INTERNATIONAL MEETING as an exciting and unforgettable event!

Prof. Dr. Francesco Tomasello, Italy
WFNS Honorary President
Honorary President of the Meeting
It is with great pleasure to announce the forthcoming WFNS 2019 INTERNATIONAL MEETING—organized by Serbian Neurosurgical Society (SNSS), Italian Society of Neurosurgery (SINch), and Southeast Europe Neurosurgical Society (SeENS)—to be held in Belgrade in March 21-24, 2019.

On behalf of SINch, I would like to kindly invite you to participate to this extraordinary event; this time the congress will feature an incredible exchange of scientific information at the highest level and will provide a glimpse over the most advanced neurosurgical treatments and care along with recent innovations. This sounds timely for the modern neurosurgical scenario, boosted by easier diffusion of ideas and methods throughout the new technologies. Innovation is the key for progress and no doubt that neurosurgery fits this requirement.

This Congress is going to take place in the “white city”, the scientific and multicultural capital of Serbia. This city is an emblematic example of optimization of results, through perseverance and devotion for working. All of us are strongly tied to the Belgrade group, and the past, present and future collaborations remain dedicated to build bridges of knowledge and experience for keeping a scientific, professional, academic and social networking.

I trust in the Serbian hospitality and in our friendship for having a memorable social and scientific moment.

Thank you.

Prof. Dr. Paolo Cappabianca,
Italy
SINCH Secretary
Honorary President of the Meeting
Dear Colleagues, Friends, Ladies and Gentlemen,

It is my great pleasure and honor to announce and invite You to the WFNS 2019 INTERNATIONAL MEETING, hosted by Serbian Neurosurgical Society (SNSS), Italian Society of Neurosurgery (SINch) in conjunction with the Southeast Europe Neurosurgical Society (SeENS) and taking place in Belgrade, Serbia, on March 21st -24th 2019.

The Southeast Europe Neurosurgical Society (SeENS, www.seens.eu) has been founded in 2012. In a 5 years period (2012-2017) SeENS has become an affiliated member of the European Association of Neurosurgical Societies (EANS) and full member of the World Federation of Neurosurgical Societies (WFNS). SeENS has succeeded to rebuilt liaisons and to make new once after a period of almost 20 years of poor comunication between colleagues in the SE Europe region. Currently SeENS is gathering neurosurgeons from 14 countries of the Southeast Europe region and Turkey. SeENS is recognized as a very active Society organizing or co-organizing up to 10 events each year.

Co-organizing the WFNS INTERNATIONAL MEETING represents a great honor and privilege for our Society, but also highlights the confidence of WFNS in our Society being able to participate in organization of such an important event.

Concerning the attractiveness of invited speakers at this WFNS INTERNATIONAL MEETING we expect a strong academic and high social level event.

This Meeting will have the patronage and support of all important State and Academic Institutions of Republic of Serbia.

It is my great honor to invite You to participate at this WFNS INTERNATIONAL MEETING and to discover and enjoy the beautiful city of Belgrade, capital of Serbia, the only European city built on the confluence of two great rivers, a city that «never sleeps».

I cordially invite You to Belgrade, Serbia to experience and share noteworthy scientific and social moments during the WFNS INTERNATIONAL MEETING 2019.

Sincerely,

Prof. Dr. Kresimir Rotim, Croatia
SeENS Honorary President
Honorary President of the Meeting
ORGANIZING COMMITTEE

Prof. Dr. Lukas Rasulic, Serbia

Prof. Dr. Tomislav Sajko, Croatia

Prof. Dr. Marco Cenzato, Italia

Prof. Dr. Petar Vulekovic, Serbia

Prof. Dr. Alberto Delitala, Italy

Prof. Dr. Domenico d’Avella, Italy

Prof. Dr. Nebojsa Stojanovic, Serbia

Dr. Venko Filipce, Macedonia

Dr. Fatos Olldashi, Albania

Dr. Giuseppe Cinalli, Italy

Dr. Ljubodrag Minic, Serbia

Prof. Dr. Marco Maria Fontanella, Italy

Doc. Dr. Vladimir Papic, Serbia
SCIENTIFIC COMMITTEE

Prof. Dr. Ihsan Solaroglu, Turkey
Co-Chairman of the Scientific Committee

Prof. Dr. Ioan Stefan Florian, Romania
WFNS Second Vice-President at Large
SeENS Vice-President
Co-Chairman of the Scientific Committee

Dr. Francesco Di Meco, Italy

Dr. Natale Francaviglia, Italia

Prof. Dr. Vaso Antunovic, Serbia

Prof. Dr. Miroslav Samardzic, Serbia

Dr. Maurizio Fornari, Italy

Prof. Dr. Mentor Petrela, Albania

Prof. Roberto Delfini, Italy

Dr. Vincenzo Paternó, Germany

Prof. Giovanni Broggi, Italy

Dr. Ibrahim Omerhodzic, Bosnia and Herzegovina

Dr. Djula Djilvesi, Serbia
LOCAL ORGANIZING COMMITTEE

Dr. Mirko Micovic, Serbia

Dr. Nenad Novakovic, Serbia

Dr. Mladen Karan, Serbia

Dr. Domenico Solari, Italy

Dr. Andrija Savic, Serbia

Dr. Domagoj Gajski, Croatia

Dr. Davide Milani, Italy

Dr. Ante Rotim, Croatia

Dr. Vojin Kovacevic, Serbia

Dr. Sinisa Matic, Serbia

Dr. Milan Lepic, Serbia

Dr. Jagos Golubovic, Serbia

Dr. Luka Berilazic, Serbia

Dr. Bojan Jelaca, Serbia
FACULTY
/CONFIRMED SO FAR/

Acar Ferudin, Turkey
Adelson David, USA
Akalan Nejat, Turkey
Al Aly Khaled, UAE
Alolama Mohammad, UAE
Ammirati Mario, USA
Andreou Alexandros, Greece
Andrews Russell, USA
Antoniadis Gregor, Germany
Arraee Persilla Cepeda Tito, Colombia
Arnautovic Kenan, USA
Arreza Miguel, Spain
Bakhti Souad, Algeria
Banczerowski Peter, Hungary
Barbagallo Giuseppe, Italy
Behari Sanjay, India
Benes Vladimir, Czech Republic
Bernardo Antonio, USA
Bhoate Harjinder, India
Biroli Francesco, Italy
Boop Frederick, USA
Bosnjak Roman, Slovenia
Brogi Giovanni, Italy
Bruno Michael, Belgium
Buki Andras, Hungary
Caglar Y. Sukru, Turkey
Caparoski Aleksandar, Macedonia
Cappabianna Paolo, Italy
Cardali Salvatore, Italy
Cavallo Luigi, Italy
Cennato Marco, Italy
Ceylan Sava, Turkey
Chandran Hari, Malaysia
Cherian Iype, Nepal
Chernov Mikhail, Russia/Japan
Chudy Darko, Croatia
Cicig Tomislav, Serbia
Ciurea Alexandru-Vlad, Romania
Conti Alfredo, Italy
Costa Francesco, Italy
Czosnyka Marek, UK
D’Angelo Vincenzo, Italy
Daniel Roy Thomas, Switzerland
Darbar Aneela, Pakistan
D’Avella Domenico, Italy
De Bonis Pasquale, Italy
Delfini Roberto, Italy
Delitala Alberto, Italy
Del Maestro Rolando, Canada
Demetriades Andreas, UK
Deopujari Chrandrashekhar, India
Di Meco Francesco, Italy
Di Rocco Concezio, Germany
Ducati Alessandro, Italy
Duffau Hugues, France
Dunn Ian, USA
Djilvesi Djula, Serbia
Djurovic Branko, Serbia
El Abbadi Bendahane Najia, Morocco
El Azhari Abdessalam, Morocco
El Khamlchi Abdelslam, Morocco
El Ouahabi Abdessalam, Morocco
El Shawarbi Amr, UAE
Emmez Hakan, Turkey
Enam Ather, Pakistan
Enchev Yavor Petkov, Bulgaria
Esposito Vincenzo, Italy
Fahlbusch Rudolf, Germany
Feng Ling, China
Ferraresi Stefano, Italy
Ferroli Paolo, Italy
Fieggen Graham, South Africa
Florian Ioan Stefan, Romania
Fontanello Marco Maria, Italy
Fornari Maurizio, Italy
Foroglou Nicolas, Greece
Fountas Konstantinos, Greece
Francaviglia Natale, Italy
Froelich Sebastien, France
Gabrovsky Nikolay, Bulgaria
Galzio Renato, Italy
Garozzo Debora, UAE
Gentili Fred, Canada
Gerganov Venelin, Germany
Germano Antonino, Italy
Germano Isabelle, USA
Ghadirpour Reza, Italy
Giussani Carlo, Italy
González-López Pablo, Spain
Grotenshuis Andre, Netherlands
Grujicic Danica, Serbia
Hoit Daniel, USA
Iacarino Corrado, Italy
Iacoangeli Maurizio, Italy
Innocenzi Gualtiero, Italy
Ivanov Marcel, UK
Jacques Line, USA
Jaskolski Dariusz, Poland
Jenkins Alistair, UK
Jokovic Milos, Serbia
July Julius, Indonesia
Kalang Kazadi, Zimbabwe
Kanaa Imad, Saudi Arabia
Kandasamy Regunath, Malaysia
Kasper Ekkehard, Canada
Kelly Daniel, USA
Khan Tariq, Pakistan
Kim Se-Hoon, Korea
Kiris Talat, Turkey
Kline David, USA
<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knosp Engelbert</td>
<td>Austria</td>
</tr>
<tr>
<td>Konovalov Alexander</td>
<td>Russia</td>
</tr>
<tr>
<td>Konovalov Nikolay</td>
<td>Russia</td>
</tr>
<tr>
<td>Krishnan Kartik</td>
<td>Germany</td>
</tr>
<tr>
<td>Lafuente Jesus</td>
<td>Spain</td>
</tr>
<tr>
<td>Lavano Angelo</td>
<td>Italy</td>
</tr>
<tr>
<td>Locatelli Davide</td>
<td>Italy</td>
</tr>
<tr>
<td>Loftus Christopher</td>
<td>USA</td>
</tr>
<tr>
<td>Mahan Mark</td>
<td>USA</td>
</tr>
<tr>
<td>Maldonado Igor</td>
<td>France</td>
</tr>
<tr>
<td>Mao Ying</td>
<td>China</td>
</tr>
<tr>
<td>Masini Marcos</td>
<td>Brazil</td>
</tr>
<tr>
<td>Masotto Barbara</td>
<td>Italy</td>
</tr>
<tr>
<td>Mathiesen Tiit</td>
<td>Denmark</td>
</tr>
<tr>
<td>Matula Christian</td>
<td>Austria</td>
</tr>
<tr>
<td>Mazzatenta Diego</td>
<td>Italy</td>
</tr>
<tr>
<td>Meling Torstein</td>
<td>Switzerland/Norway</td>
</tr>
<tr>
<td>Meyer Bernhard</td>
<td>Germany</td>
</tr>
<tr>
<td>Milani Davide</td>
<td>Italy</td>
</tr>
<tr>
<td>Milicevic Mihajlo</td>
<td>Serbia</td>
</tr>
<tr>
<td>Milisavljevic Milan</td>
<td>Serbia</td>
</tr>
<tr>
<td>Morcos Jacques</td>
<td>USA</td>
</tr>
<tr>
<td>Mrak Goran</td>
<td>Croatia</td>
</tr>
<tr>
<td>Mura Jorge</td>
<td>Chile</td>
</tr>
<tr>
<td>Nabavi Arya</td>
<td>Germany</td>
</tr>
<tr>
<td>Nair Suresh</td>
<td>India</td>
</tr>
<tr>
<td>Nikolov Vesna</td>
<td>Serbia</td>
</tr>
<tr>
<td>Oertel Joachim</td>
<td>Germany</td>
</tr>
<tr>
<td>Olivi Alessandro</td>
<td>Italy</td>
</tr>
<tr>
<td>Olldashi Fatos</td>
<td>Albania</td>
</tr>
<tr>
<td>Omerhodzic Ibrahim</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>Oppido Piero</td>
<td>Italy</td>
</tr>
<tr>
<td>Oyesiku Nelson</td>
<td>USA</td>
</tr>
<tr>
<td>Ozek Memet</td>
<td>Turkey</td>
</tr>
<tr>
<td>Papic Vladimir</td>
<td>Serbia</td>
</tr>
<tr>
<td>Paterno Vincenzo</td>
<td>Germany</td>
</tr>
<tr>
<td>Peev Nikolay</td>
<td>UK</td>
</tr>
<tr>
<td>Peker Selçuk</td>
<td>Turkey</td>
</tr>
<tr>
<td>Perez Perez Victor Hugo</td>
<td>Mexico</td>
</tr>
<tr>
<td>Perin Alessandro</td>
<td>Italy</td>
</tr>
<tr>
<td>Perrini Paolo</td>
<td>Italy</td>
</tr>
<tr>
<td>Petrela Mentor</td>
<td>Albania</td>
</tr>
<tr>
<td>Picozzi Piero</td>
<td>Italy</td>
</tr>
<tr>
<td>Pompuccii Angelo</td>
<td>Italy</td>
</tr>
<tr>
<td>Potapov Alexander</td>
<td>Russia</td>
</tr>
<tr>
<td>Raco Antonino</td>
<td>Italy</td>
</tr>
<tr>
<td>Radulovic Danilo</td>
<td>Serbia</td>
</tr>
<tr>
<td>Rasalingam Kantha</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Rasulic Lukas</td>
<td>Serbia</td>
</tr>
<tr>
<td>Robertson Scott</td>
<td>USA</td>
</tr>
<tr>
<td>Roitberg Ben</td>
<td>USA</td>
</tr>
<tr>
<td>Romoli Stefano</td>
<td>Italy</td>
</tr>
<tr>
<td>Rosseau Gail</td>
<td>USA</td>
</tr>
<tr>
<td>Rotim Kresimir</td>
<td>Croatia</td>
</tr>
<tr>
<td>Rzaev Jamil</td>
<td>Russia</td>
</tr>
<tr>
<td>Safic Robert</td>
<td>Croatia</td>
</tr>
<tr>
<td>Sajko Tomislav</td>
<td>Croatia</td>
</tr>
<tr>
<td>Sala Francesco</td>
<td>Italy</td>
</tr>
<tr>
<td>Samii Amir</td>
<td>Germany</td>
</tr>
<tr>
<td>Samii Majdjid</td>
<td>Germany</td>
</tr>
<tr>
<td>Santarius Thomas</td>
<td>UK</td>
</tr>
<tr>
<td>Sawaya Raymond</td>
<td>USA</td>
</tr>
<tr>
<td>Schaller Karl</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Schroeder Henry</td>
<td>Germany</td>
</tr>
<tr>
<td>Selviaridis Panagiotis</td>
<td>Greece</td>
</tr>
<tr>
<td>Servadei Franco</td>
<td>Italy</td>
</tr>
<tr>
<td>Shah Nishit</td>
<td>India</td>
</tr>
<tr>
<td>Sharif Salman</td>
<td>Pakistan</td>
</tr>
<tr>
<td>Sharma Gopal Raman</td>
<td>Nepal</td>
</tr>
<tr>
<td>Signoretti Stefano</td>
<td>Italy</td>
</tr>
<tr>
<td>Sindou Marc</td>
<td>France</td>
</tr>
<tr>
<td>Sinha Sumit</td>
<td>India</td>
</tr>
<tr>
<td>Smrcka Martin</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Solaroglu Ihsan</td>
<td>Turkey</td>
</tr>
<tr>
<td>Somma Teresa</td>
<td>Italy</td>
</tr>
<tr>
<td>Soriano-Sanchez Jose</td>
<td>Mexico</td>
</tr>
<tr>
<td>Spagnuolo Edgardo</td>
<td>Uruguay</td>
</tr>
<tr>
<td>Spinner Robert</td>
<td>USA</td>
</tr>
<tr>
<td>Spyrou Michalakis</td>
<td>Cyprus</td>
</tr>
<tr>
<td>Splavski Bruno</td>
<td>Croatia</td>
</tr>
<tr>
<td>Stefini Roberto</td>
<td>Italy</td>
</tr>
<tr>
<td>Stojanovic Nebojsa</td>
<td>Serbia</td>
</tr>
<tr>
<td>Talahma Imad</td>
<td>Palestine</td>
</tr>
<tr>
<td>Tamonti Giuseppe</td>
<td>Italy</td>
</tr>
<tr>
<td>Tessitore Enrico</td>
<td>Italy</td>
</tr>
<tr>
<td>Thome Claudius</td>
<td>Austria</td>
</tr>
<tr>
<td>Tomasello Francesco</td>
<td>Italy</td>
</tr>
<tr>
<td>Tu Yong Kwang</td>
<td>Taiwan</td>
</tr>
<tr>
<td>Ture Ugur</td>
<td>Turkey</td>
</tr>
<tr>
<td>Turel Keki</td>
<td>India</td>
</tr>
<tr>
<td>Visocchi Massimiliano</td>
<td>Italy</td>
</tr>
<tr>
<td>Vorsic Matjaz</td>
<td>Slovenia</td>
</tr>
<tr>
<td>Vukic Miroslav</td>
<td>Croatia</td>
</tr>
<tr>
<td>Vulekovic Petar</td>
<td>Serbia</td>
</tr>
<tr>
<td>Watts Colin</td>
<td>UK</td>
</tr>
<tr>
<td>Wahjoepramono Eka</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Westphal Manfred</td>
<td>Germany</td>
</tr>
<tr>
<td>Winkler Peter</td>
<td>Austria</td>
</tr>
<tr>
<td>Xhumari Artur</td>
<td>Albania</td>
</tr>
<tr>
<td>Yaman Onur</td>
<td>Turkey</td>
</tr>
<tr>
<td>Yampolsky Claudio</td>
<td>Argentina</td>
</tr>
<tr>
<td>Zabihyan Samira</td>
<td>Iran</td>
</tr>
<tr>
<td>Zager Eric</td>
<td>USA</td>
</tr>
<tr>
<td>Zileli Mehmet</td>
<td>Turkey</td>
</tr>
</tbody>
</table>
“The WFNS 2019 International Meeting - One world, one neurosurgery, Belgrade, Serbia, 21/03/2019-24/03/2019 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 29 European CME credits (ECMECs). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.”

“Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 CreditsTM. Information on the process to convert EACCME® credit to AMA credit can be found at www.ama-assn.org/education/earn-credit-participation-international-activities

“Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMECs are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.”

EACCME® credits

Each participant can only receive the number of credits he/she is entitled to according to his/her actual participation at the event once he/she has completed the feedback form.
WFNS 2019
INTERNATIONAL MEETING
ONE WORLD, ONE NEUROSURGERY

March 21st-24th 2019
Crowne Plaza, Belgrade

PRE-MEETING COURSES
WFNS PRE-MEETING COURSES

March 21st, 2019

• EDUCATION
  Chairmen of the WFNS Education & Training Committee:
  Prof. Dr. Isabelle Germano and Prof. Dr Hiroyuki Kinouchi
  Venue: Hotel Crowne Plaza Belgrade

• ENDOSCOPY
  Chairmen of the WFNS Neuroendoscopy Committee
  Prof. Dr. Mahmood Qureshi and Dr. Chandrashekhar E. Deopujari
  Venue: University of Belgrade, Institute for Anatomy “Niko Miljanic”

• SURGICAL ANATOMY
  Chairmen of the WFNS Neurosurgical Anatomy Committee:
  Prof. Dr. Vladimir Benes and Prof. Dr Imad N. Kanaan
  Venue: Hotel Crowne Plaza Belgrade
WFNS EDUCATION
PRE-MEETING COURSE
“Updates in Brain Tumors and Trauma”
WFNS Education Committee Chair: Isabelle M. Germano, MD, MBA

7:30-8:00 Introductory remarks
Franco Servadei, WFNS President
Lukas Rasulic, Co-President of the Meeting
Isabelle Germano, WFNS Education Committee Chair

BRAIN TUMORS
Moderator: Lukas Rasulic and Isabelle Germano
*Each lecture will be followed with Q&A discussion 10 min

8:00-8:20 DNA methylation-based classification of CNS tumors
Manfred Westphal (Germany)

8:20-8:50 Molecular and other advanced imaging of brain tumors
Colin Watts (UK)

9:00-9:20 Awake craniotomy and intraoperative resection techniques
Isabelle Germano (USA)

9:30-9:50 Adjuvant treatments of primary brain tumors
Petar Vulekovic (Serbia)

10:00-10:30 Coffee Break

10:30-10:50 Approaches to intraventricular tumors
Ekkard Kasper (Canada)

11:00-11:20 Skull base surgery: CSF Leak prevention and repair
Christian Matula (Austria)

11:30-11:50 Brain stem tumors
Miguel Arraiz Sanchez (Spain)

12:00-12:20 Pediatric Tumors
Frederick Boop (USA)

12:30-12:50 TBA

13:00-14:00 Lunch

BRAIN AND SPINE TRAUMA
Moderator: Franco Servadei and Mehmet Zileli
*Each lecture will be followed with Q&A discussion 10 min

14:00-14:20 Advanced images of TBI
Alexander Potapov (Russia)

14:30-14:50 Adult Head Trauma
Franco Servadei (Italy)

15:00-15:20 Pediatric head trauma
David Adelson (USA)

15:30-15:50 Trauma system evaluation in developing countries
Fatos Olldashi (Albania)

16:00-16:30 Coffee break

16:30-16:50 Brachial Plexus Surgery: early or delayed
Lukas Rasulic (Serbia)

17:00-17:20 Intra-operative CT Scan: always necessary
Maurizio Fornari (Italy)

17:30-17:50 Cervical Spine trauma
Mehmet Zileli (Turkey)

18:00-18:20 Cranial and spine missile injuries
Tariq Khan (Pakistan)

18:30-18:50 Spine trauma education for the young neurosurgeon
Francesco Costa (Italy)

Venue: Hotel Crowne Plaza, Belgrade
This course has limited number of 40 participants based on the principle first come first served.
WFNS ENDOSCOPY
PRE-MEETING COURSE

WFNS Neuroendoscopy Committee Chair:
Dr. Chandrashekhar E. Deopujari

08.15-08.30 Welcome and Introduction of faculty
Paolo Cappabianca, Chandrashekhar Deopujari

08.30-09.30 Instructional talks:
Moderators: A. Grotenhuis, P. Cappabianca

08.30-08.45 Anatomy 1: Osteology of Nose, PNS and Midline Skullbase
and importance of bony landmarks and blood supply
Milan Milisavljevic

08.45-09.00 Anatomy 2: Endoscopic anatomy for endonasal
transsphenoidal approach and principles of reconstruction
Nishit Shah

09.00-09.15 Principles and Nuances of Endoscopic Pituitary surgery
Paolo Cappabianca

09.15-09.30 Cavernous Sinus and ICA management
Daniel Kelly

09.30-10.30 Dissection Demo
Nishit Shah, Domenico Solari, Daniel Kelly

10.30-12.30 Hands on for delegates Supervised by faculty

12.30-13.15 Lunch

13.15-14.45 Instructional talks:
Moderators: H. Schroeder, C. Deopujari

13.15-13.30 Extended Approaches: corridors
Andre Grotenhuis

13.30-13.45 Endonasal approaches to Craniopharyngiomas
Davide Locatelli

13.45-14.00 Endonasal approaches to Meningiomas
Fred Gentilli

14.00-14.15 Endonasal Chordomas and other clival lesions
Henry Schroeder

14.15-14.30 Endonasal Approach to CV junction
Domenico Solari

14.30-14.45 Demo dissection: ACF, Parasellar, Clivus
Mihajlo Milicevic, Henry Schroeder, Andre Grotenhuis

15.15-17.30 Hands on dissection for delegates

Venue: University of Belgrade, School of Medicine, Institute for Anatomy “Niko Miljanic”

This course has limited number of 20 participants, based on the principle first come first served.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>07.55-08.00</td>
<td>Introduction</td>
<td>Vladimir Benes</td>
</tr>
<tr>
<td>08.00-09.30</td>
<td>Anatomy of cranial nerves</td>
<td>Thomas Santarius, Pablo Gonzales-Lopez</td>
</tr>
<tr>
<td>09.30-09.50</td>
<td>Relation of CN to brain vessels</td>
<td>Igor Lima Maldonado</td>
</tr>
<tr>
<td>09.50-10.10</td>
<td>Imaging of cranial nerves</td>
<td>Arya Nabavi</td>
</tr>
<tr>
<td>10.10-10.40</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>10.40-11.00</td>
<td>Spinal cord and nerve roots</td>
<td>Vicotru Hugo Perez, Kazadi Kalangu</td>
</tr>
<tr>
<td>11.00-11.20</td>
<td>Tumor cases and related anatomy</td>
<td>Eka Wahjoepramono</td>
</tr>
<tr>
<td>11.20-11.40</td>
<td>Cranial nerves in Dolenc approach</td>
<td>Iype Cherian</td>
</tr>
<tr>
<td>11.40-12.00</td>
<td>Optic nerves in Suprasellar Tumor surgery</td>
<td>Imad Kanaan</td>
</tr>
<tr>
<td>12.00-12.20</td>
<td>Preserving the olfactory nerve</td>
<td>Thomas Santarius</td>
</tr>
<tr>
<td>12.20-13.30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13.30-13.50</td>
<td>Neurovascular conflict</td>
<td>Keki Turel</td>
</tr>
<tr>
<td>13.50-14.10</td>
<td>Schwannomas</td>
<td>Roy Thomas Daniels</td>
</tr>
<tr>
<td>14.10-14.30</td>
<td>Ependymomas</td>
<td>Ekkehard Kasper</td>
</tr>
<tr>
<td>14.30-15.00</td>
<td>Posterior fossa meningiomas</td>
<td>Vladimir Benes</td>
</tr>
<tr>
<td>15.00-15.20</td>
<td>CC junction and foramen jugulare</td>
<td>Thomas Santarius</td>
</tr>
<tr>
<td>15.20-15.40</td>
<td>Intramedullary tumors</td>
<td>Julius July</td>
</tr>
<tr>
<td>15.40-16.00</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>16.00-18.00</td>
<td>Case discussion: 10 mins each</td>
<td></td>
</tr>
</tbody>
</table>

**Venue:** Hotel Crowne Plaza Belgrade

*This course has limited number of 40 participants, based on the principle first come first served.*
PRE-MEETING COURSES

March 21st, 2019

- **GLOBAL NEURO**
  Prof. Dr. Fatos Olldashi (Albania), Prof. Dr. Andras Buki (Hungary),
  Prof. Dr. Maurizio Iacoangeli (Italy)
  Venue: Hotel Crowne Plaza Belgrade

- **AO SPINE**
  Prof. Dr. Alessandro Ducati
  Venue: Hotel Crowne Plaza Belgrade

- **SPINE INTRAOPERATIVE NAVIGATION**
  Venue: Hotel Crowne Plaza Belgrade
GLOBAL NEURO SEMINAR - NEUROTRAUMA  
March 21st, 2019  
Preliminary event program

Goal of the course
The Global Neuro Course—Neurotrauma covers the theoretical basis and practical principles for managing neurotrauma, addressing complications, and performing state-of-the-art reconstructive surgery.

Target participants
The course has been developed for surgeons who manage neurotrauma and reconstruction and who have a strong interest in these fields. It has a focus on interdisciplinary care and is appropriate for neurosurgeons, CMF, ENT, trauma, and other surgeons.

Course objectives
By completing the course, participants will be better able to:
• Apply current classification systems and guidelines in neurotrauma
• Manage neurotrauma in adult, pediatric, and polytrauma patients
• Conduct advanced neuromonitoring
• Plan and perform appropriate triage strategies

Course description
This course covers the current best strategies and considerations for managing neurotrauma patients and is based on competencies defined in GlobalNeuro’s curriculum. The content is delivered using multiple methods. Comprehensive lectures concentrate on the understanding of core material. Interactive case presentations further deepen this knowledge and enrich the discussion in trauma management and involve preselected cases submitted by participants in advance. Such case-based discussions link the lecture material with the clinical problems encountered in everyday practice.

Faculty
Chair
Fatos Olldashi (Albania)  
Andras Buki (Hungary)  
Maurizio Iacoangeli (Italy)

International Faculty
Kenan Arnautovic (USA)

Regional faculty
Andreas Demetriades (UK)  
Marek Czosnyka (UK)  
Stefan Florian (Romania)  
Angelo Pompuccii (Italy)  
Francesco Biroli (Italy)  
Arthur Xhumari (Albania)

National faculty
Djula Djilvesi (Serbia)

Special guest
Franco Servadei (Italy)  
Lukas Rasulic (Serbia)

Venue: Hotel Crowne Plaza, Belgrade
This course has limited number of 40 participants based on the principle first come first served.
<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
<th>FACULTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00–08:05</td>
<td>Introduction</td>
<td>Moderator: F Olldashi</td>
</tr>
<tr>
<td></td>
<td>Welcome and why a neurotrauma course  (in alternative: and why a neurotrauma course in eastern europe?)</td>
<td>Lukas Rasulic</td>
</tr>
<tr>
<td>08:05–08:10</td>
<td>Course structure and objectives</td>
<td>Maurizio Iacoangeli</td>
</tr>
<tr>
<td>08:10–08:15</td>
<td>Precourse assessment?</td>
<td>Andras Buki</td>
</tr>
<tr>
<td></td>
<td><strong>Module 1</strong> Basics of neurotrauma</td>
<td><strong>Moderator:</strong> F Biroli</td>
</tr>
<tr>
<td>08:20–08:40</td>
<td>The global burdeon of traumatic brain injury</td>
<td>Christian Matula</td>
</tr>
<tr>
<td>08:40–09:00</td>
<td>Management of polytrauma patient with TBI: Initial assessment, priorities and multidisciplinary treatment</td>
<td>Andreas Demetriades</td>
</tr>
<tr>
<td>09:00–09:30</td>
<td>Interactive case discussion: Polytrauma management</td>
<td>All Faculty</td>
</tr>
<tr>
<td></td>
<td>• case I: faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• case II: pre-sent by participants, selected by faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Module 2</strong> Diagnostics, imaging, and pathologies</td>
<td><strong>Moderator:</strong> Lukas Rasulic</td>
</tr>
<tr>
<td>09:30–09:50</td>
<td>Basic imaging–advanced imaging in TBI</td>
<td>Iona Stefan Florian</td>
</tr>
<tr>
<td>09:50–10:20</td>
<td>Interactive case discussion: Reading the imaging</td>
<td>All Faculty</td>
</tr>
<tr>
<td></td>
<td>• case I: faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• case II: pre-sent by participants, selected by faculty</td>
<td></td>
</tr>
<tr>
<td>10:20–10:40</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Module 3</strong> Hot Topics : Guidelines, Education, Complications and Outcome</td>
<td><strong>Moderator:</strong> Djula Djilvesi</td>
</tr>
<tr>
<td>10:40–11:00</td>
<td>Overview of current guidelines in TBI</td>
<td>Franco Servadei</td>
</tr>
<tr>
<td>11:00–11:30</td>
<td>Interactive case discussion: Adherence to guidelines, complex and complicated cases</td>
<td>All Faculty</td>
</tr>
<tr>
<td></td>
<td>• case I: faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• case II: pre-sent by participants, selected by faculty</td>
<td></td>
</tr>
<tr>
<td>11:30–11:50</td>
<td>TBI outcome: Importance of epidemiological studies</td>
<td>Francesco Biroli</td>
</tr>
<tr>
<td>11:50–12:00</td>
<td>Questions and discussion</td>
<td>All Faculty</td>
</tr>
<tr>
<td>12:00–13:00</td>
<td>LUNCH BREAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Module 4</strong> ICP management and multimodal monitoring</td>
<td><strong>Moderator:</strong> Kenan Arnautovic</td>
</tr>
<tr>
<td>13:00–13:20</td>
<td>Pathophysiology in traumatic brain injury</td>
<td>Marek Czosnyka</td>
</tr>
<tr>
<td>13:20–13:40</td>
<td>Multimodal neuromonitoring and intensive treatment</td>
<td>Andras Buki</td>
</tr>
<tr>
<td>13:40–14:10</td>
<td>Intensive treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interactive case discussion: Increased ICP (nonoperative cases)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• case I: faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• case II: pre-sent by participants, selected by faculty</td>
<td></td>
</tr>
<tr>
<td>14:10–14:30</td>
<td>Decompressive Craniectomy-Indications and Technique</td>
<td>Angelo Pompucci</td>
</tr>
<tr>
<td>14:30–14:50</td>
<td>Cranioplasty complications</td>
<td>Maurizio Iacoangeli</td>
</tr>
<tr>
<td>14:50–15:20</td>
<td>Interactive case discussion: Increased ICP (operative cases)</td>
<td>All Faculty</td>
</tr>
<tr>
<td></td>
<td>• case I: faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• case II: pre-sent by participants, selected by faculty</td>
<td></td>
</tr>
<tr>
<td>15:20–15:30</td>
<td>Questions and discussion</td>
<td>All Faculty</td>
</tr>
<tr>
<td>15:30–15:50</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Module 5</strong> Organization and education</td>
<td><strong>Moderator:</strong> Arthur Xhumari</td>
</tr>
<tr>
<td>15:50–16:10</td>
<td>Organization of neurotrauma care and the role of regional centers in neurotrauma</td>
<td>Fatos Olldashi</td>
</tr>
<tr>
<td>16:10–17:10</td>
<td>Role of education in neurotrauma: Round table with expert opinion</td>
<td>Moderator: Christian Matula</td>
</tr>
<tr>
<td>17:10–17:20</td>
<td>Global Neuro: present and future</td>
<td>Christian Matula</td>
</tr>
<tr>
<td>17:20–17:30</td>
<td>Questions and discussion</td>
<td>All faculty</td>
</tr>
<tr>
<td>17:30–17:40</td>
<td>Course evaluation</td>
<td>Chairs</td>
</tr>
<tr>
<td>17:40–17:45</td>
<td>Closure and certificates</td>
<td>All faculty</td>
</tr>
</tbody>
</table>
AO SPINE
ADVANCED SEMINAR - CERVICAL SPINE

Chairperson: Alessandro Ducati, Turin, Italy

Faculty:
Giuseppe Barbagallo, Catania, Italy
Bernhard Meyer, Munich, Germany
Claudius Thome, Innsbruck, Austria
Stefano Romoli, Firenze, Italy

Thursday, March 21, 2019

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
<th>LECTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00 - 13:10</td>
<td>Welcome and AOSpines presentation</td>
<td>Giuseppe Barbagallo</td>
</tr>
<tr>
<td>13:10 - 13:15</td>
<td>Presentation of the Seminar, Faculty and Objectives</td>
<td>Alessandro Ducati</td>
</tr>
<tr>
<td>13:15 - 13:35</td>
<td>Cervical Spine: pathology and reconstruction</td>
<td>Claudius Thomé</td>
</tr>
<tr>
<td>13:35 - 14:15</td>
<td>Presentation and discussion of 2 difficult cases</td>
<td>Claudius Thomé</td>
</tr>
<tr>
<td>14:15 - 14:35</td>
<td>When and how to approach primary and secondary</td>
<td>Bernhard Meyer</td>
</tr>
<tr>
<td></td>
<td>tumors of the cervical spine?</td>
<td></td>
</tr>
<tr>
<td>14:35 - 15:15</td>
<td>Presentation and discussion of 2 difficult cases</td>
<td>Bernhard Meyer</td>
</tr>
<tr>
<td>15:15 - 15:45</td>
<td>COFFEE BREAK</td>
<td></td>
</tr>
<tr>
<td>15:45 - 16:05</td>
<td>Deformity of the cervical spine secondary to degenerative and infectious diseases</td>
<td>Giuseppe Barbagallo</td>
</tr>
<tr>
<td>16:05 - 16:45</td>
<td>Presentation and discussion of 2 difficult cases</td>
<td>Giuseppe Barbagallo</td>
</tr>
<tr>
<td>16:45 - 17:05</td>
<td>Traumatic lesions of the cervical spine: the AO classification and its significance to treatment</td>
<td>Stefano Romoli</td>
</tr>
<tr>
<td>17:05 - 17:45</td>
<td>Presentation and discussion of 2 difficult cases</td>
<td>Stefano Romoli</td>
</tr>
<tr>
<td>17:45 - 18:00</td>
<td>Closing remarks, Certificates</td>
<td>Alessandro Ducati</td>
</tr>
</tbody>
</table>

Venue: Hotel Crowne Plaza, Belgrade

This course has limited number of 40 participants based on the principle first come first served.
SPINE INTRAOPERATIVE NAVIGATION

March 21st, 2019 • 09:00 AM – 16:00 PM

Workshop presented by: Southeast Europe Neurosurgical Society (SeENS)

Goal of the Course
The Intraoperative Spine Navigation Course covers theoretical and practical principles of using the Spinal Navigation system during spine fusion and instrumentation surgery.

Course Description
This workshop seeks to fulfill the need of neurosurgeons, orthopedics, neurologists, physiatrists, and interested allied health practitioners to improve the fund of knowledge and to increase competence in evaluating, counseling, managing, and/or referring patients who present with low back spine complaints. The course will include lectures, question & answer discussions, along with practical part of using spinal navigation system and instrumentation on models.

Course Objectives
At the conclusion of this workshop, participants will be able to optimally counsel, diagnose and manage patients with the following spine conditions: Lumbar stenosis, lumbar spondylolisthesis, failed back surgery syndrome, determine appropriate patients to refer to surgery, order appropriate diagnostic imaging familiarize with minimal invasive spine surgery with the use of spinal navigation.

COURSE DIRECTOR
Professor Krešimir Rotim, MD, PhD
Head, Department of Neurosurgery
Sestre milosrdnice UHC, Zagreb, Croatia

COURSE CO-DIRECTOR
Asist. Prof. Tomislav Sajko, MD, PhD
Department of Neurosurgery
Sestre milosrdnice UHC, Zagreb, Croatia

FACULTY
Professor Mehmet Zileli
WFNS Spine Committee Chairman
Izmir, Turkey

Professor Francesco Costa
Head Spine Oncology Surgery
Humanitas Research Hospital, Milano, Italy

FACULTY
Mr. Csaba Eles
Product Manager Neurosurgery
Budapest, Hungary
PROGRAM

08:00–09:00  Registration
09:00–09:10  Welcome and Announcements
09:10–09:40  TBA  Professor Krešimir Rotim
09:40–10:10  TBA  Asist Professor Tomislav Sajko
10:10–10:40  TBA  Professor Mehmet Zileli
10:40–11:00  Discussion
11:00–11:30  Coffee break
11:30–12:00  TBA  Mr. Csaba Eles
12:00–12:30  TBA
12:30–13:00  TBA  Professor Francesco Costa
13:00–13:30  Discussion
13:30–14:00  Break
14:00–15:30  Practical workshop
15:30–16:00  Discussion and adjourn

Venue: Hotel Crowne Plaza, Belgrade

This course has limited number of 40 participants based on the principle first come first served.
BESTA NEUROSIM CENTER COURSE

1ST International Neurosurgery Simulation Course at WFNS
March 22nd-23rd, 2019

The WFNS, in collaboration with the Besta NeuroSim Center, are proud to announce the upcoming event as the first edition of the International Neurosurgery Simulation Course held within the WFNS International Meeting. The Besta NeuroSim Center is the first and largest European simulation and training center entirely dedicated to neurosurgery. Virtual reality simulation with haptic feedback is endowed in the top-notch simulators available at the center in order to allow residents to rehearse and operate virtual human brain in a 3D virtual reality setting. This is probably the future of neurosurgical training, because it may allow residents to improve their skills in a safe environment, without harming patients because of the operator’s inexperience.

In this proposed course, trainees can simulate both interventions carried out under the microscope (e.g. removal of a brain tumor) and neurosurgical operations which do not require the use of a microscope (e.g. EVD placement). There are only 36 seats for the course, if you want to participate please contact ASAP:

Dr. Roberta Ayadi: roberta.ayadi@istituto-besta.it
Alessandra Rocca: alessandra.rocca.1994@gmail.com
Congress secretariat: wfn2019belgrade@snss.org.rs

TOTAL COURS HOURS: 8 (4 per day)
TOTAL N° OF PARTICIPANTS: 36 (18 per day)

Moreover, the Simulation Centre at the congress venue will be open from 09.00 am until 12.00 pm and from 02.00 pm until 06.00 pm to showcase the simulators and allow all residents and attending neurosurgeons to briefly try our simulators.

THE SIMULATORS

NEUROVR
It allows any neurosurgeon (resident or attending) to simulate in a virtual reality and three-dimensional environment, many neurosurgical interventions carried out under the operative microscope, such as the removal of brain tumours, or endoscopic procedures within the cerebral ventricles or transnasosphenoidal. NeuroVR is designed for training neurosurgeons, using the same principle of pilot training in aircrafts. This is the most accurate and realistic neurosurgical simulator available today. The system provides an automatic registration of each candidate’s performance in order to see if his/her technical skills improves and track the learning curve.

IMMERSIVE TOUCH
Immersive Touch can be used for planning interventions, so as to better define the times and access corridors to the areas to be treated, or more practical procedures on patients such as placing an external ventricular drain. The simulator provides a three-dimensional view of images completely in digital graphics and it is a “high fidelity” simulation system endowed with visual and tactile feedback.

USIM
It is an intraoperative Ultrasound Simulation app that can be downloaded on any smartphone that becomes a virtual probe to simulate and rehearse intraoperative ultrasound on a library of cases that were previously acquired at C. Besta Institute.

SURGICAL THEATER
CT and MRI scans of are used to reconstruct a patient-specific 3D model that helps neurosurgeons to pre-operatively evaluate and rehearse the operative case, decrypt the surgical anatomy and determine the best corridor to follow, practice different surgical procedures. It can be connected to the intraoperative navigation system in the OR and it allows case-specific rehearsal, performing some neurosurgical procedures (e.g. aneurysm clipping), along with post-operative debriefing.
SCHEDULE

DAY 1
Welcoming Presentation.
Presentation and introduction to simulation in neurosurgery and its latest developments. Presenters: Prof DiMeco, Prof Meling, Prof Tessitore, Prof Del Maestro, Prof Grotenhuis, and Prof Perin.
Four-hour course: 18 participants
After the course, the simulation centre is open to the public.

DAY 2
Four-hour course: 18 participants
After the course, the simulation centre is open to the public.

ACTIVITIES’ SCHEDULE
The candidates will be asked to perform different tasks:
- Tumor (meningioma) debunking case at NeuroVR.
  Different parameters will be assessed: percentage of tumor removed, percentage of brain parenchyma removed, strength applied to the tissue, volume of blood lost.
- External ventricular drain (EVD) at ImmersiveTouch
  Different parameters will be assessed: number of attempts needed to reach the ventricles, accuracy in positioning the catheter.
- Visualization of an MCA left aneurysm with the aid of virtual reality glasses and clipping of that aneurysm at Surgical Theatre
- Identification of ten anatomical structures, displaying the brain in B-mode ultrasound at USim
The candidates will be evaluated in their ability to orientate using b-mode ultrasound, before and after the help of MRI images of the case.

Venue: Hotel Crowne Plaza, Belgrade

This course has limited number of 20 participants per day based on the principle first come first served.
“Lumbar Spinal Stenosis” consensus meeting

Meeting description: A half day program with 6 speakers summarizing the Milan meeting’s panel topics. Each speaker will summarize the previous speakers’ documents and place exact statements of our first decisions. After 20 minutes talks, each topic will be discussed by all participants (15 minutes discussion). Then the statements are voted by the WFNS spine committee members only. (5 minutes voting and declaration of the results)

PROGRAM

1: Natural course and diagnosis of lumbar spinal stenosis  
   Discussion  
   Declaration of the consensus statements  
   Mehmet Zileli

2: Conservative treatment or follow up  
   Discussion  
   Declaration of the consensus statements  
   Maurizio Fornari

3: Percutaneous techniques for lumbar spinal stenosis  
   Discussion  
   Declaration of the consensus statements  
   Scott C. Robertson

4: Decompressive surgery for lumbar spinal stenosis  
   Discussion  
   Declaration of the consensus statements  
   Francesco Costa

5: Fusion surgery for lumbar spinal stenosis  
   Discussion  
   Declaration of the consensus statements  
   Salman Sharif

6: Mobility preserving surgeries for lumbar spinal stenosis  
   Discussion  
   Declaration of the consensus statements  
   Ben Roitberg

Venue: Hotel Crowne Plaza, Belgrade
WFNS 2019
INTERNATIONAL MEETING
ONE WORLD, ONE NEUROSURGERY

March 21st-24th 2019
Crowne Plaza, Belgrade

FINAL
SCIENTIFIC PROGRAM

*Final scientific program is subject to change.
PRE-MEETING COURSES

07:30-18:50  WFNS Education Pre-meeting Course  
Chair: Isabelle Germano  
Venue: Crowne Plaza

07:55-18:00  WFNS Neurosurgical Anatomy Committee Pre-meeting Course  
Chair: Vladimir Benes  
Venue: Crowne Plaza

08.15-17.30  WFNS Endoscopy Pre-meeting Course  
Chairs: Chrandrashekhar Deopujari and Paolo Cappabianca  
Venue: University of Belgrade, Institute for Anatomy “Niko Miljanic”

08.00-17.45  Global Neuro Seminar  
Chairs: Fatos Oldashi, Andras Buki, Maurizio Iacoangeli  
Venue: Crowne Plaza

09.00-16.00  Spine Intraoperative Navigation  
Course director: Kresimir Rotim  
Venue: Crowne Plaza

13.00-18.00  AO Spine Advanced Seminar - Cervical Spine  
Chair: Alessandro Ducati  
Venue: Crowne Plaza

19:30-22:00  OPENING CEREMONY AND WELCOME RECEPTION  
Venue: Hotel Crowne Plaza
Friday, March 22nd, 2019

08:00-08:15 Opening remarks

PLENARY SESSION I
Chairs: Lukas Rasulic, Marco Cenzato

08:15-08:30 Surgical treatment of intramedullary spinal cord tumor: experience of more than 750 cases
Nikolay Konovalov, Russia

08:30-08:45 From simulation through cadaver training to patient care: a safe way to educate spinal surgeons
Karl Schaller, Switzerland

08:45-09:00 Visual function preservation in microsurgical management of parasellar meningiomas
Francesco Tomasello, Italy

09:00-09:15 The revolution of DAVF treatment in the neurovascular section
Ling Feng, China

09:15-09:30 Neurosurgical management of craniopharyngiomas
Rudolf Fahlbusch, Germany

09:30-09:45 Problems of geriatric spine surgery
Mehmet Zileli, Turkey

09:45-10.00 Coffee break

10.00-12.45 GLOBAL NEUROSURGERY SESSION
Moderators: Gail Rosseau, Franco Servadei
PANELISTS: Graham Fieggen, Miroslav Vukic, Edgardo Spagnuolo, Amr El Shawarby, Ioan Stefan Florian

WOMEN IN NEUROSURGERY
Chairs: Souad Bakhti, Ling Feng

12.45-12.55 Association of opium addiction with rupture of intracranial aneurysms
Samira Zabihyan, Iran

12.55-13.05 Pineal region tumors: surgical strategy
Danica Grujicic, Serbia

13.05-13.15 Pitfalls and avoidance of complications in neuroendoscopy
Najia El Abbadi, Morocco
13.15-13.25  Multidisciplinary treatment of brain metastases
Isabelle Germano, USA

13.25-13.35  Women in neurosurgery: a young italian neurosurgeon
Teresa Somma, Italy

13.35-13.45  Men’s Contribution for Development of WINS
Hari Chandran, Malaysia

13:45-14:30  Lunch

13.45-15.15  3D SPECIAL LECTURES *

Surgery of Brainstem Cavernous Angiomas
Eka J Wahjoepramono, Indonesia

Surgical approaches for tumors in the 3rd and 4th ventricles
Thomas Santarius, UK

Microvascular Decompression and cranial nerves in posterior fossa
Julius July, Indonesia

* Lunch will be served within the session

14.30-18.30  WFNS SPINE COMMITTEE CONSENSUS CONFERENCE
“Lumbar Spinal Stenosis”

Executive Board Room

MT-I  PEDIATRICS
Chairs: Concezio Di Rocco, Graham Fieggen

14.30-14.45  Shuntscope in pediatric patients
Joachim Oertel, Germany

14.45-15.00  Pituitary Adenomas in pediatric age: an endoscopic approach
Davide Locatelli, Italy

15.00-15.15  Breakthroughs in Medulloblastoma management. Can it be cured?
Alexandru-Vlad Ciurea, Romania

15.15-15.30  Surgical approach to thalamic tumors
Memet Özak, Turkey

15.30-15.45  Spinal tumors in children
Concezio Di Rocco, Germany

15.45-16.00  Rosette forming glioneuronal tumors of the 4th ventricle
Nejat Akalan, Turkey
16.00-16.15  Management of Spina Bifida  
Graham Fieggen, South Africa

16.15-16.30  Long-term surgical results on craniopharyngiomas  
Abdeslam El Khamlichi, Morocco

16.30-16.45  Affordable (Paediatric) Neurosurgery in the third world  
Alistair Jenkins, UK

16:45-17:00  Many a slip between the cup and the lip: Management dilemmas in congenital craniovertebral junction anomalies  
Sanjay Behari, India

17.00-17.15  Coffee break

---

MT-2  TUMOR  
Chairs: Miguel Arraez, Kenan Arnautovic  
Hall 2

14.30-14.45  Surgical management of petrous apex lesions  
Miguel Arraez, Spain

14.45-15.00  Endonasal approach to craniopharyngiomas  
Luigi Cavallo, Italy

15.00-15.15  Meningiomas of the CP angle  
Panagiotis Selviaridis, Greece

15.15-15.30  Cranio-orbital pretemporal skull base approach to sellar/juxtasellar lesions  
Kenan Arnautovic, USA

15.30-15.45  Long-term morbidity of meningioma  
Tiit Mathiesen, Denmark

15.45-16.00  Management of foramen magnum Meningioma  
Najia El Abbadi Bendahane, Morocco

16.00-16.15  High-grade gliomas surgery: combined fluorescence, IOUS and CEUS experience  
Natale Francaviglia, Italy

16.15-16.30  Management of giant pituitary adenomas  
Nicolas Foroglou, Greece

16.30-16.45  Olfactory groove meningiomas - results of transcranial resection in relation to imaging-based selection criteria for endoscopic approach  
Thomas Santarius, UK

16.45-17.00  Endonasal transsphenoidal surgery for pituitary tumors  
Julius July, Indonesia

17.00-17.15  Coffee break
MT-3  NEW HORIZONS  
Chairs: Ihsan Solaroglu, Amir Samii

Hall 3

14:30-14:45  Arachnoid membrane in meningioma surgery  
Vladimir Benes, Czech Republic

14:45-15:00  Intraneural ganglion cysts  
Robert Spinner, USA

15:00-15:15  First Experiences with a Dedicated Hybrid OR for Spine Surgery  
Amir Samii, Germany

15:15-15:30  Cerebral Revascularization Surgery: Techniques And Applications  
Yong Kwang Tu, Taiwan

15:30-15:45  Posterior Fossa Pilocytic Astrocytomas  
Domenico D'Avella, Italy

15:45-16:00  Anticoagulation and Hemostasis in Neurosurgery  
Christopher Loftus, USA

16:00-16:15  Extent of surgical resection of malignant astrocytoma of the spinal cord  
Vincenzo Paterno, Germany

16:15-16:30  The surgery of intramedullary spinal cord tumors in the era of neuromonitoring  
Francesco Sala, Italy

16:30-16:45  Overcoming Fracture Progression in Complicated Kümmell’s Disease: Single-stage Transpedicular Vertebral Body Reconstruction  
Se-Hoon Kim, Korea

16:45-17:00  Comprehensive Management of Spinal Cord Lesions  
Manfred Westphal, Germany

17:00-17:15  Coffee break
14.30-14.45  New Technologies in Aneurysm Surgery  
Jorge Mura, Chile

14.45-15.00  Surgery of complex aneurysms  
Edgardo Spagnuolo, Uruguay

15.00-15.15  Management of ruptured intracranial aneurysms in the Post Isat era:  
current indications and place of microsurgical clipping  
Abdessamad El Ouahabi, Morocco

15.15-15.30  Giant aneurysms multimodal treatments  
Marco Cenzato, Italy

15.30-15.45  Future challenges of vascular microsurgery  
Kresimir Rotim, Croatia

15.45-16.00  New endovascular aneurysm technology  
Daniel Hoit, USA

16.00-16.15  The Role of Intraoperative MRI in Neurovascular Surgery: Our Experience  
Antonino Raco, Italy

16.15-16.30  ICA blister aneurysms  
Torstein Meling, Switzerland/Norway

16:30-16:45  Surgical treatment of cerebral AVM – cohort from 2005-4/2018  
Martin Smrcka, Czech Republic

16:45-17:00  TBA  
Gopal Raman Sharma, Nepal

17:00-17:15  Coffee break

09.00-18.00  BESTA NEUROSIM CENTER SIMULATION  
Hall 7
KEYNOTE LECTURES & ORAL PRESENTATIONS

TUMOR (OP-1)

Chairs: Maurizio Iacoangeli, Danica Grujicic

Hall 1

17.15-17.30 KEYNOTE LECTURE: Skull base and cranio-facial approaches to minimize approach-related morbidity for intradural neoplastic and vascular lesions
Maurizio Iacoangeli, Italy

17.30-17.45 KEYNOTE LECTURE: Transcallosal approach to midline tumors
Danica Grujicic, Serbia

17.45-18.00 KEYNOTE LECTURE: Surgical treatment of the lateral ventricle tumors
Vincenzo D’Angelo, Italy

18.00-18.10 Factors affecting the length of survival of patients with glioblastoma
Vesna Nikolov, Serbia

18.10-18.20 GRANT WINNER: Enhanced B7-H4 expression in gliomas with low PD-L1 expression identifies an immune-desert phenotype
Di Chen et al., China

18.20-18.26 Gemistocytic astrocytomas: A 15-year, multicenter study
Atef Ben Nsir et al., Tunisia

18.26-18.32 Results following transspenoidal endoscopic pituitary surgery – a retrospective analysis in regards to the learning curve, a single department experience
Aleksandar Stanimirovic, et al., Serbia

18.32-18.38 Single cell sequencing identifies cellular heterogeneity in human microglia
Adam Young et al., UK

18.38-18.44 Role of trans-nasal endoscopic surgery for suprasellar meningiomas
Salman Mohammed Shaikh et al., India

18.44-18.50 Identification of prognostic factors for survival in series of 110 patients with newly diagnosed glioblastoma – A single-center observational study.
Rosanda Ilić et al., Serbia

18.50-18.56 Long term outcome and prognostic factors in adults with medulloblastoma
Claudia Pasquali et al., Italy

18.56-19.02 Remote cerebellar hemorrhage following surgery for supra-tentorial pathology
Rajesh Meena et al., India

19.02-19.08 The evolution of surgical treatment strategies for olfactory groove meningiomas: Historic and contemporary open surgical approaches and proposal of new classification system
Farhan Mirza et al., US

19.08-19.14 Differential DNA methylome and gene expression analysis of growth hormone pituitary adenomas revealing the correlation of cell–cell adhesion and tumor invasiveness
Silin Wu et al., China
17.15-17.30 KEYNOTE LECTURE: Spinal intramedullary tumors
Hakan Emmez, Turkey

17.30-17.45 KEYNOTE LECTURE: Intraoperative monitoring in spinal cord tumor surgery
Reza Ghadirpour, Italy

17.45-18.00 KEYNOTE LECTURE: Management of Complications after transpedicular fixations
Tito Arcadio Perilla Cepeda, Colombia

18:00-18:10 GRANT WINNER: Use of intra-facet fixation in lumbar spine
Tossif Ghodiwala et al., Russia

18:10-18:16 Cervical radiculopathy vs. carpal tunnel syndrome-the shared theritory;
Miljan Bulatović-Clinical Hospital Centre Zemun-Belgrade, Belgrade, Serbia
Miljan Bulatović et al., Serbia

Natale Francaviglia et al., Italy

18:22-18:28 Intraoperative neurophysiological monitoring and clinical assessment in patients with
anterior cervical discectomy and fusion
Vedrana Karan et al., Serbia

18:28-18:34 Anatomic and radiologic characteristics of the craniocervical junction and their
significance for the choice of neurosurgical approach
Marina Milic et al., Serbia

18:34-18:40 Tandem spinal stenosis; Searching for the best clinical approach:
Case report and Review of literature
Marko Samardzic et al., Serbia

18:40-18:46 Clinico-radiological outcome assesment of minimal invasive transforaminal lumbar
interbody fusion for spondlyolisthesis
Deepak Bhangale et al., India

18:46-18:52 Surgical technique for cervical pedicle screw insertion using O-Arm navigation plus
mini screws
Nobuyuki Shimokawa et al., Japan

18:52-18:58 Lumbar Angiolipoma Removal Via Percutaneous Endoscopic Interlaminar Approach,
Márcio Robertti, Ramalho da Cunha et al., Brazil

18:58-19:04 Are we punishing the innocent: Relevance of Ganglion preservation in the cases of
cranovertebral anomalies with C1/C2 instrumentation and joint manipulation?
Arun Srivastava et al., India

19:04-19:10 Severity of the spinal stenosis – A novel classification method
Milenko Stanic et al., Serbia

19:10-19:16 Is it necessary to plate after multilevel anterior cervical discectomy and fusion?
Marios Theologou et al., Greece
VASCULAR (OP-3)
Chairs: Marco Fontanella, Harjinder Bhatoe

17.15-17.30 KEYNOTE LECTURE: Cerebral Cavernomas: treatments and problems
Marco Fontanella, Italy

17.30-17.45 KEYNOTE LECTURE: Microsurgery for brain arteriovenous malformations
Harjinder Bhatoe, India

17.45-18.00 KEYNOTE LECTURE: Neurovascular conflicts
Barbara Masotto, Italy

18:00-18:10 GRANT WINNER: Predicting long-term outcomes after poor-grade aneurysmal subarachnoid hemorrhage using machine learning algorithms
Bing Zhao et al., China

18:10-18:20 GRANT WINNER: The optimal operation time for rapid progression pediatric Moyamoya disease
Wenjun Shen et al., China

18:20-18:26 Thrombolysis in acute ischemic stroke patients with Tenecteplase in a developing nation: Challenges and experience
Neeraj Basantani et al., India

18:26-18:32 Cerebral aneurysm progression: smooth muscle cell, endothelial cell and extracellular matrix
Peixi Liu et al., China

18:32-18:38 Transciliary keyhole approach for middle cerebral artery aneurysms
Abhay Singh et al., India

18:38-18:44 The application of hybrid surgery in the treatment of brain arteriovenous malformation
Jianping Song et al., China

18:44-18:50 Neural network in neurovascular surgery: first experience in vasospasm prediction
Aleksei Trubkin et al., Russia

18:50-18:56 Non-endoscopic minimally invasive evacuation of intracerebral haematoma
Tomaz Velnar et al., Slovenia

18:56-19:02 Internal maxillary artery bypass for the treatment of complex middle cerebral artery aneurysms
Long Wang et al., China

19:02-19:08 Microsurgical resection of Intracranial arteriovenous malformation: Result in 197 patients
Ismail Yuce et al., Turkey

19:08-19:14 Patterns and predictors of in-hospital aneurysmal rebleed
Ranjit Rangnekar et al., India
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Description</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.15-17.30</td>
<td><strong>KEYNOTE LECTURE:</strong> Temporal DNET: seizure and functional outcome</td>
<td>Tomislav Sajko, Croatia</td>
</tr>
<tr>
<td>17.30-17.45</td>
<td><strong>KEYNOTE LECTURE:</strong> Neuroendoscopy and combined therapy in ventricular tumors</td>
<td>Piero Andrea Oppido, Italy</td>
</tr>
<tr>
<td>17.45-18.00</td>
<td><strong>KEYNOTE LECTURE:</strong> Endoscopic endonasal approach to treat craniopharyngiomas</td>
<td>Diego Mazzatenta, Italy</td>
</tr>
<tr>
<td>18.00-18.10</td>
<td><strong>GRANT WINNER:</strong> Endoscopic endonasal and supraorbital keyhole surgery for the</td>
<td>Davide Nasi et al., Italy</td>
</tr>
<tr>
<td></td>
<td>management of anterior skull base meningiomas: Overcoming the barriers between</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above and below approaches</td>
<td></td>
</tr>
<tr>
<td>18.10-18.16</td>
<td>**New trends in glioblastoma treatment in Vojvodina Province (Serbia): progress and</td>
<td>Igor Djan et al., Serbia</td>
</tr>
<tr>
<td></td>
<td>achievements</td>
<td></td>
</tr>
<tr>
<td>18.16-18.22</td>
<td><strong>Surgical outcome in intracranial lower cranial nerves (LCNs) schwannomas.</strong></td>
<td>Vincenzo Fontana et al., Italy</td>
</tr>
<tr>
<td></td>
<td><strong>Recent experience</strong></td>
<td></td>
</tr>
<tr>
<td>18.22-18.28</td>
<td><strong>Hydatid cyst, an extinct, rare entity (we hope so) – single centre experience</strong></td>
<td>Adrian - Mircea Furtos et al., Romania</td>
</tr>
<tr>
<td>18.28-18.34</td>
<td><strong>Pediatric glioblastomas: study of a Tunisian surgical series</strong></td>
<td>Ghassen Gader et al., Tunisia</td>
</tr>
<tr>
<td>18.34-18.40</td>
<td><strong>Foramen magnum meningiomas: clinical presentation and surgical management</strong></td>
<td>Mario Giarletta et al., Italy</td>
</tr>
<tr>
<td>18.40-18.46</td>
<td><strong>Middle cerebellar peduncle: niche for a spectrum of high grade lesions</strong></td>
<td>Jaskaran Singh Gosal et al., India</td>
</tr>
<tr>
<td>18.46-18.52</td>
<td><strong>Endoscopic treatment of the 3rd ventricle colloid cyst, total resection is real</strong></td>
<td>Jalal Najjar et al., Turkey</td>
</tr>
<tr>
<td>18.52-18.58</td>
<td><strong>Deep white matter ischemia after awake surgery for gliomas</strong></td>
<td>Yoshitaka Narita et al., Japan</td>
</tr>
<tr>
<td>18.58-19.04</td>
<td><strong>Supratentorial cerebellar liponeurocytoma, a benign tumor with malignant features</strong></td>
<td>Alejandro Feria et al., USA</td>
</tr>
<tr>
<td>19.04-19.10</td>
<td><strong>Surgical management of thalamic glial lesion: a retrospective study of 60 patients</strong></td>
<td>Marco Paolo Schiariti et al., Italy</td>
</tr>
<tr>
<td>19.10-19.16</td>
<td><strong>Surgical treatment of Jugular Foramen Schwannoma: Surgical approaches and techniques</strong></td>
<td>Shao-bo Su et al., China</td>
</tr>
</tbody>
</table>
17.15-17.30 KEYNOTE LECTURE: Low grade gliomas - follow up, radical surgery, radiotherapy, chemotherapy, or...
Milos Jokovic, Serbia

17.30-17.45 KEYNOTE LECTURE: Cerebellar gliomas
Ibrahim Omerhodzic, Bosnia and Herzegovina

17.45-18.00 KEYNOTE LECTURE: Clinoid area meningiomas, lessons from 48 personal cases
Mentor Petrela, Albania

18:00-18:10 GRANT WINNER: The accuracy and complications of frame-based stereotactic brain biopsy - The value of histopathological analysis
Bojan Jelaca et al., Serbia

18:10-18:16 Controversies in the management of vestibular schwannomas
Shankar Athawale et al., India

18:16-18:22 Recent evidence in diagnosis and treatment of meningiomas: A brief systematic review
Naci Balak et al., Turkey

18:22-18:28 Prognostic factors in vestibular schwannoma surgery for hearing function preservation
Marco Cancedda et al., Italy

Varidh Katiyar et al., India

18:34-18:40 Prognostic factors associated with pituitary microscopic dural invasion
Ronald Murambi et al., Australia

18:40-18:46 Atypical intracranial meningiomas: a case series analysis of outcomes and treatment modalities
Filip Vrban et al., Croatia

18:46-18:52 Ruptured Intracranial Dermoid Cysts: A Retrospective Review
Nishanth Sashiva et al., India

18:52-18:58 Local selective chemotherapy in recurrent glioblastoma with doxorubicine First clinical experience with 2 cases.
Tatiana Rusu et al., Moldova

Venkata Ramesh Chandra Vemula et al., India

19:04-19:10 Improving efficiency of initial management in neuro-oncology through implementation of a digital referral process
Mei Yin Wong et al., UK

19:10-19:16 Surgical treatment of intramedullary ependymomas in the intraoperative neurophysiological monitoring era
Giampietro Pinna et al., Italy
**Hall 6**

**SPINE (OP-6)**  
**Chairs:** Nebojsa Stojanovic, Massimiliano Visocchi

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.15-17.30</td>
<td><strong>KEYNOTE LECTURE:</strong> Indications for reconstructive surgery of the cervical spine</td>
<td>Nebojsa Stojanovic, Serbia</td>
</tr>
<tr>
<td>17.30-17.45</td>
<td><strong>KEYNOTE LECTURE:</strong> 360° surgical approaches to the craniovertebral junction: a fearless revolution around the skull base</td>
<td>Massimiliano Visocchi, Italy</td>
</tr>
<tr>
<td>17.45-18.00</td>
<td><strong>KEYNOTE LECTURE:</strong> Sagittal Balance and importance for spine surgery</td>
<td>Onur Yaman, Turkey</td>
</tr>
<tr>
<td>18.00-18.10</td>
<td><strong>GRANT WINNER:</strong> Short term outcome of surgical treatment of patients with lumbar disc herniation</td>
<td>Miroslav Fimic et al., Serbia</td>
</tr>
<tr>
<td>18.10-18.16</td>
<td><strong>Surgical management of subaxial cervical fractures: Our experience</strong></td>
<td>Geldon Fejzo et al., Albania</td>
</tr>
<tr>
<td>18.16-18.22</td>
<td><strong>Propofol infusion versus combination of isoflurane with nitroglycerine for controlled hypotensive anesthesia in spine surgery:</strong> A randomized controlled study</td>
<td>Mohamed Gaber et al., Egypt</td>
</tr>
<tr>
<td>18.22-18.28</td>
<td><strong>Surgical management of upper cervical fractures: Our experience</strong></td>
<td>Irgen Hodaj et al., Albania</td>
</tr>
<tr>
<td>18.28-18.34</td>
<td><strong>Transforaminal endoscopic discectomy for L5-S1 disc herniations- is it a myth or reality?</strong></td>
<td>Karlo Houra et al., Croatia</td>
</tr>
<tr>
<td>18.34-18.40</td>
<td><strong>Intramedullary spinal cavernoma about a series of 7 cases</strong></td>
<td>Ahmed Maatoug et al., Tunisia</td>
</tr>
<tr>
<td>18.40-18.46</td>
<td><strong>Dynamic stabilization of the lumbar spine in high biomechanic demand individuals: analysis of a series of 70 military patients</strong></td>
<td>Carlos Roberto Massella Junior et al., Brazil</td>
</tr>
<tr>
<td>18.46-18.52</td>
<td><strong>Evaluation of surgical procedures for thoracolumbar body fracture due to high-energy trauma</strong></td>
<td>Hiroaki Matsumoto et al., Japan</td>
</tr>
<tr>
<td>18.52-18.58</td>
<td><strong>Lateral extended TLIF using a novel apophyseal resting TLIF cage: three year experience</strong></td>
<td>Ronald J. Sabitzer et al., Austria</td>
</tr>
<tr>
<td>18.58-19.04</td>
<td><strong>Herniated discs. Open microsurgical or endoscopic approach? What is better for the surgeon and what is better for the patient?</strong></td>
<td>Mikhail Safronov et al., Russia</td>
</tr>
<tr>
<td>19.04-19.10</td>
<td><strong>Long-term outcome of lumbar disc surgery: five years follow up</strong></td>
<td>Mohamed Shabaan et al., Egypt</td>
</tr>
<tr>
<td>19.10-19.16</td>
<td><strong>Water-sports related cervical injuries- last summer season experience of 5 cases</strong></td>
<td>Rajeev Sharma et al., India</td>
</tr>
</tbody>
</table>
VASCULAR (OP-7)
Chairs: Eka J Wahjoepramono, Talat Kıriş

17.15-17.30  KEYNOTE LECTURE: Wisdom in management of Giant Aneurysms
Eka J Wahjoepramono, Indonesia

17.30-17.45  KEYNOTE LECTURE: Clipping Strategies in Complex Aneurysms
Talat Kıriş, Turkey

17.45.-18.00  KEYNOTE LECTURE: Surgery of MCA Aneurysm
Abdessamad El Azhari, Morocco

18:00-18:10  GRANT WINNER: Squalenoyl adenosine nano-assemblies enhance cerebral blood flow in filament perforation SAH model in mice
Ilkay Isikay et al., Turkey

18:10-18:20  GRANT WINNER: Perimesencephalic subarachnoid haemorrhage (PMSAH): Proposal of modified UK rinkel criteria
Amad Khan et al., UK

18:20-18:26  How to manage and reduce the risk of Intraoperative Rupture of Intracranial Aneurysms
Said, Ait Benali et al., Morocco

18:26-18:32  Gamma knife radiotherapy for arteriovenous malformations located in midbrain region of the brain
Atmaranjan Dash et al., India

18:32-18:38  Management of ruptured intracranial aneurysms in the Post Isat era: current indications and place of microsurgical clipping
Abdessamad El Ouahabi et al., Morocco

18:38-18:44  Intracranial artery tortuosity: association with risk of aneurysm rupture
Kornelia Klis et al., Poland

18:44-18:50  Prognosis value of ICH Score in patients with intracerebral hemorrhage: first study analysis in the Moroccan population
Salma Mrichi et al., Morocco

18:50-18:56  Outcome analysis in operated cases of Distal anterior cerebral artery aneurysms; An Institutional experience in forty consecutive cases
Bimal Sahoo et al., India

18:56-19:02  Intracranial dural arteriovenous fistulas with cortical venous drainage: Gamma knife radiosurgery as the treatment of choice
Hardik Sardana et al., India

19:02-19:08  Clipping versus coiling, in posterior circulation intracranial aneurysms: A meta-analysis
Eleni Tsianaka et al., Kuwait

19:08-19:14  Evaluation of wall structure corresponding to high-resolution vessel wall imaging in unruptured intracranial aneurysms
Kai Quan et al., China
### TRAUMA (OP-8)

**Chairs: Stefano Signoretti, Imad Talahma**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.15-17.30</td>
<td><strong>KEYNOTE LECTURE:</strong> Post-traumatic cranioplasty: Time for a Consensus Conference</td>
</tr>
<tr>
<td></td>
<td>Corrado Iaccarino, Italy</td>
</tr>
<tr>
<td>17.30-17.45</td>
<td><strong>KEYNOTE LECTURE:</strong> Correct decompressive craniectomy when no ICP monitoring is available</td>
</tr>
<tr>
<td></td>
<td>Imad Talahma, Palestine</td>
</tr>
<tr>
<td>17.45-18.00</td>
<td><strong>KEYNOTE LECTURE:</strong> Avoidance of complications in spine trauma</td>
</tr>
<tr>
<td></td>
<td>Keki Turel, India</td>
</tr>
<tr>
<td>18.00-18.10</td>
<td><strong>GRANT WINNER:</strong> Prognostic computed tomography scores in traumatic brain injury</td>
</tr>
<tr>
<td></td>
<td>Muhammad Rafay et al., Pakistan</td>
</tr>
</tbody>
</table>
| 18.10-18.20| **GRANT WINNER:** Diagnostic of mild traumatic brain injury – Is there anything more we can do?
|            | Mladen Karan et al., Serbia                                                                  |
| 18.20-18.26| **Blood glucose levels for prediction of absence of intracranial injuries in minor head trauma**|
|            | Georgios Alexiou et al., Greece                                                              |
| 18.26-18.32| **Efficacy of single burr hole for the treatment of chronic subdural hematoma:** An institutional study of 150 cases |
|            | Sudhendoo Babhulkar et al., India                                                            |
| 18.32-18.38| **Single burr-hole surgery with or without membranectomy for chronic subdural hematoma**    |
|            | Milena Roganovic et al., Montenegro                                                          |
| 18.38-18.44| **How can we increase the efficacy of DC? (Fresh Cadaver Study)**                           |
|            | Andras Csokay et al., Hungary                                                                |
| 18.44-18.50| **Missile traumatic adult brain injury in the north of palestine: management and outcomes of 380 patients** |
|            | Mazhar Darwazeh et al., Palestine                                                            |
| 18.50-18.56| **Chronic traumatic encephalopathy (CTE): Causes, diagnosis, role of the neurosurgeon and medico-legal implications** |
|            | Domenic Esposito et al., UK                                                                  |
| 18.56-19.02| **Controversies on post traumatic hydrocephalus: A retrospective study and review of the literature** |
|            | Charalampos Gatos et al., Greece                                                              |
| 19.02-19.08| **The Dubrava Model- a novel approach in treating acutely neurotraumatized patients in rural areas, a proposal for management** |
|            | Darko Oreskovic et al., Croatia                                                               |
| 19.08-19.14| **Improved outcomes in chronic subdural hematoma with etizolam: Magic Pill?**                |
|            | Saraswati S. Shenoy et al., India                                                             |
08.00-19.00  WFNS 2019 BELGRADE E-POSTER SESSION

Area for Poster presentation

17.30-19.00  WFNS 2019 BELGRADE POSTER EVALUATION AND DISCUSSION SESSION
Moderators: Martin Smrcka, Petar Vulekovic, Luigi Cavallo

Area for Poster presentation
### PLENARY SESSION 2
**Chairs: Kresimir Rotim, Francesco Tomasello**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00-08:15</td>
<td>Reconstructive Neurosurgery After TBI</td>
<td>Alexander Potapov</td>
<td>Russia</td>
</tr>
<tr>
<td>08:15-08:30</td>
<td>Historical Reflections on Nerve Surgery Since World War II</td>
<td>David Kline</td>
<td>USA</td>
</tr>
<tr>
<td>08:30-08:45</td>
<td>Clipping aneurysms - lessons I have learnt after over 1000 operated aneurysms</td>
<td>Ioan Stefan Florian</td>
<td>Romania</td>
</tr>
<tr>
<td>08:45-09:00</td>
<td>Lateral skull base meningiomas: Philosophy and Techniques</td>
<td>Jacques Morcos</td>
<td>USA</td>
</tr>
<tr>
<td>09:00-09:15</td>
<td>Endoscopic endonasal approach for anterior fossa meningiomas</td>
<td>Paolo Cappabianca</td>
<td>Italy</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Craniocervical junction chordomas</td>
<td>Sebastien Froelich</td>
<td>France</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Soccer and Neurosurgery</td>
<td>Nelson Oyesiku</td>
<td>USA</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>New insights into the surgical management of diffuse low-grade gliomas</td>
<td>Hugues Duffau</td>
<td>France</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Education in spine surgery in the XXI century</td>
<td>Jesus Lafuente</td>
<td>Spain</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Brain Mapping for Tumors in Eloquent Areas</td>
<td>Isabelle Germano</td>
<td>USA</td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Growth Patterns of Pituitary Adenoma with Parasellar Growth: Anatomy, Surgery and Results</td>
<td>Engelbert Knosp</td>
<td>Austria</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>Coffee break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MT-5

HOW TO IMPROVE QUALITY OF PUBLICATIONS

Chairs: Tiit Mathiesen, Nelson Oyesiku

Hall 1

11:00-11:15 What is the editor looking for
Tiit Mathiesen, Denmark

11:15-11:30 Randomized controlled trials in neurosurgery: an assessment of discontinuation and publication outcomes
Andreas Demetriades, UK

11:30-11:45 Publication Quality Improvement by Plagiarism Detection. Acta Clinica Croatica Experience
Kresimir Rotim, Croatia

11:45-12:00 The state of the journal Neurosurgery
Nelson Oyesiku, USA

12:00-12:15 When will I recommend publication of a single case
André Grotenhuis, Netherlands

12:15-12:30 How to convince reviewer?
Ihsan Solaroglu, Turkey

12:30-12:45 Top tips for publishing your papers in the Journal of Neurosurgery
David Adelson, USA

12:45-13:00 Publications in Neurosciences: A self-improvement exercise or drudgery?
Sanjay Behari, India

13:00-13:15 TBA

13:15-14.00 Lunch

MT-6

TRAUMA

Chairs: Corrado Iaccarino, Tariq Khan

Hall 2

11:00-11:15 Pediatric Decompressive Craniectomy for Severe TBI
David Adelson, USA

11:15-11:30 Traumatic brain injury biomarkers: State of the center - TBI study
Andras Buki, Hungary

11:30-11:45 The antisecretory factor 16 and the ICP management
Mohammad Alolama, UAE

11:45-12:00 Decompressive Craniectomies without ICP Monitoring
Tariq Khan, Pakistan

12:00-12.15 Skull Base Trauma – Worthwhile dealing with that?
Christian Matula, Austria
<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker/Speaker's Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:15-12.30</td>
<td>Severe traumatic brain injury patients management - institutional experience and protocol</td>
<td>Djula Djilvesi, Serbia</td>
</tr>
<tr>
<td>12:30-12.45</td>
<td>Brain injury in elderly patients: a new scoring system</td>
<td>Dariusz Jaskólski, Poland</td>
</tr>
<tr>
<td>12.45-13.00</td>
<td>Disasters and surgery: mass casualty centers benefit global healthcare</td>
<td>Russell Andrews, USA</td>
</tr>
<tr>
<td>13.00-13.15</td>
<td>Gunshot Injury to the spine: An institutional experience of management and complications from a developing country</td>
<td>Aneela Darbar, Pakistan</td>
</tr>
<tr>
<td>13.15-14.00</td>
<td>Lunch</td>
<td></td>
</tr>
</tbody>
</table>

### MT-7 FUNCTIONAL & PAIN
**Chairs: Marc Sindou, Piero Picozzi**

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker/Speaker's Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:15</td>
<td>The treatment of Arnold neuralgia: Can we rewrite the history?</td>
<td>Stefano Ferraresi, Italy</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>Endoscope-assisted microvascular decompression for hemifacial spasm</td>
<td>Henry Schroeder, Germany</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Classical trigeminal neuralgias: from imaging to surgery</td>
<td>Marc Sindou, France</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Pudendal neuralgia - Experience with the transgluteal approach</td>
<td>Gregor Antoniadis, Germany</td>
</tr>
<tr>
<td>12:00-12.15</td>
<td>Denervation for durable treatment of spasticity</td>
<td>Mark Mahan, USA</td>
</tr>
<tr>
<td>12:15-12.30</td>
<td>New Era in Gamma Knife Radiosurgery</td>
<td>Selçuk Peker, Turkey</td>
</tr>
<tr>
<td>12:30-12.45</td>
<td>Everything You Always Wanted to Know about Radiosurgery of AVM (But Were Afraid to Ask)</td>
<td>Mikhail Chernov, Russia / Japan</td>
</tr>
<tr>
<td>12.45-13.00</td>
<td>Brain stimulation in Disorder of Consciousness from theory to practice</td>
<td>Darko Chudy, Croatia</td>
</tr>
<tr>
<td>13.15-14.00</td>
<td>Lunch</td>
<td></td>
</tr>
</tbody>
</table>
### MT-8 SPINE

**Chairs:** Jesus Lafuente, Roberto Delfini

**Hall 4**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00-11:15</td>
<td><strong>New classification for lumbar microinstability: clinical and radiological results at 2 years follow up</strong>&lt;br&gt;Roberto Delfini, Italy</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td><strong>Long Term Results with Minimally Invasive Plif In Degenerative Lumbar Spondylolisthesis</strong>&lt;br&gt;Matjaz Vorsic, Slovenia</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td><strong>Combined anterior and posterior approach for complex cervical cases</strong>&lt;br&gt;Maurizio Fornari, Italy</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td><strong>MI TLIF: State of the art</strong>&lt;br&gt;Jose Antonio Soriano Sanchez, Mexico</td>
</tr>
<tr>
<td>12:00-12:15</td>
<td><strong>Cervical myelopathy: how to identify best responders to surgery</strong>&lt;br&gt;Enrico Tessitore, Italy</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td><strong>Cervical Intramedullary tumors and its mimicks; How to avoid Maslows Hammer?</strong>&lt;br&gt;Suresh Nair, India</td>
</tr>
<tr>
<td>12:30-12:45</td>
<td><strong>Skeptical approach to the spine surgery</strong>&lt;br&gt;Michalakis Spyrou, Cyprus</td>
</tr>
<tr>
<td>12:45-13.00</td>
<td><strong>Decision making in spine surgery</strong>&lt;br&gt;Kantha Rasalingam, Malaysia</td>
</tr>
<tr>
<td>13.00-13.15</td>
<td><strong>Management of Anterior Cervical Fusion Complications</strong>&lt;br&gt;Scott Robertson, USA</td>
</tr>
<tr>
<td>13.15-14.00</td>
<td>Lunch</td>
</tr>
</tbody>
</table>

---

### YOUNG NEUROSURGEON FORUM

**Chairs:** Andreas Demetriades, Ihsan Solaroglu, Tomislav Sajko, Enrico Tessitore, Djula Djilvesi

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00-14:07</td>
<td><strong>Pathohistology of ligamentum flavum and correlation with neurogenic claudications</strong>&lt;br&gt;Vuk Aleksic et al., Serbia</td>
</tr>
<tr>
<td>14:07-14:14</td>
<td><strong>Serum biomarkers as predictors of severity of injury and functional outcome after acute traumatic spinal cord injury</strong>&lt;br&gt;Raheja Amol et al., India</td>
</tr>
<tr>
<td>14:14-14:21</td>
<td><strong>Not-aneurysm-related bleeding after aneurysmal subarachnoid hemorrhage: Causes and impact</strong>&lt;br&gt;Marvin Darkwah Oppong et al., Germany</td>
</tr>
<tr>
<td>14:21-14:28</td>
<td><strong>Age at brain AVM presentation – Why it matters</strong>&lt;br&gt;Ioan-Alexandru Florian et al., Romania</td>
</tr>
<tr>
<td>14:28-14:35</td>
<td><strong>Effect of humic acid on acute spinal cord injury and oxidant/antioxidant levels in spinal cord injury model: An experimental study</strong>&lt;br&gt;Burak Kinali et al., Turkey</td>
</tr>
</tbody>
</table>
14:35-14:42  Thromboembolic and hemorrhagic complications after operative treatment of intracranial meningiomas
Nebojsa Lasica et al., Serbia

14:42-14:49  Implications for maxillary and middle meningeal artery insonation in neurosurgery
Milan Lepic et al., Serbia

14:49-14:56  Flow 800 vascular map model in predicting onset of vasospasm following micro vascular clipping of ruptured intracranial aneurysms
Sunil Munakomi et al., Nepal

14:56-15:03  Use of Autologous multipotent cables as interposition grafts for sciatic nerve regeneration in rat models
Suyash Singh et al., India

15:03-15:10  Digital aid in neurosurgery: Is this the era of deep neural networks?
Jagos Golubovic et al., Serbia

09.00-18.00  BESTA NEUROSIM CENTER SIMULATION
Hall 7
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker, Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.15-15.30</td>
<td><strong>KEYNOTE LECTURE</strong>: Role of stereotactic biopsy of brain tumors in neurosurgical practice</td>
<td>Petar Vulekovic, Serbia</td>
</tr>
<tr>
<td>15.30-15.45</td>
<td><strong>KEYNOTE LECTURE</strong>: Aggressive multimodal management of brain metastasis</td>
<td>Alfredo Conti, Italy</td>
</tr>
<tr>
<td>15.45-16.00</td>
<td><strong>KEYNOTE LECTURE</strong>: TBA</td>
<td></td>
</tr>
<tr>
<td>16.00-16.10</td>
<td>Brain metastasis- current therapeutic options</td>
<td>Vladimir Papic, Serbia</td>
</tr>
<tr>
<td>16.10-16.20</td>
<td><strong>GRANT WINNER</strong>: Navigated transcranial magnetic stimulation brain mapping in glioma patients</td>
<td>George Petrescu et al., Romania</td>
</tr>
<tr>
<td>16.26-16.32</td>
<td>Full endoscopic removal of third ventricular colloid cysts technique, results and limitations</td>
<td>Ilyas Dolas et al., Turkey</td>
</tr>
<tr>
<td>16.32-16.38</td>
<td>Tuberculum sellae meningiomas: Grading scale to assess surgical outcomes in endoscopic endonasal surgery</td>
<td>Federico Frio et al., Italy</td>
</tr>
<tr>
<td>16.38-16.44</td>
<td>Attitudes towards high-grade gliomas in the elderly: An international neurosurgical survey</td>
<td>Aimee Goel et al., UK</td>
</tr>
<tr>
<td>16.44-16.50</td>
<td>Single session hybrid operation combining embolization and microsurgical resection is safe and effective in central nervous system (CNS) hypervascular tumors management</td>
<td>Peiliang Li et al., China</td>
</tr>
<tr>
<td>16.50-16.56</td>
<td>Intraoperative objective assessment of tumor fluorescence reveals biological heterogeneity within histologically seemingly homogenous tumor zones in glioblastoma</td>
<td>Aliasgar Moiyadi et al., India</td>
</tr>
<tr>
<td>16.56-17.02</td>
<td>Interest of brain mapping by direct electrical stimulation in surgery of gliomas near or within eloquent areas</td>
<td>Idir Moulla et al., Algeria</td>
</tr>
<tr>
<td>17.02-17.08</td>
<td><strong>Endoscopic assisted supraorbital “key hole” approach to suprasellar tumors. Our experience</strong></td>
<td>Arthur Mumliev et al., Ukraine</td>
</tr>
<tr>
<td>17.08-17.14</td>
<td>Long term outcome and prognostic factors in adults with medulloblastoma</td>
<td>Ema Tot et al., Italy</td>
</tr>
</tbody>
</table>
**SPINE & PERIPHERAL NERVE (OP-10)**  
Chairs: Robert Spinner, Kartik Krishnan

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:15-15:30</td>
<td><strong>KEYNOTE LECTURE:</strong> Perineuriomas</td>
<td>Robert Spinner, USA</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td><strong>KEYNOTE LECTURE:</strong> Endoscopic Nerve Surgery</td>
<td>Kartik Krishnan, Germany</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td><strong>KEYNOTE LECTURE:</strong> Peripheral nerve injury at war: Yemen war experience</td>
<td>Khaled Al Aly, UAE</td>
</tr>
<tr>
<td>16:00-16:10</td>
<td><strong>GRANT WINNER:</strong> Comparison of surgical versus conservative treatment of sciatica due to lumbar disc herniation</td>
<td>Noor-ul-Huda Maria et al., Pakistan</td>
</tr>
<tr>
<td>16:10-16:20</td>
<td><strong>GRANT WINNER:</strong> A novel classification for the treatment of lumbar foraminal stenosis</td>
<td>Orhun Mete Cevik et al., Turkey</td>
</tr>
<tr>
<td>16:20-16:26</td>
<td>Epidural hematoma causes acute hydrocephalus after foramen magnum decompression surgery for Chiari I malformation</td>
<td>Levent Aydin et al., Turkey</td>
</tr>
<tr>
<td>16:26-16:32</td>
<td>Endoscopic surgery for recurrent disc herniation after open and endoscopic lumbar discectomy</td>
<td>Salih Aydin et al., US</td>
</tr>
<tr>
<td>16:32-16:38</td>
<td>Surgical treatment of the subaxial cervical spine injury: About 60 cases</td>
<td>Abdelmoumene Ryad Ayoun et al., Algeria</td>
</tr>
<tr>
<td>16:38-16:44</td>
<td>Neurophysiological demonstration of surface electrodes polyelectromyography ([sPEMG]) for assessment of motor control of lower trunk muscles</td>
<td>Boban Joksimovic et al., Serbia</td>
</tr>
<tr>
<td>16:44-16:50</td>
<td>The image guided transtubular extracavitary costo-trasversectomy (TECT) for the treatment of giant thoracic disk herniations: description of the technique and results</td>
<td>Rodolfo Maduri et al., Switzerland</td>
</tr>
<tr>
<td>16:50-16:56</td>
<td>Results of surgical treatment of cavernous malformations of the spinal cord</td>
<td>Bahromhon Zakirov et al., Russia</td>
</tr>
<tr>
<td>16:56-17:02</td>
<td>Radiological differences in spinal cord diameters based on surgical approach for Potts spine with neurologic deficits- are clinical outcomes also different?</td>
<td>Manoj Phalak et al., India</td>
</tr>
<tr>
<td>17:02-17:08</td>
<td>Recurrence of trigeminal neuralgia after microvascular decompression. What to do?</td>
<td>Mihai Alexandru Stanciuc et al., Romania</td>
</tr>
<tr>
<td>17:08-17:14</td>
<td>Structural and functional Changes of the median nerve in carpal tunnel syndrome</td>
<td>Mahmoud Wahdan et al., Egypt</td>
</tr>
</tbody>
</table>
FUNCTIONAL & PAIN (OP-11)
Chairs: Amr El Shawarbi, Angelo Lavano

15.15-15.30 KEYNOTE LECTURE: Vagal nerve stimulation for intractable Epilepsy
Amr El Shawarbi, UAE

15.30-15.45 KEYNOTE LECTURE: Spinal cord stimulation for failed back surgery syndrome
Angelo Lavano, Italy

15.45-16.00 KEYNOTE LECTURE: Thoracic outlet syndrome: a common, frequently overlooked cause of non discogenic brachialgia
Debora Garozzo, UAE

16.00-16.10 GRANT WINNER: Relationship between tremor rate and MRI thalamic lesion appearance in a series of 30 patients treated by 1.5 Tesla transcranial magnetic resonance-guided focused ultrasound for movement disorders
Giuseppe Roberto Giammalva et al., Italy

16.10-16.20 GRANT WINNER: 2 years follow-up of the first clinical series of patients with essential tremor and tremor-dominant Parkinson’s disease treated MRgFUS-thalamotomy using 1.5 Tesla scanner
Rosario Maugeri et al., Italy

16.20-16.26 Neurovascular conflict syndromes. Physiological approach to an anatomical problem
Harjinder Singh Bhatoe et al., India

16.26-16.32 Minimally invasive disconnection of hypothalamic hamartomas using robotic and O arm guidance
Ramesh Doddamani et al., India

16.32-16.38 Puzzling technique for fixation of poly-methyl methacrylate cranioplasty flaps
Ahmed EL-Fiki et al., Egypt

16.38-16.44 Improving targeting accuracy leading to successful treatment of secondary dystonia with deep brain stimulation of globus pallidus internus
Sarah Hendrickx et al., Belgium

16.44-16.50 Subthalamic and pallidal deep brain stimulation in primary meige syndrome: Long-term outcomes
Zhiqi Mao et al., China

16.50-16.56 Acupuncture for pain management in evidence-based medicine
Taqee Ansari Mohammed et al., India

16.56-17.02 Classical trigeminal neuralgias: from imaging to surgery
Marc Sindou et al., France

17.02-17.08 Functional hemispherectomy for uncontrollable epilepsy: a single center experience
Sergio Sousa et al., Portugal

17.08-17.14 Brain stereotaxic transplantation of human neural stem cells for chronic stroke patients: a review
Yassine Yachou et al., Russia
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.15-15.30</td>
<td><strong>KEYNOTE LECTURE:</strong> The evolution of intraoperative navigated 3D fluoroscopic imaging for surgery of spine degenerative diseases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Salvatore Cardali, Italy</td>
</tr>
<tr>
<td>15.30-15.45</td>
<td><strong>KEYNOTE LECTURE:</strong> Anterior cervical approach for the treatment of cervical myelopathy</td>
<td>Danilo Radulovic, Serbia</td>
</tr>
<tr>
<td>15.45-16.00</td>
<td><strong>KEYNOTE LECTURE:</strong> The influence of age on cervical lordosis restoration after anterior cervical disectomy and fusion with bone allograft</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bruno Splavski, Croatia</td>
</tr>
<tr>
<td>16.00-16.10</td>
<td>Minimally invasive unilateral approach for extensive bilateral decompression of lumbar spinal canal stenosis using tubular retractors and over the top technique</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Robert Saftic, Croatia</td>
</tr>
<tr>
<td>16:10-16:20</td>
<td><strong>GRANT WINNER:</strong> Is a picture worth a thousand words? Correlation between new scale for MRI findings and clinical presentation in patients with one level lumbar disc herniation and nerve root compression</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Filip Pajicic et al., Serbia</td>
</tr>
<tr>
<td>16:20-16:26</td>
<td><strong>Cervical disc arthroplasty versus anterior cervical disectomy and fusion</strong></td>
<td>Ahmed Abdelkhalek et al., Egypt</td>
</tr>
<tr>
<td>16:26-16:32</td>
<td><strong>Vertebral augmentation</strong> Dr. Salah Albishawi, FRCS (Glasg.), FRCS. SN (Eng.Ed.Glasg.Ire.)</td>
<td>Consultant neurosurgeon, Jordan Hospital Dr. Mohamed Idris, MD neurosurgical resident</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Salah Albishawi et al., Jordan</td>
</tr>
<tr>
<td>16:32-16:38</td>
<td><strong>Cervical collars for the management of type II odontoid fractures in the elderly; Are they necessary?</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lauren Harris et al., UK</td>
</tr>
<tr>
<td>16:38-16:44</td>
<td><strong>Novel use of recombinant tissue plasminogen activator in an acute extensive spinal epidural haematoma in a patient with coagulopathy</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stavros Koustais et al., Ireland</td>
</tr>
<tr>
<td>16:44-16:50</td>
<td><strong>Clinical outcome related to C2 nerve-root sacrifice and the feasibility of its preservation in patients with congenital atlantoaxial dislocation</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Karthigeyan Madhivanan et al., India</td>
</tr>
<tr>
<td>16:50-16:56</td>
<td><strong>Our experiences in surgical treatment of neck discus hernia and neck trauma with cervical cage with anterior cervical plate system, Ohrid, Macedonia</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mitre Miloshevski et al., Macedonia</td>
</tr>
<tr>
<td>16:56-17:02</td>
<td><strong>The morphology of the cod dorsal horn - implications for DREZ surgery using suction of the gray substance as the lesioning method</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Milan Spaic et al., Serbia</td>
</tr>
<tr>
<td>17:02-17:08</td>
<td><strong>Minimally invasive techniques for lumbar disc herniation</strong></td>
<td>Ante Subasic et al., Croatia</td>
</tr>
<tr>
<td>17:08-17:14</td>
<td><strong>Full-endoscopic utilization for decompression of nerve structures on lumbar level of the spine: first experience report</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vasily Korolishin et al., Russia</td>
</tr>
</tbody>
</table>
15.15-15.30  **KEYNOTE LECTURE: Neuronavigation in Dorso-Lumbar Surgery**
Gualtiero Innocenzi, Italy

15.30-15.45  **KEYNOTE LECTURE: How Much Fusion Do We Need?**
Fatos Olldashi, Albania

15.45-16.00  **KEYNOTE LECTURE: Treatment of spinal disraphysm. A single center experience**
Aleksandar Caparoski, Macedonia

16:00-16:10  **GRANT WINNER: Intradural spinal tumors: Surgical considerations and institutional experience**
Domagoj Gajski et al., Croatia

16:10-16:16  **Validation of Enneking oncologic principles applied to primary osseous tumours of spine: A single centre retrospective cohort study**
Nitish Agarwal et al., India

16:16-16:22  **Open Carpal Tunnel Release: A Retrospective Surgical Demographic Data of a Single Center Experience**
Ibrahim Alhalal et al., Saudi Arabia

16:22-16:28  **Transpedicular screw fixation in degenerative lumbosacral spine disease - surgical outcome**
Osama Arim et al., Turkey

16:28-16:34  **Vertico-horizontal atlantoaxial index A new craniovertebral radiographic index**
Rami Darwazeh et al., Palestine

16:34-16:40  **Minimally invasive non endoscopic carpal tunnel release**
Peter Hwang et al., Singapore

16:40-16:46  **Efficacy of transplantation fibrin matrix with neuroinduced mesenchymal stem cells for restoration sciatic nerve function after its complete rupture in rats**
Vladyslav Kaliuzhka et al., Ukraine

16:46-16:52  **Results of surgical treatment of patients with carpal tunnel syndrome by decompression with endoscopic assistance**
Artur Pogosyan et al., Russia

16:52-16:58  **Our Experience In Secondary Repair In Peripheral Nerve Injury 2017-2018, Ohrid, Macedonia**
Micun Micunovic et al., Macedonia

16:58-17:04  **A Comparative study of anterolateral versus posterolateral decompression and spinal fixation in thoracic and thoraco-lumbar potts spine**
Siddarthareddy Musali et al., India

17:04-17:10  **Posterior pedicle fixation-based dynamic lumbar stabilization versus rigid fusion: A pilot study with critical analysis**
Shashivadhanan Sundaravadhanan et al., India

17:10-17:16  **Somatosensory evoked potentials evaluations of patients with spina bifida occulta**
Gokhan Canaz et al., Turkey
15.15-15.30 KEYNOTE LECTURE: Influence of normal hydrostatic pressure gradient on CSF physiology and hydrocephalus treatment
Miroslav Vukic, Croatia

15.30-15.45 KEYNOTE LECTURE: FET-PET diagnostic in recurrent gliomas
Roberto Stefini, Italy

15.45-16.00 KEYNOTE LECTURE: Facial nerve integrity in CPA tumor surgery
Imad Kanaan, Saudi Arabia

16:00-16:10 GRANT WINNER: Are neurosurgeons fearful of artificial intelligence (AI) replacing them in the future?: Initial Insights
Varadaraya S. Shenoy et al., India

16:10-16:16 High-tech simulation and psychometric assessment for neurosurgery residents: new paradigms for a better training
Alessandro Perin et al., Italy

16:16-16:22 The Impact of thymoquinone on cerebral vasospasm in an experimental subarachnoid hemorrhage (SAH) model
Enes Akkaya et al., Turkey

16:22-16:28 Factors predicting need for post-operative ventilation after microsurgical clipping of cerebral aneurysms – A Multivariate analysis
Saad Bin Anis et al., Pakistan

16:28-16:34 Hematoma recurrence in burr hole drainage compared to burr hole irrigation as treatment of chronic subdural hematoma: A Systematic review and meta-analysis
Made Bhuwana Putra et al., Indonesia

16:34-16:40 A Clinical experience with decompressive craniectomy
Ozgur Demir et al., Turkey

16:40-16:46 A Review of neurosurgical research validation: The absence of direct replication studies
Neal Kerr et al., New Zealand

16:46-16:52 Antioxidant and neuroprotective effects of dextaphen in traumatic brain injury-induced rats
Pınar Kuru Bektasoglu et al., Turkey

16:52-16:58 Effect of pycnogenol on ischemia/reperfusion induced inflammatory and oxidative brain injury in rats
Baris Ozoner et al., Turkey

16:58-17:04 Academic vs. non-academic neurosurgeons in China: Comparison in terms of workload, burnout, and engagement
Yirui Sun et al., China

17:04-17:10 A chronic CSF over-shunting condition causing cervical cord signs: Miyazaki Syndrome Case report and review of pathomechanism
Dušan Vitanovic et al., Serbia

17:10-17:16 The status quo of working and living among Chinese neurosurgeons: Results of a cross-sectional nationwide survey
Jinli Yu et al., China
15:15-15.30 KEYNOTE LECTURE: Management of low grade gliomas in children  
Souad Bakhti, Algeria

15.30-15.45 KEYNOTE LECTURE: Surgical treatment of Chiari I malformation  
Venelin Gerganov, Germany

15.45-16.00 KEYNOTE LECTURE: Photometric evaluation of cranial and facial symmetry in hemicoronal single suture synostosis treated with open fronto-orbital remodelling and rigid internal fixation  
Carlo Giussani, Italy

16:00-16:10 GRANT WINNER: Heterogeneity of cerebrospinal fluid diversion sites in the treatment of adult and pediatric hydrocephalus  
Cezar Octavian Morosanu et al., UK

16:10-16:16 The predictive role of electrodiagnostic evaluations in recovery of children with obstetrical brachial plexus lesion in first year of life  
Jasna Stojkovic et al., Serbia

16:16-16:22 The Outcome of surgical excision of giant supratentorial brain tumors in pediatrics: a study of consecutive 70 cases at our institute  
Ahmed Ashry et al., Egypt

16:22-16:28 VP shunt complications  
Ala Belhaj et al., Tunisia

16:28-16:34 An alternative and complementary medicine method in vulnerable pediatric cancer patients: Yoga  
Emmanuel Gazdama Hamatu et al., Nigeria

16:34-16:40 Treatment of pediatric brain tumors: single institution experience  
Mirsad Hodzic et al., Bosnia and Herzegovina

16:40-16:46 Correlation between the radiological disappearance of syrinx and clinical improvement in surgical decompression of chiari malformation type I (CM- I)  
Ahmed Kamal Abdelaziz et al., Egypt

16:46-16:52 Shunt anal extrusion in a type 2 chiari malformation  
Brighton Valentine Nyamapfene et al., Zimbabwe

16:52-16:58 Surgical treatment for pediatric caudate nucleus tumors  
Bahattin Tanrikulu et al., Turkey

16:58-17:04 Outcomes of ventriculo-peritoneal shunt placement by conventional or laparoscopic techniques with or without supra-hepatic fixation an observational study  
Medha Vyas et al., India

17:04-17:10 Trajectory planning with the use of image guidance system for endoscopic third ventriculostomy and its effect in reducing complications  
Muhammad Samir Irfan Wasi et al., Pakistan

17:10-17:16 Severe positional plagiocephaly: safe surgical technique and results  
Bojana Zivkovic et al., Serbia
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.15-15.30</td>
<td><strong>KEYNOTE LECTURE:</strong> Management of cervical tumors</td>
<td>Michael Bruneau, Belgium</td>
</tr>
<tr>
<td>15.30-15.45</td>
<td><strong>KEYNOTE LECTURE:</strong> Vertebroplasty and/or kyphoplasty?</td>
<td>Yavor Petkov Enchev, Bulgaria</td>
</tr>
<tr>
<td>15.45-16.00</td>
<td><strong>KEYNOTE LECTURE:</strong> The venous drainage of the spinal cord and it’s implications in spinal cord surgery</td>
<td>Victor Hugo Perez Perez, Mexico</td>
</tr>
<tr>
<td>16:00-16:10</td>
<td><strong>GRANT WINNER:</strong> Minimally invasive approach for surgical treatment of craniovertebral junction meningiomas</td>
<td>Stanislav Kaprovoy et al., Russia</td>
</tr>
<tr>
<td>16:10-16:16</td>
<td>Posterior transpedicular corpectomy and circumferential reconstruction in thoraco-lumbar burst fractures: a feasible and safer approach</td>
<td>Carla Daniela Anania et al., Italy</td>
</tr>
<tr>
<td>16:16-16:22</td>
<td>Pain is the recovery priority for patients with degenerative cervical myelopathy</td>
<td>Oliver Mowforth et al., UK</td>
</tr>
<tr>
<td>16:22-16:28</td>
<td>Transdural approach for upper lumbar disc herniation</td>
<td>Khalil Ayadi et al., Tunisia</td>
</tr>
<tr>
<td>16:28-16:34</td>
<td>The management of traumatic spine injury in a territorial Hub and Spoke system of a northern region of Italy. Analysis of one year of activity</td>
<td>Corrado Iaccarino et al., Italy</td>
</tr>
<tr>
<td>16:34-16:40</td>
<td>Intraoperative computed tomography and surgical navigation system combination in spinal surgery: effectiveness and safety</td>
<td>Dmirty Asyutin et al., Russia</td>
</tr>
<tr>
<td>16:40-16:46</td>
<td>Intraoperative video angiography experience in surgical treatment of spinal cord hemangioblastomas</td>
<td>Stanislav Timonin et al., Russia</td>
</tr>
<tr>
<td>16:46-16:52</td>
<td>Modern aspects of treatment of extramedullary spinal cord tumors</td>
<td>Roman Onoprienko et al., Russia</td>
</tr>
<tr>
<td>16:52-16:58</td>
<td>Sagittal balance in spinal surgery</td>
<td>Evgeniy Brinyuk et al., Russia</td>
</tr>
<tr>
<td>16:58-17:04</td>
<td>Dynamic stabilization of the lumbar spine in patients with degenerative spondylolisthesis and lumbar spine instability. 5 Years follow-up</td>
<td>Arkadii Kazmin et al., Russia</td>
</tr>
<tr>
<td>17:04-17:10</td>
<td>Endoscopic detethering of cord</td>
<td>Sumeet Pawar et al., India</td>
</tr>
<tr>
<td>17:10-17:16</td>
<td>Cervical alignment following open door laminoplasty for cervical spondylotic myelopathy (CSM) and ossified posterior longitudinal ligament (OPLL)</td>
<td>Ravi Sharma et al., India</td>
</tr>
</tbody>
</table>
08.00-17.00    WFNS 2019 BELGRADE E-POSTER SESSION

Area for Poster presentation

15.30-17.00    WFNS 2019 BELGRADE POSTER EVALUATION
AND DISCUSSION SESSION
Moderators: Dariusz Jaskólski, Selcuk Peker, Marcel Ivanov

Area for Poster presentation

20.00-00.00    SOCIAL DINNER
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00-08:15</td>
<td>Surgical strategies and outcomes for craniopharyngioma in the endoscopic era</td>
<td>Daniel Kelly, USA</td>
</tr>
<tr>
<td>08:15-08:30</td>
<td>Combined endoscopic management of craniopharyngioma</td>
<td>Chandrashekhar Deopujari, India</td>
</tr>
<tr>
<td>08:30-08:45</td>
<td>Complications of endoscopic endonasal skull base surgery and their avoidance</td>
<td>Andre Grotenhuis, Netherlands</td>
</tr>
<tr>
<td>08:45-09:00</td>
<td>Endoscopic approach to clival chordomas and chondrosarcomas</td>
<td>Savas Ceylan, Turkey</td>
</tr>
<tr>
<td>09:00-09:15</td>
<td>Skull base reconstruction in endoscopic endonasal skull base surgery</td>
<td>Domenico Solari, Italy</td>
</tr>
<tr>
<td>09:15-09:30</td>
<td>Usefulness of minimally invasive surgery (MIS) for the management of thoracolumbar spinal metastasis</td>
<td>Claudio Yampolsky, Argentina</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Research Laboratory for Microsurgical and Endoscopical Anatomy as a translational approach</td>
<td>Peter Winkler, Austria</td>
</tr>
<tr>
<td>09:45-10:00</td>
<td>Endoscopic approaches to colloid cysts</td>
<td>Alberto Delitala, Italy</td>
</tr>
<tr>
<td>10:00-10:15</td>
<td>Transplanum transtubercle removal of suprasellar meningiomas and craniopharyngiomas</td>
<td>Roman Bosnjak, Slovenia</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Endoscope Assisted Microneurosurgery for Intracranial Expansive and Vascular Lesions</td>
<td>Renato Galzio, Italy</td>
</tr>
<tr>
<td>10:30-10:45</td>
<td>Endoscopic odontoidectomy: our experience and literature review</td>
<td>Davide Milani, Italy</td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>Coffee break</td>
<td></td>
</tr>
</tbody>
</table>
08:00-08:15 Language mapping for parietal gliomas
Igor Maldonado, France

08:15-08:30 Exoscope-guided (VITOM 3D) single-stage removal of supratentorial cavernous angioma and hemangioblastoma
Antonino Germano, Italy

08:30-08:45 Surgery around the corticospinal tract
Vincenzo Esposito, Italy

08:45-09:00 Extraoperative cortical stimulation and mapping for epilepsy and tumors in eloquent areas.
Konstantinos Fountas, Greece

09:00-09:15 Fluroscence assisted surgery for brain tumors
Giovanni Broggi, Italy

09.15-09:30 Supracerebellar transtentorial approach to the mediobasal temporal region in prone position
Feridun Acar; Turkey

09:30-09:45 Advantages of perilesional resections for glioblastoma
Raymond Sawaya, USA

09:45-10:00 Precision Neurosurgery for the Gliomas: An Old Concept in New Clothes
Colin Watts, UK

10:00-10:15 Management of Craniopharyngiomas; open vs endoscopic techniques-current state of the art
Fred Gentili, Canada

10:15-10:30 The use of different technologies in the OR to optimize the extent of resection of brain tumors
Alessandro Olivi, Italy

10:30-10:45 The neurosurgical treatment of the malignant brain tumors
Branko Djurovic, Serbia

10:45-11:00 Coffee break
08:00-08:15  Surgical approach to peripheral neuropathy  
Line Jacques, USA  

08:15-08:30  Surgical challenges in the management of giant nerve sheath spinal tumors. Multidisciplinary approach  
Marcel Ivanov, UK  

08:30-08:45  Minimally invasive and keyhole neurosurgery  
Sumit Sinha, India  

08:45-09:00  Can scoring system predict outcome in metastasis spine  
Salman Sharif, Pakistan  

09:00-09:15  Management of complication in peripheral nerve surgery  
Lukas Rasulic, Serbia  

09:15-09:30  Microsurgical Treatment of Lumbar Spondylolysis and Spondylolisthesis  
Marcos Masini, Brazil  

09:30-09:45  Role of minimal invasive techniques and new classification system in the surgical treatment of pathologies situated in the spinal canal  
Peter Banczerowski, Hungary  

09:45-10:00  MISS (minimally invasive spinal surgery, the concept. MISS is not a miss-surgery)  
Nikolay Peev, UK  

10:00-10:15  Minimalistic approaches to cranio-vertebral junction tumors  
Mario Ammirati, USA  

10:15-10:30  We’ve Got Your Back: How the Nerve Surgeon Can Bail Out the Spine Surgeon  
Eric Zager, USA  

10:30-10:45  Management of Durotomy and CSF Leaks in Spinal Injury  
Regunath Kandasamy, Malaysia  

10:45-11:00  Coffee break
08:00-08:15 Moyamoya, surgical experience
    Artur Xhumari, Albania

08:15-08:30 Hybrid visualization systems and floresanas guided microsurgery for high grade gliatumors
    Y. Sukru Caglar, Turkey

08:30-08:45 Molecular cellbiology of glioma invasion
    Ather Enam, Pakistan

08:45-09:00 Intraoperative flow evaluation in vascular surgery
    Paolo Ferroli, Italy

09:00-09:15 Anterolateral skullbase approaches
    Iype Cherian, Nepal

09:15-09:30 Surgical treatment of trigeminal neuralgia
    Paolo Perrini, Italy

09:30-09:45 Use of bypasses in neurosurgery
    Goran Mrak, Croatia

09:45-10:00 The role of radiosurgery in pain treatment
    Piero Picozzi, Italy

10:00-10:15 Cognitive biases in neurosurgery
    Nikolay Gabrovsky, Bulgaria

10:15-10:30 Can evidence based medicine help us in achieving supreme results in degenerative lumbar surgery?
    Tomislav Cigic, Serbia

10:30-10:45 Surgical Treatment of Orbital Tumors
    Jamil Rzaev, Russia
08.00-11.00  WFNS 2019 BELGRADE E-POSTER SESSION

Area for Poster presentation

09.30-11.00  WFNS 2019 BELGRADE POSTER EVALUATION AND DISCUSSION SESSION
Moderators: Ioan Stefan Florian, Nebojsa Stojanovic, Vincenzo Paterno

Area for Poster presentation

PLENARY SESSION 3
Chairs: Franco Servadei, Ioan Stefan Florian, Ihsan Solaroglu

Hall 1

11:00-11:15  Surgery of Brainstem Cavernomas
Ying Mao, China

11:15-11:30  Surgical management of focal brain stem tumors in kids
Frederick Boop, USA

11:30-11:45  The microsurgical approach to medulla oblongata
Ugur Ture, Turkey

11:45-12:00  The role of augment and virtual reality in neurosurgery: how the digital era is changing training and surgery
Antonio Bernardo, USA

12:00-12:15  Treatment options for intracranial vessel dissections
Alexandros Andreou, Greece

12:15-12:30  A high-tech playground for the next generation neurosurgeons: real-time intraoperative imaging
Francesco Di Meco, Italy

12:30-12:45  Craniopharyngiomas: a lifetime of lessons, pitfalls and surgical results
Alexander Konovalov, Russia

12:45-13.00  Hearing preservation in acoustic or surgical approaches to parasellar meningioma
Ian Dunn, USA

13.00-13.30  Surgical approaches for midline tumors
Madjid Samii, Germany

13.30-14.00  YOUNG NEUROSURGEONS AWARD, BEST ORAL PRESENTATION AND BEST E-POSTER PRESENTATION AWARDS & CLOSING CEREMONY
EP1 Minimally invasive microscopic decompression for focal lumbar spinal canal stenosis
Ahmed Abdelkhalek et al., Egypt

EP2 Spontaneous meningoencephalocele of the temporal lobe in the sphenoid sinus in an adult: a case report and review of the literature
Souhir Abdelmouleh et al., Tunisia

EP3 Hydatid cyst of the posterior fossa: two cases report and a review of literature
Souhir Abdelmouleh et al., Tunisia

EP4 The Lhermitte-Duclos Syndrome: A rare bilateral cerebellar location of a rare pathology
Souhir Abdelmouleh et al., Tunisia

EP5 Cerebral hydatid cyst, about a case
Daira Abdennour et al., Algeria

EP6 Chronic Dural Hematoma, experience of our service about 87 cases
Daira Abdennour et al., Algeria

EP7 Complex C5 fracture, about a case
Daira Abdennour et al., Algeria

EP8 Dysembryoplastic neuroepithelial tumors (DNET), about a case
Daira Abdennour et al., Algeria

EP9 Meningioma in the form of acute subdural hemorrhage, unusual presentation: A case report
Mohammad Abdoh et al., Saudi Arabia

EP10 How a mortality and morbidity review (MMR) can reduce complications in a Department of neurosurgery
Said Ait Benali et al., Morocco

EP11 How to reduce the risk of post operative pain and complications in lumbar degenerative spine surgery
Said Ait Benali et al., Morocco

Firas Akrout et al., Tunisia

EP13 Cervical spondylosis Dr. Salah Albishawi, FRCS (Glasg.), FRCS. SN (Eng.Ed.Glasg.Ire.,) Consultant neurosurgeon, Jordan Hospital Dr.Mohamed Idris , MD, neurosurgical resident
Salah Albishawi et al., Jordan

EP14 Keeping it safe and simple- securing external ventricular drains
Cristina Caterina Aldea et al., Romania

EP15 Single stage, single opening surgical strategy for multiple intracranial aneurysms- a single surgeon experience of 20 years
Cristina Caterina Aldea et al., Romania

EP16 Intraoperative flow cytometry may predict prognosis in glioblastoma
Georgios Alexiou et al., Greece

EP17 Rosmarinic acid induce apoptosis in glioblastoma cells
Georgios Alexiou et al., Greece
EP18 Bilateral sixth cranial nerve palsy following lumboperitoneal shunt
Ibrahim Alhalal et al., Saudi Arabia

EP19 Arachnoid cyst management
Raed Aljubour et al., Jordan

EP20 Insurance and flow alteration STA-MCA bypass in management of complex anterior intracranial circulation aneurysms in postendovascular era
Raheja Amol et al., India

EP21 An observational analysis of costs and -effectiveness study of an intraoperative compared with a preoperative image-guided system in spine surgery fixation. Analysis of 10 years of experience
Carla Daniela Anania et al., Italy

EP22 Surgical treatment of dropped head syndrome (DHS), a rare and invalidating pathology
Carla Daniela Anania et al., Italy

Anita Andersone et al., Latvia

EP24 The topographical influence of nanomaterials on neuroregeneration in the central nervous system
Ya Lyn Samantha Ang et al., Singapore

EP25 The relationship of the dentate nucleus with the pyramid of vermis: a microneurosurgical anatomical study
Santhosh Kumar Annayappa et al., India

EP26 Enhanced recovery after spine surgery: the journey from evidence to effect
Ahmed Ashry et al., Egypt

EP27 Risk factors for white cord syndrome after decompressive surgery for cervical spondylotic myelopathy
Ahmed Ashry et al., Egypt

EP28 Spine and spinal cord tumor surgery: advanced treatment concept
Dmitry Asyutin et al., Russia

EP29 Metastasis of small-cell lung carcinoma with a fourth ventricle localization: a rare case report
Aysegul Aydin et al., Turkey

EP30 Intradural migration of a bullet following gunshot injury: management and technical difficulties
Levent Aydin et al., Turkey

EP31 Ventriculo pleural shunts: management and surgical challenges
Levent Aydin et al., Turkey

EP32 Management of acute colloid cysts: surgical management and nuances
Levent Aydin et al., Turkey

EP33 Percutaneous vertebroplasty in vertebra plana: 20 year experience
Levent Aydin et al., Turkey

EP34 Full endoscopic lumbar decompression of spinal stenosis through uniportal approach: techniques and preliminary results
Salih Aydin et al., US

Abdelmoumene Ryad Ayoun et al., Algeria
<table>
<thead>
<tr>
<th>EP36</th>
<th>Management and outcome of neural tube defects: A report of 370 cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abdelmoumene Ryad Ayoun et al., Algeria</td>
</tr>
<tr>
<td>EP37</td>
<td>Surgical management of cervical disc herniation</td>
</tr>
<tr>
<td></td>
<td>Abdelmoumene Ryad Ayoun et al., Algeria</td>
</tr>
<tr>
<td>EP38</td>
<td>Surgical treatment of intra-cranial aneurysms: About 10 cases</td>
</tr>
<tr>
<td></td>
<td>Abdelmoumene Ryad Ayoun et al., Algeria</td>
</tr>
<tr>
<td>EP39</td>
<td>Tumors of the orbit: About 11 cases</td>
</tr>
<tr>
<td></td>
<td>Abdelmoumene Ryad Ayoun et al., Algeria</td>
</tr>
<tr>
<td>EP40</td>
<td>A case of decompressive craniectomy after multiple arterial territorial cerebral infarctions</td>
</tr>
<tr>
<td></td>
<td>Naci Balak et al., Turkey</td>
</tr>
<tr>
<td>EP41</td>
<td>A method for simulation of the resection of intracranial tumors in training</td>
</tr>
<tr>
<td></td>
<td>Naci Balak et al., Turkey</td>
</tr>
<tr>
<td>EP42</td>
<td>Surgical anatomy and the technique of cervical oblique corpectomy</td>
</tr>
<tr>
<td></td>
<td>Naci Balak et al., Turkey</td>
</tr>
<tr>
<td>EP43</td>
<td>Dynamic magnetic resonance imaging parameters for objective assessment of the magnitude of tethered cord syndrome in patients with spinal dysraphism</td>
</tr>
<tr>
<td></td>
<td>Sanjay Behari et al., India</td>
</tr>
<tr>
<td>EP44</td>
<td>A rare tumor of the pituitary region</td>
</tr>
<tr>
<td></td>
<td>Ala Belhaj et al., Tunisia</td>
</tr>
<tr>
<td>EP45</td>
<td>Management of a special kind of adenomas</td>
</tr>
<tr>
<td></td>
<td>Ala, Belhaj et al., Tunisia</td>
</tr>
<tr>
<td>EP46</td>
<td>Mediastinal chordoma: an unusual location of a rare tumor</td>
</tr>
<tr>
<td></td>
<td>Ala, Belhaj et al., Tunisia</td>
</tr>
<tr>
<td>EP47</td>
<td>Pineal Meningioma: A case report and review of Literature</td>
</tr>
<tr>
<td></td>
<td>Ala, Belhaj et al., Tunisia</td>
</tr>
<tr>
<td>EP48</td>
<td>Brown tumors mimicking bone metastases: a case report with literature review</td>
</tr>
<tr>
<td></td>
<td>Atef Ben Nsir et al., Tunisia</td>
</tr>
<tr>
<td>EP49</td>
<td>Epidural spinal meningiomas - Diagnostic dilemmas and treatment options</td>
</tr>
<tr>
<td></td>
<td>Atef Ben Nsir et al., Tunisia</td>
</tr>
<tr>
<td>EP50</td>
<td>Giant cervical dumbbell-shaped neurinoma: case report refining the anatomic boundaries of the posterolateral approach</td>
</tr>
<tr>
<td></td>
<td>Atef Ben Nsir et al., Tunisia</td>
</tr>
<tr>
<td>EP51</td>
<td>Malignant transformation of thoracic schwannoma in a patient without Von Recklinghausen s disease: A case report</td>
</tr>
<tr>
<td></td>
<td>Atef Ben Nsir et al., Tunisia</td>
</tr>
<tr>
<td>EP52</td>
<td>Severe fracture-dislocation of the thoracolumbar spine with complete conus medullaris transection: a case report with special insight to surgical management</td>
</tr>
<tr>
<td></td>
<td>Atef Ben Nsir et al., Tunisia</td>
</tr>
<tr>
<td>EP53</td>
<td>Surgical management of pyogenic spondylodiscitis: a review of 14 consecutive patients</td>
</tr>
<tr>
<td></td>
<td>Atef Ben Nsir et al., Tunisia</td>
</tr>
</tbody>
</table>
EP54  Vertebral artery injury following cervical spine trauma: a case report and literature review
Atif Ben Nsir et al., Tunisia

EP55  Intraventricular meningiomas
Harjinder Singh Bhatoe et al., India

EP56  Tension pneumocephalus following cerebrospinal fluid drainage through lumbar puncture for cerebrospinal fluid leakage: a case report
Made Bhuwana Putra et al., Indonesia

EP57  Complications of ventriculo-peritoneal shunts
Sofiene Bouali et al., Tunisia

EP58  Sagittal balance correction in degenerative lumbar spinal stenosis treatment using I-CT with navigation system
Evgeny Brinyuk et al., Russia

EP59  An unusual case of spontaneous spinal epidural hematoma
Gokhan Canaz et al., Turkey

EP60  Endovascular treatment of multiple intraranial aneurysms in granulomatosis with polyangitis
Orhun Mete Cevik et al., Turkey

EP61  Feasibility of robotic implementation in neurosurgery: fourth ventricle and paramedian supracerebellar transtentorial approach
Orhun Mete Cevik et al., Turkey

EP62  Isolated central nervous system metastasis in pediatric wilms' tumor: a case report and review of literature
Ines Cherif et al., Tunisia

EP63  Pediatric esthesioneuroblastoma: a case report
Ines Cherif et al., Tunisia

EP64  Perforating head injury with iron rod: A case report and review of literature
Ines Cherif et al., Tunisia

EP65  Ruptured central nervous system dermoid cyst of the suprasellar region manifesting as unusual epileptic seizure: a case report
Ines Cherif et al., Tunisia

EP66  Serious cranio-facial wound by disc wheel: a case report
Ines Cherif et al., Tunisia

EP67  Testicular non-seminomatous germ cell tumors (NSGCT) and brain metastases: About a rare location of the posterior fossa
Ines Cherif et al., Tunisia

EP68  Challenges in cranioplasty
George-Mihai Cosma et al., Romania

EP69  Daily fast fresh cadaver practice as novel training method in vascular neurosurgery
Andras Csokay et al., Hungary

EP70  How can we reduce the complications in neurosurgical mission? (Daily fast fresh cadaver practice help us)
Andras Csokay et al., Hungary

EP71  Prognostic factors of surgically treated spinal meningeomas and long-term surgical outcomes
Gábor Czigiéczki et al., Hungary
Rami Darwazeh et al., Palestine

EP73  Sphenoorbital Meningiomas: diagnosis, surgical management, and recurrence rate
Rami, Darwazeh, et al., Palestine

EP74  Surgical strategies for removing the intracanalicular portion of vestibular schwannoma and the clinical outcomes
Rami Darwazeh et al., Palestine

EP75  Sub temporal preauricular infratemporal approach combined with Fronto temporo orbitozygotomy in single stage for lateral and posterior skull base tumor: Experience in 18 patients
Atmaranjan Dash et al., India

EP76  Intracranial complications of sinusitis - a case series
Ana Luisa De Pinho Pardilho et al., UK

EP77  Brain hydatid cyst in three years old child
Slavko Duraskovic et al., Montenegro

EP78  Intra-arterial tirofiban thrombolysis after flow-diverter stent thrombosis: case report
Slavko Duraskovic et al., Montenegro

EP79  Parasagittal meningioma surgery
Ashraf Elbadry et al., Egypt

EP80  Can hydrogen peroxide enhance hemostasis in meningioma surgical excision without preoperative embolization?
Ashraf Elbadry et al., Egypt

EP81  Can sonography replace electromyography and nerve conduction velocity in carpal tunnel syndrome
Ashraf Elbadry et al., Egypt

EP82  Chronic subdural haematoma in liver disease patients with coagulopathy, local experience
Ashraf Elbadry et al., Egypt

EP83  Extent of hyperostotic bone removal in convexity meningioma to achieve pathologically free margins
Ahmed EL-Fiki et al., Egypt

EP84  Chronic Traumatic Encephalopathy (CTE): causes, diagnosis, role of the neurosurgeon and medico-legal implications
Domenic Esposito et al., US

EP85  Microspheres of ebm-titanium: a valid alternative to pmma in the treatment of vertebral fracture
Natale Francaviglia et al., Italy

EP86  One-step surgery: a custom-made technic in oncological cases
Natale Francaviglia et al., Italy

EP87  Cranioplasty of calvarial skull defects: A comparative study between using three dimensional custom-made cranioprostheses versus hand-made bone cement in restoring skull configuration
Mohamed Gaber et al., Egypt

EP88  Endoscopic assisted microscopic fenestration of inner membrane in cases of chronic subdural hematoma
Mohamed Gaber et al., Egypt
EP89 Pediatric glioblastomas: study of a Tunisian surgical series
Ghassen Gader et al., Tunisia

EP90 Complete Cauda Equina Syndrome (CES) due to lumbar disc herniation
Report of 10 cases and review of the literature
Charalampos Gatos et al., Greece

EP91 Complications after Cranioplasty autologous and heterologous. A single institute experience of 50 cases in a 5 years period and review of the literature
Charalampos Gatos et al., Greece

EP92 Supratentorial hemorrhage after posterior fossa surgery. Report of two cases and review of the literature
Charalampos Gatos et al., Greece

EP93 A survey on the adherence of European Neurosurgical Centers to Brain Trauma Foundation guidelines on Severe TBI
Antonino Germano et al., Italy

EP94 Exoscope-guided (VITOM 3D) single-stage removal of supratentorial cavernous angioma and hemangioblastoma
Antonino Germano et al., Italy

Antonino Germano et al., Italy

EP96 Costotransversectomy: an option for surgical approach to challenging anterior thoracic spine pathologies.
Tossif Ghodiwala et al., Russia

EP97 Results of surgical treatment of patients with focal drug-resistant MR-negative epilepsy
Tossif Ghodiwala et al., Russia

EP98 Surgical management of brain tumors in language areas
Tossif Ghodiwala et al., Russia

EP99 Surgical tactics for dealing with pseudoarthrosis after spinal fusion
Tossif Ghodiwala et al., Russia

EP100 Foramen magnum meningiomas: clinical presentation and surgical management
Mario Giarletta et al., Italy

EP101 Intracranial pressure monitoring: The patient experience
Aimee Goel et al., UK

EP102 Retrospective study on syndrome of trephined following decompressive craniectomy
Ravi Kiran Gorijala et al., India

EP103 Surgical management of Cushing’s disease
Khalida Grine et al., Algeria

EP104 Pediatric multiple meningioma: case report and review
William Gump et al., US

EP105 Surgery of severe open cranio-orbital injury with regional tissue defect
Zhilin Guo et al., China

EP106 Clinical and imaging findings in a rare case of sinus pericranii
Mohamed Amine Hadj Taieb et al., Tunisia
EP107 Evaluation of neurological recovery after cervical cord decompression for cervical myelopathy
Mohamed Amine Hadj Taieb et al., Tunisia

EP108 Intraparenchymal meningioma: case report
Mohamed Amine Hadj Taieb et al., Tunisia

EP109 Pediatric supratentorial anaplastic oligodendroglioma: a rare tumor in children
Mohamed Amine Hadj Taieb et al., Tunisia

EP110 Deaths by craniocerebral trauma due to road traffic accidents: socio-demographic and forensic data in Sfax
Mohamed Amine Hadj Taieb et al., Tunisia

EP111 Fatal rupture of intracranial aneurysm of the internal carotid artery due to emotion:
an autopsy case
Mohamed Amine Hadj Taieb et al., Tunisia

EP112 About a rare case of osteolytic epidermoide cyst of the skull: an overview
Mechergui Haifa et al., Tunisia

EP113 Abscess on cerebellar ischemic stroke
Mechergui Haifa et al., Tunisia

EP114 Conus medullaris syndrome caused by epidural lymphangioma
Mechergui Haifa et al., Tunisia

EP115 Cranio-facial traumatism by trans-orbit penetrating object
Mechergui Haifa et al., Tunisia

EP116 Intracerebral hematoma: unusual mode of revealing an acute lymphoblastic leukemia
Mechergui Haifa et al., Tunisia

EP117 Multifocal glioblastoma in adults with brainstem involvement: a case report
Mechergui Haifa et al., Tunisia

EP118 Multiple and bilateral cerebral hydatid cyst: a case report
Mechergui Haifa et al., Tunisia

EP119 Post traumatic carotido-cavernous fistula: an unusual vascular complication
Mechergui Haifa et al., Tunisia

EP120 Septic neurological manifestations of osler weber disease: about two cases
Mechergui Haifa et al., Tunisia

EP121 Spinal epidural lipomatosis: a rare cause of sciatica
Mechergui Haifa et al., Tunisia

EP122 The paragangioma of cauda equina: a case report
Mechergui Haifa et al., Tunisia

EP123 The vault metastases of a thyroid carcinoma miming a meningioma: about two cases
Mechergui Haifa et al., Tunisia

EP124 Traumatic high-grade spondyloptosis at C7-T1: a case report
Mechergui Haifa et al., Tunisia

EP125 A review on the importance of nursing approaches in nutrition of children with cancer
Emmanuel Gazdama Hamatu et al., Nigeria
EP126 Phenytoin versus levetiracetam for post traumatic brain injury seizure prophylaxis; a retrospective study at a UK major trauma centre
Lauren Harris et al., UK

EP127 Subtemporal extradural approach for superior semicircular canal dehiscence: results in three consecutive patients
Sarah Hendrickx et al., Belgium

EP128 Triple Conjoint nerve root syndrome: a special case of sciatic pain
Sarah Hendrickx et al., Belgium

EP129 Epidemiology of traumatic brain injury and traumatic spine injury: 10–years-interval of telemedicine experience in a region of Northern Italy
Corrado Iaccarino et al., Italy

EP130 Patient management with chronic subdural ematoma in non-specialist neurosurgery. 10 years of experience of the Hub & Spoke Siat Emilia North West System
Corrado Iaccarino et al., Italy

EP131 Validation of NIH recurrent glioblastoma scale to predict survival after surgery for recurrent glioblastoma multiforme
Rosanda Ilic et al., Serbia

EP132 Outcome of traumatic subarachnoid hemorrhage in patients presenting to neurosurgery department lady reading hospital Peshawar
Muhammad Ishfaq et al., Saudi Arabia

EP133 Assessment of postural control of lower back by galvanic vestibular stimulation
Boban Joksimovic et al., Serbia

EP134 Clinical program for assessment of low back postural control in subjects with chronic back pain
Boban Joksimovic et al., Serbia

EP135 Pain and motor control of the lumbopelvic region
Boban Joksimovic et al., Serbia

EP136 Spinal subdural abscess mimicking an extradural tumor: case report and review of literature
Stanislav Kaprovoy et al., Russia

EP137 Survival and functional outcomes after surgical treatment intramedullary spinal cord astrocytomas
Stanislav Kaprovoy et al., Russia

EP138 Role of erythropoietin in traumatic brain injury: A systematic review, meta-analysis and trial sequential analysis of randomized controlled trials
Varidh Katiyar et al., India

EP139 3D modeling in the planning of spinal deformity surgeries
Arkadii Kazmin et al., Russia

EP140 Chevron decompression in the treatment of multilevel lumbar spinal canal stenosis
Arkadii Kazmin et al., Russia

EP141 Indications for surgical treatment of thoracolumbar kyphosis in patients with mucopolysaccharidosis
Arkadii Kazmin et al., Russia

EP142 Pregnancy and childbirth in patients with idiopathic scoliosis
Arkadii Kazmin et al., Russia
EP143 Risk factors and surgical treatment of craniovertebral stenosis in patients with Maroteaux-Lamy syndrome (mucopolysaccharidosis type VI)
Arkadii Kazmin et al., Russia

EP144 Tactics of preoperative preparation of patients for surgical treatment on the spine, depending on the correlation with Pyrilinks-D levels
Arkadii Kazmin et al., Russia

EP145 Effectiveness of four-rod fixation in patients undergoing pedicle subtraction osteotomy of the spine
Arkadii Kazmin et al., Russia

EP146 Posterior fossa ICP monitoring: a tale of two compartments
Amad Khan et al., UK

EP147 Remote control: intradural spinal tumour resection complicated by remote cerebellar haemorrhage
Amad Khan et al., UK

EP148 Straight to the point: an updated technique for performing lumbar puncture safely in obese patients
Amad Khan et al., UK

EP149 The role of thalamotomy for treatment of tremor in the era of deep brain stimulation
Amad Khan et al., UK

EP150 A retrospective study of infectious complications in patients with severe traumatic brain injury: Bacteriological profile, its impact on treatment cost & short-term outcome with a review of literature
Muhammad Mukhtar Khan et al., Pakistan

EP151 Fracture of the dorsum sellae
Mansour Khrifech et al., Tunisia

EP152 Whether to recommend operation when benign brain tumor was found in elderly patients in the age 70 or older
Chang Hyun Kim et al., Republic of South Korea

EP153 Co-existence of cavernous meningioma with para-ophtalmic aneurysm: A case report with stepwise approach of endovascular surgery and stereotactic radiosurgery
Burak Kinali et al., Turkey

EP154 Modern aspects of minimally invasive spinal surgery, ICT & navigation
Nikolay Konovalov et al., Russia

EP155 A rare case of giant primary orbital hydatid cyst
Ambuj Kumar et al., India

EP156 Minimally invasive microendoscopic technique for management of deep seated intracranial lesions: Experience of 463 cases
Ambuj Kumar et al., India

EP157 Amelioration of cerebral vasospasm and secondary injury by vigabatrin following experimental subarachnoid hemorrhage in the rabbit
Pınar Kuru Bektasoglu et al., Turkey

EP158 Antifibrotic effect of boric acid in rats with epidural fibrosis
Pınar Kuru Bektasoglu et al., Turkey
<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP159</td>
<td>Neuroprotective effects of mildronate in a rat model of traumatic brain injury</td>
<td>Pınar Kuru Bektasoglu et al.</td>
<td>Turkey</td>
</tr>
<tr>
<td>EP160</td>
<td>The effects of cinnamaldehyde on early brain injury and cerebral vasospasm following experimental subarachnoid hemorrhage in the rabbit</td>
<td>Pınar Kuru Bektasoglu et al.</td>
<td>Turkey</td>
</tr>
<tr>
<td>EP161</td>
<td>The vasorelaxant and neuroprotective effects of mildronate in a rabbit subarachnoid hemorrhage model</td>
<td>Pınar Kuru Bektasoglu et al.</td>
<td>Turkey</td>
</tr>
<tr>
<td>EP162</td>
<td>Augmentation of regeneration in peripheral nervous system surgery</td>
<td>Milan Lepic et al.</td>
<td>Serbia</td>
</tr>
<tr>
<td>EP163</td>
<td>Sitting position craniostomy for chronic subdural hematoma - a pilot study</td>
<td>Milan Lepic et al.</td>
<td>Serbia</td>
</tr>
<tr>
<td>EP164</td>
<td>Supplementation, nutrition and diet role in peripheral nervous system injuries</td>
<td>Milan, Lepic et al.</td>
<td>Serbia</td>
</tr>
<tr>
<td>EP165</td>
<td>A case of a B cell lymphoma revealed by a dorsal spinal cord compression with review of literature</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP166</td>
<td>A rare case of cerebellar metastasis of osteosarcoma</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP167</td>
<td>Abdominal pseudocyst as a complication of ventriculoperitoneal shunt placement: review of the literature</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP168</td>
<td>Brain metastasis from ovarian cancer: a case report</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP169</td>
<td>Brain metastasis from renal cell carcinoma</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP170</td>
<td>Ependymomas of the terminal filum</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP172</td>
<td>Hemimegalencephaly revealed by belated epilepsy in adulthood: An overview</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP173</td>
<td>Intraventricular menigioma case report and literature review</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP174</td>
<td>Ossified cephalhematoma</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
<tr>
<td>EP175</td>
<td>Primary liposarcoma of the thoracic spine: case report</td>
<td>Ahmed Maatoug et al.</td>
<td>Tunisia</td>
</tr>
</tbody>
</table>
EP178 Intratumoral hemorrhage in pediatric primary spinal intradural Ewing's sarcoma presenting with acute neurological decline
Karthigeyan Madhivanan et al., India

EP179 CASE REPORT: Cerebral toxoplasmosis infection by T.gondii in young patient with AIDS
Noor-ul-Huda Maria et al., Pakistan

EP180 CASE REPORT: 36 yrs old young man with post traumatic dural arteriovenous fistula
Noor-ul-Huda Maria et al., Pakistan

EP181 Case Report: Central neurocytoma in a 26 yrs old girl
Noor-ul-Huda Maria et al., Pakistan

EP182 Postoperative rise in serum sodium level, an indicator of diabetes insipidus after pituitary adenoma surgery
Noor-ul-Huda Maria et al., Pakistan

EP183 The effect of psychosocial factors in the success of conservative management for low backache
Noor-ul-Huda Maria et al., Pakistan

EP184 Cervical Tarlov cyst mimicking a spinal hydatid cyst: a case report
Hamoud Marouane et al., Morocco

EP185 Endoscopic endonasal transsphenoidal surgery of 43 pituitary adenomas. Experience of university hospital of Fez Morroco
Hamoud Marouane et al., Morocco

EP186 Cortical and subcortical mapping of the language area in the cavernoma of the perisylvian area: case report
Carlos Roberto Massella Junior et al., Brazil

EP187 Palliative care in dorso-lumbar vertebral malignant neoplasms by the use of radiofrequency ablation with or without vertebroplasty. Clinical and radiological findings in a series of 41 patients.
Rosario Maugeri et al., Italy

EP188 TcMRgFUS thalamotomy as a repeatable option for treating relapsing movement disorder. Report of a second treatment in a patient affected with refractory essential tremor combined with parkinsonism
Rosario Maugeri et al., Italy

EP189 Readmission rates of patients with intracranial injuries in the United States
Chelsea Mendonca et al., US

Micun Micunovic et al., Macedonia

EP191 Case of large mixopapillary ependymoma presented with back pain
Vladimir Miladinovic et al., Serbia

EP192 Complications of Gamma Knife surgery: cross analysis between three medical centers (2 Canadian centers and 1 Serbian center)
Aleksandar Miljkovic et al., Serbia

EP193 Presentation of clinical picture in patients with spontaneous subarachnoid hemorrhage
Aleksandar Miljkovic et al., Serbia

EP194 Surgical treatment of posterior circulation aneurysms
Joao Monteiro Silva et al., Portugal
Idir Moulla et al., Algeria

EP196 Research protocol for a national myelopathy medical education project: what is the extent of medical student knowledge and teaching?
Oliver Mowforth et al., UK

EP197 “I am not delusional!” – sensory dysaesthesia secondary to degenerative cervical myelopathy
Oliver Mowforth et al., UK

EP198 Establishing a national neurosurgical myelopathy student society
Oliver Mowforth et al., UK

EP199 Neurosurgical treatment and characteristics of head injuries self-inflicted by captive bolt pistol
Bozidar Mursic, et al., Croatia

EP200 Results of surgical treatment of traumatic thoracolumbar spine injuries
Bozidar Mursic et al., Croatia

EP201 A curious case of vanishing traumatic epidural hematoma
Siddarthareddy Musali et al., India

EP202 Simple improvisation to enhance utility of fluorescein sodium in resection of intracranial lesions at Routine Neurosurgical Centers
Siddarthareddy Musali et al., India

EP203 Difficulties in practicing neurosurgery in besieged areas in Syrian war.
Jalal Najjar et al., Turkey

EP204 Neurosurgery and anatomical dissections in the ancient Arabic and Islamic world
Jalal Najjar et al., Turkey

EP205 Combined endoscopic endonasal and open transmandibular-transcervical approach for management of giant clival chordomas extended to the cranio-vertebral junction
Davide Nasi et al., Italy

EP206 Extended endoscopic endonasal approach with or without C1–C2 anterior endoscopic screw fixation for cranio-vertebral junction lesions: lesson learned and technical nuances
Davide Nasi et al., Italy

EP207 Revisiting the selective vestibular neurotomy for intractable Ménière’s disease in the era of endoscopy and intraoperative advanced neuromonitoring
Davide Nasi et al., Italy

EP208 A network meta-analysis comparing mortality following four neurosurgical techniques in patients with spontaneous supratentorial intracerebral hemorrhage
Ahmed Negida et al., Egypt

EP209 Reliability analysis of the AOSpine thoracolumbar spine injury classification system
Ljupco Nikolov et al., Macedonia

EP210 Selection of treatment methods for bleeding aneurysms
Vesna Nikolov et al., Serbia

EP211 Tailored approach for the resection of planum sphenoidale meningiomas
Punga Oana-Mihaela et al., Romania

EP212 Survival prognosis in glioblastoma patients in relation to ATRX, IDH and p53 expression
Ibrahim Omerhodzic et al., Bosnia and Herzegovina
EP213 Battle's sign (Post traumatic Retroauricular Ecchymosis)
Oumaima Outani et al., Morocco

EP214 A late complication seen after anterior cervical fusion surgery: stabilization screw coming to mouth caused by cough and literature search
Omer Ozdemir et al., Turkey

EP215 A novel classification of Rathke’s Cleft Cysts based on intraoperative findings
Baris Ozoner et al., Turkey

EP216 Our five years experience in non-syndromic craniosynostosis treatment
Ivan Pasalic et al., Croatia

EP217 Factors predicting facial nerve function after acoustic neuroma surgery
Claudia Pasquali et al., Italy

EP218 Pure endonasal endoscopic surgery in pituitary adenomas: An institutional experience in a series of 46 cases
Ashis Patnaik et al., India

EP219 Rare cases of rosssette forming glioneuronal tumours of septum pellucidum
Ashis Patnaik et al., India

EP220 Teflon shunt in tetraventricular obstructive noncommunicating hydrocephalus
Sumeet Pawar et al., India

EP221 3D technology to train both neurosurgeons and patients; improved a new kind of informed consent by means of high-tech preoperative rehearsal
Alessandro Perin et al., Italy

EP222 How New Training Paradigms in Neurosurgery can be used to get the best out of everybody
Alessandro Perin et al., Italy

EP223 The STARS-CASCADE Study: Surgical Theater for Advanced Rehearsal and Surgical Performance - Cerebral Aneurysm Simulation, Clipping, and Debriefing
Alessandro Perin et al., Italy

EP224 USim: a new device and app for interactive, case-specific, intraoperative ultrasound simulation and rehearsal in neurosurgical oncology
Alessandro Perin et al., Italy

EP225 Microsurgical management of cerebral AVM: Our experience and outcome
George Petrescu et al., Romania

EP226 Primary intramedullary spinal cord malignant non-Hodgkin lymphoma case report
George Petrescu et al., Romania

EP227 Unusual presentation of thoracic spinal schwannoma with massive intratumoral haemorrhage
George Petrescu et al., Romania

EP228 Posterior reversible encephalopathy syndrome (PRES) following cystosubarachnoid shunt for cervicodorsal intramedullary cyst
Manoj Phalak et al., India

EP229 Case report: Surgical approach to brain stem lesions
Adina Mihaela Popa, et al., Romania

EP230 Deep Brain Stimulation for vegetative and minimal conscious state. Volumetric analysis in patients after implanted electrode in centromedian parafascicle complex
Marina Raguz et al., Croatia
EP231 Herbal Medicine Today: Clinical and Research Issues Rare diseases
Mohammed Al Bassir Rahamani et al., India

EP232 Penetrating brain injury from a traditional fish speargun: entrapped in posterior fossa
Dimas Rahman et al., Indonesia

EP233 Cerebral hydatid cyst about 3 cases
Nabil Raouzi et al., Morocco

EP234 Deep brain stimulation (DBS) in parkinson’s disease preliminary experience of 7 patients
Oujda Morocco
Nabil Raouzi et al., Morocco

EP235 Neurotrauma and intensive care program, a case study of okinni catchment area in Osun State
Nigeria
Benita Abidemi Rasheed et al., Nigeria

EP236 A prolactinoma mimicking a radiological aspect of a meningioma
Jdidi Rihab et al., Tunisia

EP237 Meningeal metastases about of two cases
Jdidi Rihab et al., Tunisia

EP238 Meningeal metastasis revealing breast cancer
Jdidi Rihab et al., Tunisia

EP239 Spinal rosai dorfman associated with IgG4-related disease: case report and literature review
Elena Roca et al., Italy

EP240 Two-year outcomes of Vagus nerve stimulation for drug-resistant epilepsy: longer intervals from disease onset to surgery are associated with worse outcomes
Vasco Sá Pinto et al., Portugal

EP241 Persistent primitive trigeminal artery. A retrospective institutional review
Nishanth Sadashiva et al., India

EP242 “Multilevel stenosis and deformity of spine - when is only a microsurgical approach indicated?”
Mikhail Safronov et al., Russia

EP243 PRP effect on spinal fusion
Mikhail Safronov et al., Russia

EP244 Scan & Plan strategy with BodyTom portable CT scanner and Renaissance surgical robot
Mikhail Safronov et al., Russia

EP245 Intracranial dural arteriovenous fistulas with cortical venous drainage: gamma knife radiosurgery as the treatment of choice
Hardik Sardana et al., India

EP246 Delayed postural headache after C6 lateral mass fracture and traumatic occlusion of the ipsilateral vertebral artery. Report of a case with atypical presentation
Panagiotis Sarlis et al., Greece

EP247 Endoscopic transsphenoid approach to clival and sellar region
Dragan Savić et al., Serbia

EP248 Predicted value of MRI in decision making for lumber disc surgery
Mohamed Shabaan et al., Egypt
EP249 Relation of sexual dysfunction on lumbar disc herniation
Mohamed Shabaan et al., Egypt

EP250 Skull-base tumour: multiportal combined endoscopic & microscopic approach
Salman Mohammed Shaikh et al., India

EP251 Gamma Knife stereotactic radiosurgery for treatment of vestibular shwanomma secondary to type 2 neurofibromatosis
Prashant Kumar Sharma et al., India

EP252 Profile survey of the Chinese Pediatric Neurosurgeons
Wenjun Shen et al., China

EP253 Occult intra-sacral meningocele: our experience
Varadaraya S. Shenoy, et al., India

EP254 A study of posterior fossa venous anatomy & its surgical significance
Varadaraya S. Shenoy, et al., India

EP255 Spontaneous acute arterial subdural hematoma: A series of 6 cases
Varadaraya S. Shenoy, et al., India

Abhay Singh et al., India

EP257 Non traumatic medullary compression: neuroblastoma: about a case and literature review
Daoud Souad et al., Algeria

EP258 Cranio-cerebral wounds by weapon: Study of Two Clinical Cases
Daoud Souad et al., Algeria

EP259 Extra-axial medullo-blastoma in cerebello-pontine angle: A case report with littérature review
Daoud Souad et al., Algeria

EP260 Neurembryoplastic neuroepithelial tumors DNET: about a case and review of the literature
Daoud Souad et al., Algeria

EP261 Hemangiopericytoma - case report
Ghassen Souissi et al., Tunisia

EP262 Internal decompression for cervical spinal stenosis – an alternative surgery based on the natural spine biomechanic
Milan Spaic et al., Serbia

EP263 Thoracic endoscopic sympathectomy for causalgia – the decision making process
Milan Spaic et al., Serbia

EP264 The value of alloplastic cranioplasty made by additive manufacturing of prefabricated 3D printed modified mold
Bruno Splavski et al., Croatia

EP265 Predicting perioperative coagulopathy via machine learning in patients requiring emergency neurosurgical operations
Yirui Sun et al., China

EP266 Blast Induced Neurotrauma In Indian Armed Forces: A Retrospective study
Shashivadhanan Sundaravadhanan et al., India
EP267 Neurotrauma: A futuristic perspective
Shashivadhanan Sundaravadhanan et al., India

EP268 Three dimensional printing in spine surgery: A quest for the perfect fit
Shashivadhanan Sundaravadhanan et al., India

EP269 Endoscopic foraminoplasty for unilateral hydrocephalus
Bahattin Tanrikulu et al., Turkey

EP270 Running for surgery without obtaining pre-surgical CSF samples in radiologically confirmed pineal region mature teratomas
Bahattin Tanrikulu et al., Turkey

EP271 Surgery for pediatric ponto-mesencephalic junction tumors
Bahattin Tanrikulu et al., Turkey

EP272 The complex management of an ruptured arteriovenous malformation in a pregnant patient with inherited thrombophilia-case report
Maria Teodora Teascu et al., Romania

EP273 Surgical management of type II traumatic odontoid fracture with posterior displacement of the dens - two cases
Stefany Todorova et al., Bulgaria

EP274 Cerebellar arteriovenous malformation revealed by an acute subdural hematoma of the posterior fossa: case report and review of literature
Amine Trifa et al., Tunisia

EP275 Surgical treatment of dysembryoplastic neuroepithelial tumor: about 5 cases
Amine, Trifa et al., Tunisia

EP276 Tuberous sclerosis complex revealed by a giant cell astrocytoma: a case report
Amine Trifa et al., Tunisia

EP277 Gene expression in intracranial aneurysms – comparision analysis of aneurysmal walls with extracranial arteries with real time polymerase chain reaction and immunohistochemistry
Gaurav Tyagi et al., India

EP278 Management and outcomes in 61 cases of supra-infra tentorial extradural hematoma (SIEDH) in a tertiary neurosurgical center
Alok Uppar et al., India

EP279 Is degenerative disc disease a consequence of bacterial infection?
Tomaz Velnar et al., Slovenia

EP280 Our experience with Caspar microsurgical discectomy
Tomaz Velnar et al., Slovenia

EP281 Comparative study lumbar microdiscectomy and microsurgical tubular discectomy based on clinical outcome, muscle injury markers and postoperative imaging changes
Venkata Ramesh Chandra Vemula et al., India

EP282 Oblique Lumbar Interbody Fusion (OLIF) for lumbar spondylolisthesis-Technical nuances and our initial experience
Venkata Ramesh Chandra Vemula, et al., India

EP283 Vertebral column resection for severe spinal deformity: Institutional experience
Venkata Ramesh Chandra Vemula et al., India
EP284  Dual microsurgical and endovascular treatment strategy for multiple brain aneurysms  
Filip Vrban et al., Croatia

EP285  Potential benefits of temozolomide therapy to overall survival rate of high-grade glioma  
surgical patients  
Vjenceslav Vrtaric et al., Croatia

EP286  A rare case of intramedullary Nocardia farcinica at the cauda equina  
Medha Vyas et al., India

EP287  A rare case of isolated Cauda Equina Nocardia farcinica infection  
Medha Vyas et al., India

EP288  An indigenous method of securing ventriculo peritoneal shunt tube in peritoneal cavity  
Medha Vyas et al., India

EP289  An indigenous method of suprahepatic infradiaphragmatic fixation of ventriculo peritoneal  
shunt tube in peritoneal cavity  
Medha Vyas et al., India

EP290  Structural and functional changes of the median nerve in carpal tunnel syndrome  
Mahmoud Wahdan et al., Egypt

EP291  The purely endoscopic supracerabellar infratentorial approach for resecting pineal region  
tumors with preservation of cerebellomesencephalic vein: technical note and preliminary clinical  
outcomes  
Silin Wu et al., China

EP292  Clinical outcome of cervical key-hole corpectomy for cervical myelopathy with ossification  
of posterior longitudinal ligament  
Ismail Yuce et al., Turkey

EP293  Long-term clinical outcome and reoperation rate after microsurgical bilateral decompression  
via unilateral approach of lumbar spinal stenosis  
Ismail Yuce et al., Turkey

EP294  Management of intradural spinal tumors: analysis of resectability by minimally invasive approach  
and outcome  
Ismail Yuce et al., Turkey

EP295  The analysis of clinical characteristics and surgical results of upper lumbar disc herniations  
Ismail Yuce et al., Turkey

EP296  Mesenchymal osseous metaplasia leading to posttraumatic syringomyelia– case report and  
literature overview  
Aleksandra Zdravkovic et al., Serbia

EP297  Case report of multicentric hemangioblastoma  
Aleksandra Zdravkovic et al., Serbia

EP298  What we can expect before surgery when we saw cystic lesion intramedulary in  
thoraco-lumbar spine?  
Aleksandra Zdravkovic et al., Serbia

EP299  Depression in brain tumor patients  
Nenad Zivkovic et al., Serbia
EP300 Percutaneous endoscopic interlaminar lumbar foraminotomy (PEILF) and nucleotomy (PEILN): A case series of 23 patients
Nenad Zivkovic et al., Serbia

EP301 Periradicular transforaminal infiltration for lumbar radiculopathy
Nenad Zivkovic et al., Serbia

EP302 Tubular microscopes discectomy (TMD): retrospective study of 47 patients
Nenad Zivkovic et al., Serbia
REGISTRATION FORM

Please complete online Registration on our website www.wfnsbelgrade2019.talkb2b.net

PRE-MEETING COURSES, MARCH 21ST, 2019

Each Course has limited number of participants based on principle first come first served. Endoscopy Course has limited number of up to 20 participants and all other Courses have limited number of up to 40 participants.

<table>
<thead>
<tr>
<th>Course</th>
<th>Registration fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFNS Education</td>
<td>FREE</td>
</tr>
<tr>
<td>WFNS Endoscopy</td>
<td>€500,00</td>
</tr>
<tr>
<td>WFNS Surgical Anatomy</td>
<td>€50,00</td>
</tr>
<tr>
<td>Global Neuro</td>
<td>€50,00</td>
</tr>
<tr>
<td>AO Spine</td>
<td>€50,00</td>
</tr>
<tr>
<td>Spine Intraoperative Navigation</td>
<td>€50,00</td>
</tr>
</tbody>
</table>

MEETING COURSE, MARCH 22ND-23RD, 2019

This Course has limited number of 15 participants per day based on principle first come first served.

<table>
<thead>
<tr>
<th>Course</th>
<th>Registration fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day I</td>
<td>Included in Congress Registration Fee</td>
</tr>
<tr>
<td>Day II</td>
<td>Included in Congress Registration Fee</td>
</tr>
</tbody>
</table>

WFNS 2019 INTERNATIONAL MEETING, March 22ND-24TH, 2019

Registration is mandatory for all categories

<table>
<thead>
<tr>
<th>Category:</th>
<th>Early registration by October 01st, 2018</th>
<th>Late registration from October 02nd 2018 until February 01st, 2019</th>
<th>On-site registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>FREE</td>
<td>FREE</td>
<td>FREE</td>
</tr>
<tr>
<td>Board exam neurosurgeons</td>
<td>300 €</td>
<td>350 €</td>
<td>400 €</td>
</tr>
<tr>
<td>Reduced Category*</td>
<td>100 €</td>
<td>150 €</td>
<td>150 €</td>
</tr>
<tr>
<td>Medical students</td>
<td>FREE</td>
<td>FREE</td>
<td>FREE</td>
</tr>
</tbody>
</table>
*Residents / Young neurosurgeons below age of 40 / Participants from Low income Countries [link 1] / Lower middle income [link 2] (refer to list qualified by World Bank). Please upload the photocopy of passport with registration form.

REGISTRATION FEES INCLUDES: Congress materials, admission to all scientific sessions, buffet lunches, refreshments and coffee breaks indicated in the program and VAT.

According to the decision of the Scientific Committee, 30 best oral presentations will be awarded with free registration and accommodation.

SOCIAL PROGRAM

| Social Dinner, March 23rd, 2019 | 50 € |

REGISTRATION CANCELLATION TERMS

- Requests for registration cancellation must be submitted in writing to the Secretariat at wfns2019belgrade@snss.org.rs
- For cancellations received until October 01\textsuperscript{st}, 2018 refund of registration fees will be 100%.
- For cancellations received until February 01\textsuperscript{st}, 2019 refund of registration fees will be 50%.
- After that the registration fee will not be refunded.
- Please note that registration refunds will be processed within 30 days after the end of Meeting, bank charges will be deducted from the refund.
- If no refund is required but a change in participant registration is needed, then the Secretariat must be informed in writing via email to wfns2019belgrade@snss.org.rs
CALL FOR ABSTRACTS
Abstract guidance & Online submission

The Scientific Committee of the WFNS 2019 International Meeting welcomes the submission of scientific abstracts. Authors are invited to submit abstracts in the following sub-categories:

- Neuro-oncology
- Neurovascular
- Neurotrauma and Intensive Care
- Spine and Peripheral Nerve
- Pediatrics
- Functional and Stereotactic Neurosurgery
- Varia

Abstract(s) should be submitted on line on the web site
The abstract should be submitted by January 15th, 2019.
All abstracts will be reviewed. Accepted abstracts will be published in the Abstract Book.
The best abstracts will be included in the main scientific program.

Carefully read the guidelines before submitting your abstract. Acknowledgement of receipt of your submission will be returned to your e-mail address. Please note, that acknowledgement of receipt of your abstract submission does not mean that your abstract is accepted by the Scientific Committee.

SUBMISSION GUIDELINES

- Abstracts must be submitted in English.
- Titles should contain no more than 200 characters.
- Abstract text should contain no more than 300 words.
- Use standard abbreviations. Place a special or unusual abbreviation in parenthesis after the full word when it appears for the first time.
- Abstracts must be written in comprehensible English and must conform to the guidelines or they will not be accepted. It is the author's responsibility to submit a correct abstract.
- Any tables, graphs or diagrams should be upload together with the abstract.
- The organizers of this event take no responsibility for any published abstracts submitted. Any issues or errors arising from the abstracts are solely the responsibility of the authors.
- Changes to abstract can only be accepted until the deadline
- By submitting his/her/their work, the Author(s) consent to the publication of the abstract and transfer and assign to the Congress organizers the rights to edit, publish, reproduce, distribute copies and to prepare derivative works such as press releases. Author(s) represent and warrants that he/she/they is/are sole author(s) of the work, that all authors have participated in and agree with the content and conclusions of the work, and that the work is original and does not infringe upon any copyright, proprietary or personal right of any third party. If the work is not original, author(s) should reference original source and ensure all relevant permission and/or authorization to re-use have been obtained.

NOTIFICATION OF ACCEPTANCE

- Upon submission, you will receive an acknowledgement email notifying that your abstract has been received with your Abstract ID.
- Once the Abstract Submission closes, all abstracts will be reviewed by the Scientific Committee. The Scientific Committee reserves the right to select the abstracts relevant to the sessions and decide on the final form of presentation.
- Notification of acceptance/rejection will be e-mailed to you no later than February 15th, 2019. (Contact Scientific Committee if you have not received your notification e-mail by wfns2019belgradeabstract@snss.org.rs).
- If the abstract is accepted, applicant MUST register and pay registration fee.
- All successfully accepted abstract submitters must present their abstract in the form of Oral or Poster Presentation during the Congress.
- The corresponding author will receive any correspondence concerning the abstract.

For any inquiries, please contact the Scientific Committee at wfns2019belgradeabstract@snss.org.rs
Please visit the website http://www.wfnsbelgrade2019.talkb2b.net/ for more details.
Welcome to Belgrade, capital of Serbia!

City of many nations, BELGRADE is a city with a tumultuous, but also frequently tragic past, primarily due to its unique position at the confluence of the Sava and Danube rivers, on the border between the East and the West. Due to its position it was rightfully named “Gates of the Balkans” and the “Doors of Middle Europe”. Belgrade is one of the oldest cities in Europe with a 7000-year history. The space around the large rivers of the Sava and Danube was already populated in the Stone Age. The Celts named the populated fortress SINGIDUNUM, where the first part of the word „Singi“ means round, and „dunum“ fortification or town. In the Byzantine Age, Singidunum became an important city of the vast empire. The Slavic name BEOGRAD (Beli grad – White City – probably because its ramparts were made of white limestone) may first be found in records from the 9th century.

Belgrade flourished in 19th and 20th centuries during the reign of the Obrenovic dynasty and Karadjodjevic dynasty. It was then and it still is an important strategic point, the crossroads from the East to the West and one of the most significant cities in the Balkans.

Visitors who come to Belgrade for the first time, never leave indifferent, and always come back to it with joy.

More importantly, Belgraders like everyone, so get to know Belgrade by getting to know Belgraders!
WFNS 2019 INTERNATIONAL MEETING
VENUE & ACCOMMODATION

CROWNE PLAZA BELGRADE 4*
HEADQUARTER HOTEL

FALKENSTEINER 4*
https://www.falkensteiner.com/en/hotel/belgrad/the-hotel

HOLIDAY INN 4*

HOSTEL ARKABARKA
http://arkabarka.net/

HOSTEL GREEN HOUSE
http://www.greenhouse.rs/

HYATT REGENCY 5*
http://hyattregencybeograd.rs/

IN HOTEL 4*
http://www.inhotel-belgrade.rs/rs

TULIP INN PUTNIK
BELGRADE 3*
http://www.tulipinnputnikbelgrade.com/

HOSTEL SAN ART
http://www.sanarthostel.rs/

TOS recommendation for accommodation in Belgrade:
http://www.srbija.travel/accommodation/accommodation-search.600.html
SNSS & SeENS
Technical support and organization

ULTRA MARINE D.O.O
Phone: +381.11.334.81.58
Fax: +381.11.334.82.55, +381.11.334.94.51
e-mail: wfns2019belgrade@snss.org.rs
office@ultramarine.rs

wfnsbelgrade2019.talkb2b.net