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 - TBA

MEETING COURSE
- Besta Neurosim Center

Save the date
96th Anniversary of Neurosurgery in Serbia
81st Anniversary of Clinic for Neurosurgery, Belgrade, Serbia
PRESIDENTS OF THE MEETING

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

Prof. Dr. Marco Cenzato, Italy
SINCH President

HONORARY PRESIDENTS OF THE MEETING

Prof. Dr. Franco Servadei, Italy
WFNS President

Prof. Dr. Francesco Tomasello, Italy
WFNS Honorary President

Prof. Dr. Paolo Cappabianca, Italy
SINCH Secretary

Prof. Dr. Kresimir Rotim, Croatia
SeENS Honorary President

HONORARY COMMITTEE
TBA
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 colleague,

It is my great pleasure to announce, on behalf of SINCH, the International Meeting WFNS 2019 to be held in Belgrade, Serbia, from 21 to 24 March 2019, organized with the Serbian Society of Neurosurgery (SNSS) and the collaboration of the Society of Neurosurgery of Southeast Europe (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 a 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, committed to sharing all the information and the most advanced resources in training, technology and the practice of neurosurgery.

As president of 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’m 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.

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Welcome!

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

WELCOME ADRESSES
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!

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**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 in 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.
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 liasons and to make new once after a period of almost 20 years of poor communication 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. Domenico d’Avella, Italy

Prof. Dr. Nebojsa Stojanovic, Serbia

Prof. Dr. Alberto Delitala, Italy

Prof. Dr. Fatos Olldashi, Albania

Dr. Venko Filipce, Macedonia

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
FACULTY
ICONFIRMED SO FAR/

Acar Ferudin, Turkey
Adelson David, USA
Akalan Nejat, Turkey
Al-Mefty Ossama, USA
Alolama Mohammad, UAE
Ammirati Mario, USA
Andreou Alexandros, Greece
Andrews Russell, USA
Antoniadis Gregor, Germany
Arcadio Perilla Cepeda Tito, Colombia
Arnautovic Kenan, USA
Arraez Miguel, Spain
Bakhti Souad, Algeria
Barbagallo Giuseppe, Italy
Barbanera Andrea, Italy
Banczerowski Peter, Hungary
Benes Vladimir, Czech Republic
Bhatoe Harjinder, India
Boop Frederick, USA
Bosnjak Roman, Slovenia
Broggi Giovanni, Italy
Bruneau Michael, Belgium
Buki Andras, Hungary
Cappabianca Paolo, Italy
Cardali Salvatore, Italy
Cavallo Luigi, Italy
Cenatzu Marco, Italy
Ceylan Savas, Turkey
Chandran Hari, Malaysia
Chernov Mikhail, Russia/Japan
Ciurea Alexandru-Vlad, Romania
Conti Alfredo, Italy
Costa Francesco, Italy
D’Angelo Vincenzo, Italy
D’avella Domenico, Italy
De Bonis Pasquale, Italy
de Oliveira Evandro, Brazil
Del Basso De Caro Maria Laura, Italy
Del Maestro Rolando, Canada
Delfini Roberto, Italy
Delitala Alberto, Italy
Demetriades Andreas, UK
Deojuhari Chrandrashekhar, India
Di Meco Francesco, Italy
Di Rocco Concezio, Germany
Ducatti Alessandro, Italy
Duffau Hugues, France

Djilvesi Djula, Serbia
Djurovic Branko, Serbia
El Abbadi Bendahane Najia, Morocco
El Azhari Abdessamad, Morocco
El Khamlichi Abdeslam, Morocco
El Ouahabi Abdessamad, Morocco
El Shawarbi Amr, UAE
Emmez Hakan, Turkey
Enchev Yavor Petkov, Bulgaria
Esposito Vincenzo, Italy
Fahlbusch Rudolf, Germany
Feng Ling, China
Ferrelli Paolo, Italy
Ferraresi Stefano, Italy
Fiegen Graham, South Africa
Florian Ioan Stefan, Romania
Fornari Maurizio, Italy
Foroglou Nicolas, Greece
Fountas Konstantinos, Greece
Fontanella Marco Maria, Italy
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
Ghadrifour Reza, Italy
González-López Pablo, Spain
Grotenhuis Andre, Netherlands
Grujicic Danica, Serbia
Guedes Corrêa José Fernando, Brazil
Giussani Carlo, Italy
Hoit Daniel, USA
Iaccarino Corrado, Italy
Iacoangeli Maurizio, Italy
Innocenzi Gualtiero, Italy
Ivanov Marcel, UK
Jacques Line, USA
Jokovic Milos, Serbia
Kanaan Imad, Saudi Arabia
Kandasamy Regunath, Malaysia
Kasper Ekkehard, Canada
Kato Yoko, Japan
Kelly Daniel, USA
Khan Tariq, Pakistan
Kirış Talat, Turkey
Kline David, USA
Kliot Michael, USA
Knosp Engelbert, Austria
Konovalov Alexander, Russia
Konovalov Nikolay, Russia
Lafuente Jesus, Spain
Lavano Angelo, Italy
Locatelli Davide, Italy
Loftus Christofer, USA
Mahan Mark, USA
Maldonado Igor, France
Mao Ying, China
Masini Marcos, Brazil
Masotto Barbara, Italy
Mathiesen Tilt, Denmark
Matula Christian, Austria
Mazzatenta Diego, Italy
Meling Torstein, Switzerland/Norway
Milani Davide, Italy
Milicevic Milajlo, Serbia
Milisavljevic Milan, Serbia
Misra Basant, India
Morcos Jaques, USA
Mura Jorge, Chile
Nabavi Arya, Germany
Nair Suresh, India
Nikolov Vesna, Serbia
Oertel Joachim, Germany
Olivi Alessandro, Italy
Olldashi Fatos, Albania
Omerhodzic Ibrahim, Bosnia and Herzegovina
Oppido Piero, Italy
Osorio-Fonseca Enrique, Colombia
Oyesiku Nelson, USA
Ozek Memet, Turkey
Pamir Necmettin, Turkey
Papic Vladimir, Serbia
Paterno Vincenzo, Germany
Pedechenko Yevhenii, Ukraine
Peker Selcuk, Turkey
Perin Alessandro, Italy
Perrini Paolo, Italy
Petrela Mentor, Albania
Picozzi Piero, Italy
Potapov Alexander, Russia
Raco Antonino, Italy
Radulovic Danilo, Serbia
Rasalingam Kantha, Malaysia
Rasulic Lukas, Serbia
Robertson Scott, USA
Romoli Stefano, Italy
Rosseau Gail, USA
Rotim Kresimir, Croatia
Sajko Tomislav, Croatia
Sala Francesco, Italy
Samii Amir, Germany
Samii Majid, Germany
Schaller Karl, Switzerland
Schroeder Henry, Germany
Scerrati Massimo, Italy
Selviaridis Panagiotis, Greece
Servadei Franco, Italy
Shah Nishit, India
Signoretto Stefano, Italy
Sindou Marc, France
Solari Domenico, Italy
Solaroglu Ihsan, Turkey
Somma Teresa, Italy
Spagnuolo Edgardo, Uruguay
Spinner Robert, USA
Spyrou Michalakis, Cyprus
Splavski Bruno, Croatia
Steno Juraj, Slovakia
Stefini Roberto, Italy
Stojanovic Nebojsa, Serbia
Talahma Imad, Palestine
Talamonti Giuseppe, Italy
Teo Charlie, Australia
Tessitore Enrico, Italy
Thome Claudius, Austria
Tomasev Francesco, Italy
Tu Yong Kwang, Taiwan
Ture Ugur, Turkey
Visocchi Massimiliano, Italy
Vorsic Matjaz, Slovenia
Vukic Miroslav, Croatia
Vulekovic Petar, Serbia
Watts Colin, UK
Wahjoepramono Eka Julianta, Indonesia
Westphal Manfred, Germany
Winkler Peter, Austria
Xhumari Artur, Albania
Yaman Onur, Turkey
Yampolsky Claudio, Argentina
Zager Eric, USA
Zileli Mehmet, Turkey
## SCIENTIFIC PROGRAM - SCHEME

<table>
<thead>
<tr>
<th>21st, Thursday</th>
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<tr>
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### GLOBAL NEUROSURGERY

### COFFEE BREAK

### WOMEN IN NEUROSURGERY

### YOUNG NEUROSURGEONS FORUM
WFNS 2019
INTERNATIONAL MEETING
ONE WORLD, ONE NEUROSURGERY

March 21st-24th 2019
Crowne Plaza, Belgrade

PRE-MEETING COURSES

96th Anniversary of Neurosurgery in Serbia
81th Anniversary of Clinic for Neurosurgery, Belgrade, Serbia
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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 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*

<table>
<thead>
<tr>
<th>Time</th>
<th>Lecture</th>
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| 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 Arraez 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*

<table>
<thead>
<tr>
<th>Time</th>
<th>Lecture</th>
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</table>
| 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  Welcome and Introduction of faculty  P. Cappabianca, C. Deopujari
08.30-09.30 Instructional talks:  Moderators: A. Grotenhuis, P. Cappabianca
  08.30  Anatomy 1: Osteology of Nose, PNS and Midline Skullbase and importance of bony landmarks and blood supply  M. Milisavljevic Belgrade
  08.45  Anatomy 2: Endoscopic anatomy for endonasal transsphenoidal approach and principles of reconstruction  N. Shah
  09.00  Principles and Nuances of Endoscopic Pituitary surgery  P. Cappabianca
  09.15  Cavernous Sinus and ICA management  Daniel Kelly
09.30-10.30 Dissection Demo  N. Shah, D. Solari and D. Kelly
10.30-12.30 Hands on for delegates Supervised by faculty
12.30-13.15 Lunch
13.15- 14.30 Instructional talks: Moderators  H. Schroeder, C. Deopujari
  13.15  Extended Approaches: corridors  A. Grotenhuis
  13.15  Endonasal approaches to Craniopharyngiomas  D. Locatelli
  13.30  Endonasal approaches to Meningiomas  F. Gentilli
  13.45  Endonasal Chordomas and other clival lesions  H. Schroeder
14.00  Endonasal Approach to CV junction  D. Solari
14.15  Demo dissection: ACF, Parasellar, Clivus  M. Milicevic, H Schroeder, A 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.
WFNS SURGICAL ANATOMY
PRE-MEETING COURSE

WFNS Neurosurgical Anatomy Committee, Chair: Prof. Dr. Vladimir Benes

7.55-08.00 Introduction
Vladimir Beneš

8.00-09.30 Anatomy of cranial nerves
Santarius, Gonzáles-López

9.30-09.50 Relation of CN to brain vessels
Maldonado

9.50-10.10 Imaging of cranial nerves
Nabavi

10.10-10.40 Break

10.40-11.00 Spinal cord and nerve roots
Peréz

11.00-11.20 Tumor cases and related anatomy
Wahjoepramono

11.20-11.40 Cranial nerves in Dolenc approach
Cherian

11.40-12.00 Cranial nerves during anterior clinoidectomy
Kanaan

12.00-12.20 Preserving the olfactory nerve
Santarius

12.20-13.30 Lunch

13.30-13.50 Neurovascular conflict
Turel

13.50-14.10 Schwannomas
Santarius

14.10-14.30 Ependymomas
Kasper

14.30-15.00 Posterior fossa meningiomas
Beneš

15.00-15.20 CC junction
Daniels

15.20-15.40 Jugular foramen tumors

15.40-16.10 Break

16.10-17.50 Case discussion
10 mins each

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
Registration 10:00h

• GLOBAL NEURO
  Prof. Dr. Christian Matula
  Venue: Hotel Crowne Plaza Belgrade

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

• SPINE INTRAOPERATIVE NAVIGATION - TBC
  Venue: Hotel Crowne Plaza Belgrade
GLOBAL NEURO COURSE - NEUROTRAUMA

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.

Venue: Hotel Crowne Plaza, Belgrade

This course has limited number of 40 participants based on the principle first come first served.
AO SPINE
ADVANCED SEMINAR - CERVICAL SPINE

Chairperson:
Alessandro Ducati, Turin, Italy

Faculty:
Giuseppe Barbagallo, Catania, Italy
Claudius Thomé, Innsbruck, Austria
Stefano Romoli, Firenze, Italy

Preliminary program - TBA

Venue: Hotel Crowne Plaza, Belgrade

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

PROGRAM

/TBA/

Venue: Hotel Crowne Plaza, Belgrade

This course has limited number of 40 participants based on the principle first come first served.
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 Congress. For the duration of the entire Congress, the Simulation Centre will be open to showcase the simulators and allow all attending resident students and staff members interested, to take part in the simulation sessions.

**Day I: WELCOMING PRESENTATIONS**

**Early Morning:** 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:** 20 participants

Once the course is finished the simulation center is open to the public – for everyone to come and try our simulators

**Day II: FOUR - HOUR COURSE**

20 participants

Once the course is finished the simulation center is open to the public – for everyone to come and try our simulators

Time slot for each day will be announced soon.

**Venue:** Hotel Crowne Plaza, Belgrade

This course has limited number of 20 participants per day based on the principle first come first served.
WFNS 2019
INTERNATIONAL MEETING
ONE WORLD, ONE NEUROSURGERY

March 21st-24th 2019
Crowne Plaza, Belgrade

PRELIMINARY
SCIENTIFIC PROGRAM

*Preliminary scientific program is subject to change.
Thursday, March 21st, 2019

08:00-19.00  PRE-MEETING COURSES

19:30-22:00  OPENING CEREMONY AND WELCOME RECEPTION
Venue: Hotel Crowne Plaza

Friday, March 22nd, 2019

08:00-08:15  Opening remarks  Hall I

PLENARY SESSION I
Chairs: Lukas Rasulic, Marco Cenzato  Hall I

08:15-08:30  Modern aspects of minimally invasive spinal surgery, ICT and navigation
Nikolay Konovalov

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

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

09:00-09:15  Hybrid revascularisation for ischemic stroke
Ling Feng

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

09:30-10:30  GLOBAL NEUROSURGERY SESSION
Gail Rosseau, Franco Servadei

10:30-11:00  Coffee Break
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 11:00-11:15 | **Shuntscope in pediatric patients**  
|           | Joachim Oertel                                                         |
| 11:15-11:30 | **Pituitary Adenomas in pediatric age: an endoscopic approach**  
|           | Davide Locatelli                                                       |
| 11:30-11:45 | **Breakthroughs in Medulloblastoma management. Can it be cured?**  
|           | Alexandru-Vlad Ciurea                                                   |
| 11:45-12:00 | **Surgical approach to thalamic tumors**  
|           | Memet Özek                                                             |
| 12:00-12:15 | **Spinal tumors in children**  
|           | Concezio Di Rocco                                                      |
| 12:15-12:30 | **Rosette forming glioneuronal tumors of the 4th ventricle**  
|           | Nejat Akalan                                                           |
| 12:30-12:45 | **Management of Spina Bifida**  
|           | Graham Fieggen                                                         |
| 12:45-13:00 | **Long-term surgical results on craniopharyngiomas**  
|           | Abdeslam El Khamlichi                                                  |
| 13.00-14.00 | **Lunch**                                                             |

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</table>
| 14:00-14:15 | **KEYNOTE LECTURE: What is new in WHO classification?**  
|           | Maria Laura Del Basso De Caro                                           |
| 14:15-14:30 | **KEYNOTE LECTURE: When should we reoperate glioblastoma?**  
|           | Danica Grujičić                                                        |
| 14:30-14:45 | **KEYNOTE LECTURE: Surgical treatment of the lateral ventricle tumors**  
|           | Vincenzo D’Angelo                                                     |
| 14:45-15:30 | **ORAL PRESENTATIONS**                                                 |
| 15:30-15:45 | **Coffee break**                                                       |
WOMEN IN NEUROSURGERY
Chairs: Souad Bakhti, Debora Garozzo

            Teresa Somma

15.52–15.59  Men’s Contribution For Development Of WINS
            Hari Chandran

15.59–16.30  TBA

TUMOR (OP-5)
Chairs: Milos Jokovic, Ibrahim Omerhodzic

Hall 1

16:30–16:45  KEYNOTE LECTURE: Treatment of low grade glioma
            Milos Jokovic

16:45–17:00  KEYNOTE LECTURE: Cerebellar gliomas
            Ibrahim Omerhodzic

17:00–17:15  KEYNOTE LECTURE: Clinoid area meningiomas, lessons from 48 personnal cases
            Mentor Petrela

17.15–18.00  ORAL PRESENTATIONS

MT-2

TUMOR
Chairs: Miguel Arraez, Karl Schaller

Hall 2

11:00–11:15  Surgical management of petrous apex lesions
            Miguel Arraez

11:15–11:30  Endonasal approach to craniopharyngiomas
            Luigi Cavallo

11:30–11:45  Meningiomas of the CP angle
            Panagiotis Selviaridis

11:45–12:00  Cranioorbital pretemporal approach to sellar/juxtasellar lesions
            Kenan Arnaoutovic

12:00–12.15  Long-term morbidity of meningioma
            Tiit Mathiesen

12:15–12.30  Management of foramen magnum Meningioma
            Najia El Abbadi Bendahane
12:30-12:45  A Variant of The Subfrontal Approach in The Management of Giant Anterior Skull Base Meningiomas
Natale Francaviglia

12:45-13:00  Management of giant pituitary adenomas
Nicolas Foroglou

13:00-14:00  Lunch

SPINE (OP-2)
Chairs: Tito Arcadio Perilla Cepeda, Reza Ghadirpour

14:00-14:15  KEYNOTE LECTURE: Spinal intramedullary tumors
Hakan Emmez

14:15-14:30  KEYNOTE LECTURE: Intraoperative monitoring in spinal cord tumor surgery
Reza Ghadirpour

14:30-14:45  KEYNOTE LECTURE: Management of Complications after transpedicular fixations
Tito Arcadio Perilla Cepeda

14:45-15:30  ORAL PRESENTATIONS

15:30-15:45  Coffee break

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

16:30-16:45  KEYNOTE LECTURE: Indications for reconstructive surgery of the cervical spine
Nebojsa Stojanovic

16:45-17:00  KEYNOTE LECTURE: 360° surgical approaches to the craniocervical junction: a fearless revolution around the skull base
Massimiliano Visocchi

17:00-17:15  KEYNOTE LECTURE: Sagittal Balance: It's impotance in spine surgery
Onur Yaman

17:15–18:00  ORAL PRESENTATIONS
MT-3  
SPINE  
Chairs: Jesus Lafuente, Roberto Delfini  
Hall 3

11:00-11:15  New classification for lumbar microinstability: clinical and radiological results at 2 yrs follow up  
Roberto Delfini

11:15-11:30  Long Term Results with Minimally Invasive Plif In Degenerative Lumbar Spondylolisthesis  
Matjaž Voršič

11:30-11:45  Combined anterior and posterior approach for complex cervical cases  
Maurizio Fornari

11:45-12:00  The surgery of intramedullary spinal cord tumors in the era of neuromonitoring  
Francesco Sala

12:00-12.15  Cervical myelopathy: how to identify best responders to surgery  
Enrico Tessitore

12:15-12.30  Cervical Intramedullary tumors and its mimicks; How to avoid Maslows Hammer?  
Suresh Nair

12:30-12.45  Skeptical approach to the spine surgery  
Michalakis Spyrou

12:45-13.00  Decision making in spine surgery  
Kantha Rasalingam

13.00-14.00  Lunch

VASCULAR (OP-3)  
Chairs: Marco Fontanella, Harjinder Bhatoe  
Hall 3

14:00-14:15  KEYNOTE LECTURE: Cerebral Cavernomas: treatments and problems  
Marco Fontanella

14:15-14:30  KEYNOTE LECTURE: Surgery for Cerebral Arteriovenous Malformations  
Harjinder Bhatoe

14:30-14.45  KEYNOTE LECTURE: Neurovascular conflicts  
Barbara Masotto

14.45-15.30  ORAL PRESENTATIONS

15:30-15:45  Coffee break
16:30-16:45 KEYNOTE LECTURE: Wisdom in management of Giant Aneurysms
Eka J Wahjoepramono

16:45-17:00 KEYNOTE LECTURE: Clipping Strategies in Complex Aneurysms
Talat Kıriş

17.00–17.15 KEYNOTE LECTURE: Surgery of MCA Aneurysm
El Azhari Abdessamad

17.15–18.00 ORAL PRESENTATIONS

11:00-11:15 Arachnoid membrane in menigioma surgery
Vladimir Benes

11:15-11:30 Reconstructive Neurosurgery After TBI
Alexander Potapov

11:30-11:45 First Experiences with a Dedicated Hybrid OR for Spine Surgery
Amir Samii

11:45-12:00 Cerebral Revascularization Surgery: Techniques and Applications
Kwang Tu Yong

12:00-12.15 Posterior Fossa Pilocytic Astrocytomas
Domenico D’ avella

12:15-12.30 Usefulness of minimally invasive surgery (MIS) for the management of thoracolumbar spinal metastasis
Claudio Yampolsky

12:30-12.45 Extent of surgical resection of malignant astrocytoma of the spinal cord
Vincenzo Paterno

12.45-13.00 Moyamoya, surgical experience
Artur Xhumari

13.00-14.00 Lunch
### TUMOR (OP-4)

**Chairs:** Tomislav Sajko, Giuseppe Talamonti

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>14:00-14:15</td>
<td><strong>KEYNOTE LECTURE:</strong> Temporal DNET: seizure and functional outcome</td>
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<tr>
<td></td>
<td>Tomislav Sajko</td>
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<tr>
<td>14:15-14:30</td>
<td><strong>KEYNOTE LECTURE:</strong> Neuroendoscopy and combined therapy in ventricular tumors</td>
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<td>Piero Andrea Oppido</td>
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<tr>
<td>14:30-14:45</td>
<td><strong>Endoscopic endonasal approach to treat craniopharyngiomas</strong></td>
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<td>Diego Mzzatenta</td>
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<tr>
<td>14:45-15:30</td>
<td><strong>ORAL PRESENTATIONS</strong></td>
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<tr>
<td>15:30-15:45</td>
<td>Coffee break</td>
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</table>

### TRAUMA (OP-8)

**Chairs:** Stefano Signoretti, Imad Talahma

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>16:30-16:45</td>
<td><strong>KEYNOTE LECTURE:</strong> Consensus Conference on Cranioplasty</td>
</tr>
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<td>Corrado Iaccarino</td>
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<tr>
<td>16:45-17:00</td>
<td><strong>KEYNOTE LECTURE:</strong> Correct decompressive craniectomy when no ICP monitoring is available</td>
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<td>Imad Talahma</td>
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<tr>
<td>17.00–18.00</td>
<td><strong>ORAL PRESENTATIONS</strong></td>
</tr>
<tr>
<td>08.15-18.00</td>
<td>Besta NeuroSim Center Simulation</td>
</tr>
</tbody>
</table>

Hall TBA
PLENARY SESSION 2
Chairs: Kresimir Rotim, Francesco Tomasello

08:00-08:15  Problems of geriatric spine surgery
             Mehmet Zileli

08:15-08:30  The History of Changes in Nerve Surgery Since World War II
             David Kline

08:30-08:45  Clipping aneurysms - lessons I have learnt after over 1000 operated aneurysms
             Ioan Stefan Florian

08:45-09:00  Lateral skull base meningiomas: Philosophy and Techniques
             Jaques Morcos

09:00-09:15  Endoscopic endonasal approach for anterior fossa meningiomas
             Paolo Cappabianca

09:15-09:30  Craniocervical junction chordomas
             Sebastien Froelich

09:30-09:45  Treatment options for intracranial vessel dissections
             Alexandros Andreou

09:45-10:00  New insights into the surgical management of diffuse low-grade gliomas
             Hugues Duffau

10:00-10:15  Education in spine surgery in the XXI century
             Jesus Lafuente

10:15-10:30  Brain Mapping for Tumors in Eloquent Areas
             Isabelle Germano

10:30-11:00  Coffee break

MT-5  VASCULAR
Chairs: Edgardo Spagnuolo, Abdessamad El Ouahabi

11:00-11:15  New Technologies in Aneurysm Surgery
             Jorge Mura

11:15-11:30  Surgery of complex aneurysms
             Edgardo Spagnuolo

11:30-11:45  Management of ruptured intracranial aneurysms in the Post Isat era:
             current indications and place of microsurgical clipping
             Abdessamad El Ouahabi
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>11:45-12:00</td>
<td>Giant aneurysms multimodal treatments</td>
<td>Marco Cenzato</td>
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<tr>
<td>12:00-12:15</td>
<td>Future challenges of vascular microsurgery</td>
<td>Kresimir Rotim</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>New endovascular aneurysm technology</td>
<td>Daniel Hoit</td>
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<tr>
<td>12:30-12:45</td>
<td>The Role of Intraoperative MRI in Neurovascular Surgery: Our Experience</td>
<td>Antonino Raco</td>
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<tr>
<td>12:45-13:00</td>
<td>ICA blister aneurysms</td>
<td>Torstein Meling</td>
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<tr>
<td>13:00-14:00</td>
<td>Lunch</td>
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**TUMOR (OP-9)**

**Chairs:** Petar Vulekovic, Paolo Ferroli

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>14:00-14:15</td>
<td>KEYNOTE LECTURE: Role of stereotactic biopsy of brain tumors in neurosurgical practice</td>
<td>Petar Vulekovic</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>KEYNOTE LECTURE: Aggressive multimodal management of brain metastasis</td>
<td>Alfredo Conti</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>KEYNOTE LECTURE: Skull base and cranio-facial approaches to minimize approach-related morbidity for intradural neoplastic and vascular lesions</td>
<td>Maurizio Iacoangeli</td>
</tr>
<tr>
<td>14:45-14:52</td>
<td>Brain metastasis- current therapeutic options</td>
<td>Vladimir Papic</td>
</tr>
<tr>
<td>14:52-15:30</td>
<td>ORAL PRESENTATIONS</td>
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<tr>
<td>15:30-15:45</td>
<td>Coffee break</td>
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**YOUNG NEUROSURGEONS FORUM (OP-9)**

**Chairs:** Andreas Demetriades, TBA

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>15:45-16:30</td>
<td>ORAL PRESENTATIONS</td>
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**SPINE & PERIPHERAL NERVE (OP-13)**

**Chairs:** Gualtiero Innocenzi, Fatos Olldashi

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>16:30-16:45</td>
<td>KEYNOTE LECTURE: Neuronavigation in Dorso-Lumbar Surgery</td>
<td>Gualtiero Innocenzi</td>
</tr>
<tr>
<td>16:45-17:00</td>
<td>KEYNOTE LECTURE: How Much Fusion Do We Need?</td>
<td>Fatos Olldashi</td>
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</tbody>
</table>
17.00-17.15  KEYNOTE LECTURE: TBA  
Andrea Barbanera

17.15–18.00  ORAL PRESENTATIONS

19:30-22:00  SOCIAL DINNER

**TRAUMA**  
Chairs: Corrado Iaccarino, David Adelson

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Title</th>
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<tbody>
<tr>
<td>11:00-11:15</td>
<td>Biomarker research in Traumatic Brain Injury: an update</td>
<td>Andras Buki</td>
</tr>
<tr>
<td>11:15-11:30</td>
<td>The antisecretory factor 16 and the ICP management</td>
<td>Mohammad Alolama</td>
</tr>
<tr>
<td>11:30-11:45</td>
<td>Pediatric Decompressive Craniectomy for Severe TBI</td>
<td>David Adelson</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Decompressive Craniectomies without ICP Monitoring</td>
<td>Tariq Khan</td>
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<tr>
<td>12:00-12:15</td>
<td>Skull Base Trauma – Worthwhile dealing with that?</td>
<td>Christian Matula</td>
</tr>
<tr>
<td>12:15-12:30</td>
<td>Severe traumatic brain injury patients management - institutional experience and protocol</td>
<td>Djula Djilvesi</td>
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<tr>
<td>12:30-12:45</td>
<td>3D printing - a new educational tool in neurosurgery</td>
<td>Nikolay Gabrovsky</td>
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<tr>
<td>13.00-14.00</td>
<td>Lunch</td>
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**SPINE & PERIPHERAL NERVE (OP-10)**  
Chairs: Michael Kliot, Jose Fernando Guedes Correa

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Title</th>
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</thead>
<tbody>
<tr>
<td>14:00-14:15</td>
<td>KEYNOTE LECTURE: Perineuriomas</td>
<td>Robert Spinner</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>KEYNOTE LECTURE: We’ve Got Your Back: How the Nerve Surgeon Can Bail Out the Spine Surgeon</td>
<td>Eric Zager</td>
</tr>
<tr>
<td>14:30-14:45</td>
<td>KEYNOTE LECTURE: Minimalistic approaches to craniovertebral junction tumors</td>
<td>Mario Ammirati</td>
</tr>
<tr>
<td>14:45-15.30</td>
<td>ORAL PRESENTATIONS</td>
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<tr>
<td>15:30-15:45</td>
<td>Coffee break</td>
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</tbody>
</table>
GENERAL (OP-14)
Chairs: Miroslav Vukic, Davide Milani

Hall 2
16:30-16:45 KEYNOTE LECTURE: Influence of normal hydrostatic pressure gradient on CSF physiology and hydrocephalus treatment
Miroslav Vukic
16:45-17:00 KEYNOTE LECTURE: FET-PET diagnostic in recurrent gliomas
Roberto Stefini
17.00–17.07 Factors affecting the length of survival of patients with glioblastoma
Vesna Nikolov

17.07–18.00 ORAL PRESENTATIONS
19:30-22:00 SOCIAL DINNER

Hall 3

FUNCTIONAL & PAIN
Chairs: Marc Sindou, Piero Picozzi

11:00-11:15 Palliative Procedures in the Surgical Treatment of Intractable Epilepsy
Massimo Scerrati
11:15-11:30 Arnold occipital neuralgia: can we rewrite the history?
Stefano Ferraresi
11:30-11:45 Endoscope-assisted microvascular decompression for hemifacial spasm
Henry Schroeder
11:45-12:00 Trigeminal neuralgia: from Imaging to Surgery
Marc Sindou
12:00-12.15 Pudendal neuralgia - Experience with the transgluteal approach
Gregor Antoniadis
12:15-12.30 Denervation for durable treatment of spasticity
Mark Mahan
12:30-12.45 New Era in Gamma Knife Radiosurgery
Selçuk Peker
12.45-13.00 Everything You Always Wanted to Know about Radiosurgery of AVM (But Were Afraid to Ask)
Mikhail Chernov
13.00-14.00 Lunch
# FUNCTIONAL & PAIN (OP-11)

**Chairs:** Amr El Shawarbi, Angelo Lavano

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</table>
| 14:00-14:15 | **KEYNOTE LECTURE:** Vagal nerve stimulation for intractable Epilepsy  
Amr El Shawarbi |
| 14:15-14:30 | **KEYNOTE LECTURE:** Spinal cord stimulation for failed back surgery syndrome  
Angelo Lavano |
| 14:30-14:45 | **KEYNOTE LECTURE:** Thoracic outlet syndrome: a common, frequently overlooked cause of non discogenic brachialgia  
Debora Garozzo |
| 14:45-15:30 | **ORAL PRESENTATIONS**                     |
| 15:30-15:45 | **Coffee break**                           |

# PEDIATRICS (OP-15)

**Chairs:** Carlo Giussani, Venelin Gerganov

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</thead>
</table>
| 16:30-16:45 | **KEYNOTE LECTURE:** Management of low grade gliomas in children  
Souad Bakhti |
| 16:45-17.00 | **KEYNOTE LECTURE:** Surgical treatment of Chiari 1 malformation  
Venelin Gerganov |
| 17.00–18.00 | **ORAL PRESENTATIONS**                     |
| 19:30-22:00 | **SOCIAL DINNER**                         |

# HOW TO IMPROVE QUALITY OF PUBLICATIONS

**Chairs:** Tiit Mathiesen, Nelson Oyesiku

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 11:00-11:15 | TBA  
Tiit Mathiesen |
| 11:15-11:30 | Randomized controlled trials in neurosurgery: an assessment of discontinuation and publication outcomes  
Andreas Demetriades |
| 11:30-11:45 | TBA  
Kresimir Rotim |
| 11:45-12:00 | The State of the Journal  
Nelson Oyesiku |
| 12:00-12:15 | TBA  
Andre Grotenhuis |
12:15-12.30  How to convince reviewer?
Ihsan Solaroglu

12:30-13.00  TBA

13.00-14.00  Lunch

**SPINE (OP-12)**
Chairs: Pasquale De Bonis, Danilo Radulovic

14:00-14:15  **KEYNOTE LECTURE:** The evolution of intraoperative navigated 3D fluoroscopic imaging for surgery of spine degenerative diseases
Salvatore Cardali

14:15-14:30  **KEYNOTE LECTURE:** Anterior cervical approach for the treatment of cervical myelopathy
Danilo Radulovic

14:30-14:45  **KEYNOTE LECTURE:** Estimating different methods of outcome for patients having juxta-facet cyst of the lumbar spine
Bruno Splavski

14:45-15.30  **ORAL PRESENTATIONS**

15:30-16:30  **Coffee break**

**SPINE (OP-16)**
Chairs: Michael Bruneau, Yavor Petkov Enchev

16:30-16:45  **KEYNOTE LECTURE:** Management of cervical tumors
Michael Bruneau

16:45-17:00  **KEYNOTE LECTURE:** Vertebroplasty and/or kyphoplasty?
Yavor Petkov Enchev

17.00–18.00  **ORAL PRESENTATIONS**

19:30-22:00  **SOCIAL DINNER**

08.15-18.00  Besta NeuroSim Center Simulation  Hall TBA
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 08:00-08:15  | **Surgical strategies and outcomes for craniopharyngioma in the endoscopic era**  
Daniel Kelly |
| 08:15-08:30  | **Combined endoscopic management of craniopharyngioma**  
Chrandrashekhar Deopujari |
| 08:30-08:45  | **Complications of endoscopic endonasal skull base surgery and their avoidance**  
Andre Grotenhuis |
| 08:45-09:00  | **Extended endoscopic endonasal approaches to clivus chordomas & chondrosarcomas**  
Savaş Ceylan |
| 09:00-09:15  | **Endoscopic endonasal skull base reconstruction**  
Domenico Solari |
| 09:15-09:30  | **Anticoagulation and Hemostasis in Neurosurgery**  
Christopher Loftus |
| 09:30-09:45  | **Research Laboratory for Microsurgical and Endoscopical Anatomy as a translational approach**  
Peter Winkler |
| 09:45-10:00  | **Endoscopic approaches to colloid cysts**  
Alberto Delitala |
| 10:00-10:15  | **Transplanum transtubercle removal of suprasellar meningiomas and craniopharygiomas**  
Roman Bosnjak |
| 10:15-10:30  | **Endoscope Assisted Microneurosurgery for Intracranial Expansive and Vascular Lesions**  
Renato Galzio |
| 10:30-11:00  | Coffee break                                                             |
PLENARY SESSION 3
Chairs: Franco Servadei, Ioan Stefan Florian, Ihsan Solaroglu

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

11:15-11:30 Microsurgery of Complex Aneurysm
Basant Misra

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

11:45-12:00 Surgical management of focal brain stem tumors in kids
Frederick Boop

12:00-12:15 Soccer and Neurosurgery
Nelson Oyesiku

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

12:30-12:45 Third Ventricle Craniopharyngiomas
Alexander Konovalov

12:45-13:15 Surgical approaches for midline tumors
Madjid Samii

13.15-14.00 OP BEST 5, AWARD & CLOSING CEREMONY

MT-10

TUMOR
Chairs: Francesco Di Meco, Charlie Teo

08:00-08:15 Language mapping for parietal gliomas
Igor Maldonado

08:15-08:30 The Impact of DTI Fiber Tracking Based on Navigated Transcranial Magnetic Stimulation on Surgery of Eloquent Brain Lesion
Antonino Germano

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

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

09:00-09:15 Fluorscence assisted surgery for brain tumors
Giovanni Broggi
09:15-09:30  Supracerebellar transtentorial approach to the mediobasal temporal region in prone position  
Feridun Acar

09:30-09:45  The treatment of malignant brain tumors  
Branko Djurovic

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

10:00-10:15  Oligodendrogliomas: multiple radical surgeries confer better outcomes and survival rates than surgery plus chemotherapy and radiotherapy  
Charlie Teo

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

10:30-11:00  Coffee break

MT-11  SPINE & PERIPHERAL NERVE  
Chairs: Stefano Ferraresi, Marcos Masini  
Hall 3

08:00-08:15  Peripheral Nerve Tumors: To grow or not to grow, that is the question  
Michael Kliot

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

08:30-08:45  Surgical approach to peripheral neuropathy  
Jacques Line

08:45-09:00  Non neurogenic tumors affecting peripheral nerves: who should operate them?  
José Fernando Guedes Corrêa

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

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

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

09:45-10:00  Comprehensive Management of Spinal Cord Lesions  
Manfred Westphal
10:00-10:15  Management of Anterior Cervical Fusion Complications  
Scott Robertson

10:15-10:30  Management of Durotomy and CSF Leaks in Spinal Injury  
Regunath Kandasamy

10:30-11:00  Coffee break
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>
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<tbody>
<tr>
<td>WFNS Education</td>
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<tr>
<td>WFNS Endoscopy</td>
<td>€500,00</td>
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<tr>
<td>WFNS Surgical Anatomy</td>
<td>€50,00</td>
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<tr>
<td>Global Neuro</td>
<td>€50,00</td>
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<tr>
<td>AO Spine</td>
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<tr>
<td>Spine Intraoperative</td>
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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>
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</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 01st, 2018 refund of registration fees will be 100%.
- For cancellations received until February 01st, 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 online on the website

The abstract should be submitted by November 20th, 2018.

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 uploaded 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 December 20th, 2018. (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!
CROWNE PLAZA BELGRADE 4*
HEADQUARTER HOTEL

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

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HOSTEL GREEN HOUSE
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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

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