

2nd Theoretical, Practical & Hands-on International Course in Peripheral Nerve & Brachial Plexus Surgery

3rd Annual Meeting of Serbian Neurosurgical Society (SNSS)
Joint meeting with Southeast Europe Neurosurgical Society (SEENS)
94th Anniversary of Neurosurgery in Serbia
79th Anniversary of Clinic for Neurosurgery at Clinical Centre of Serbia

October 31st - November 3rd 2017
University of Belgrade / School of Medicine / Institute for Anatomy "Niko Miljanić"
Belgrade, Serbia

SCIENTIFIC PROGRAM
Day 1: October 31st

08:00 Opening ceremony – Welcome addresses
- Prof. Dr Lukas Rasulic, President of Serbian Neurosurgical Society, Course Director
- Ass. Dr Zlatibor Loncar, Minister of Health, Republic of Serbia
- Prof. Dr Vladimir Kostic, President, Serbian Academy of Sciences and Arts
- Prof. Milos Jokovic, Director, Clinic of Neurosurgery, Clinical Center of Serbia
- Dr Mariano Socolovsky, Chairman, Peripheral Nerve Committee,
- Professor Dr Vladimir Kostic, President, Serbian Academy of Sciences and Arts
- Prof. Dr Branislav Filipovic, Chairman of the Institute of Anatomy “Niko Miljanic”, Course Director
- Dr. Dr Kresimir Rotim, SeENS President

09:00 SPECIAL CONFERENCE: Peripheral Nerve Surgery: from my beginnings till the present
Madjid Samii, Germany

PART I: BASIC PRINCIPLES OF DIAGNOSIS IN PERIPHERAL NERVE INJURIES
Coordinators: Allan Belzberg, Gregor Antoniadis, Javier Robla

09:30 Use of MRI in nerve trauma
Daniela Binaghi, Argentina

09:45 Neurosonography in nerve trauma
Maria Pedro, Germany

10:00 Neurophysiology in peripheral nerve injuries
Pablo Calvo, Spain

10:15 Discussion

10:45 Coffee Break

PART II: CLINICAL EXAMINATION
Coordinators: Mario Siqueira, Thomas Kretschmer, Alberto Isla

11:00 Clinical examination in videos: upper limb
Gilda di Masi, Argentina

11:15 Clinical examination in videos: lower limb
Gonzalo Bonilla, Argentina

11:30 Practical clinical examination: a short trip from the seat to the table
Thomas Kretschmer, Germany & Anil Bathia, India

12:00 Discussion

PART III: BASICS, INDICATIONS AND SURGICAL TECHNIQUES IN TRAUMA
Coordinators: Mariano Socolovsky, Rajiv Midha, Bassam Addas

12:30 Fundamentals of nerve injury and regeneration
Rajiv Midha, Canada

12:45 Surgical timing: when should we operate?
Leandro Pretto Flores, Brasil

13:00 Neurolisis: Is it useful? In which cases?
Javier Robla, Spain

13:15 The Nerve Graft
Kartik Krischnan, Germany

13:30 Neurorraphy with and without grafts: surgical technique
Miguel Dominguez, Spain

13:45 Distal nerve transfers instead of primary graft repair: when, why and how?
Jorge Clifton, Mexico

14:00 Discussion

14:15 Lunch
PART IV: SPECIAL PROBLEMS IN TRAUMATIC INJURIES

Coordinators: Lukas Rasulic, Sumit Sinha, Cristopher Winfree

15:00 Clinical aspects of ballistic peripheral nerve injuries
Shimon Roschkind, Israel

15:15 Nerve reconstruction in severely injured extremities
Marko Bumbasirevic, Serbia

15:30 Gunshot wounds: surgical treatment
Bassam Abbas, Saudi Arabia

15:45 Iatrogenical Injuries
Gregor Antoniadis, Germany

16:00 Surgical results of XII-VII and V-VII transter in facial nerve palsy
Mariano Socolovsky, Argentina

16:15 An Algorithmic Approach to the Surgical Treatment of Facial Nerve Palsy
Kartik Krischnan, Germany

16:30 Discussion

PART V: PERIPHERAL NERVE TUMORS

Coordinators: Robert Spinner, Javier Robla, Eric Zager

17.00 Nerve tumors: Basic approach
Rajiv Midha, Canadá

17.15 A clinical and radiographic score to assess malignant potential in peripheral nerve sheath tumors
Cristopher Winfree, USA

17:30 Indications for surgery and extent of surgical resection in non-malignant versus malignant tumors
Allan Belzberg, USA

17:45 Malignant peripheral nerve tumors
Alberto Isla, Spain

18.00 Coffee break

18:15 Management of brachial plexus tumors
Eric Zager, USA

18:30 Neurofibromatosis: which is the role of surgery?
Debora Carozzo, Italy

18:45 The international Schwannomatosis database
Allan Belzberg, USA

19:00 SNSS TRIBUTE:
Milivoje Kostić lecture
Intraneural ganglion cysts
Robert Spinner, USA

19:15 Perineuromas
Gregor Antoniadis, Germany

19.30 Discussion
## SCIENTIFIC PROGRAM

**Day 2: November 01st**

### PART VI: NERVE COMPRESSIONS OF THE UPPER LIMBS

*Coordinators: Wilson Zack Ray, Shimon Rochkind, Bassam Addas*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Nerve conduction studies in common entrapment neuropathies</td>
<td>Pablo Calvo, Spain</td>
<td>Spain</td>
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<tr>
<td>08:45</td>
<td>Be careful! Not all compressions are compressions!</td>
<td>Debora Garozzo, Italy</td>
<td>Italy</td>
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<tr>
<td>09:00</td>
<td>Carpal tunnel: Clinical aspects and indications for surgery</td>
<td>Eric Zager, USA</td>
<td>USA</td>
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<tr>
<td>09:15</td>
<td>Carpal tunnel syndrome: surgical technique in the open approach</td>
<td>Mario Siqueira, Brasil</td>
<td>Brasil</td>
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<tr>
<td>09:30</td>
<td>Organization of carpal tunnel surgery; experience from 1003 patients treated in a neurosurgical one-stop clinic</td>
<td>Kare Fugleholm, Denmark</td>
<td>Denmark</td>
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<tr>
<td>09:45</td>
<td>How to operate a carpal tunnel endoscopically?</td>
<td>Maria Teresa Pedro, Germany</td>
<td>Germany</td>
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<tr>
<td>10:00</td>
<td>Literature review: controversy between open and endoscopical decompression of carpal and ulnar tunnel</td>
<td>Gregor Antoniadis, Germany</td>
<td>Germany</td>
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<tr>
<td>10:15</td>
<td>Surgical treatment of ulnar nerve compression at the elbow: Indications and techniques</td>
<td>Mario Siqueira, Brazil</td>
<td>Brazil</td>
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<td>10:30</td>
<td>Endoscopic release of ulnar nerve at the elbow</td>
<td>Javier Robla, Spain</td>
<td>Spain</td>
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<tr>
<td>10:45</td>
<td><strong>Discussion</strong></td>
<td></td>
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<tr>
<td>11:15</td>
<td><strong>Coffee break</strong></td>
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<tr>
<td>11:30</td>
<td>Controversies in nerve compressions: do not believe all what is published!</td>
<td>Mariano Socolovsky, Argentina</td>
<td>Argentina</td>
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<tr>
<td>11:45</td>
<td>Thoracic outlet syndrome: European experience</td>
<td>Piero Raimondi, Italy</td>
<td>Italy</td>
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<tr>
<td>12:00</td>
<td>Thoracic outlet syndrome: North-American experience</td>
<td>Eric Zager, USA</td>
<td>USA</td>
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<td>12:15</td>
<td>Suprascapular nerve compression</td>
<td>Miguel Quadros, Spain</td>
<td>Spain</td>
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<tr>
<td>12:30</td>
<td><strong>Discussion</strong></td>
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<tr>
<td>13:00</td>
<td><strong>Lunch</strong></td>
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### PART VII: NERVE COMPRESSIONS OF THE LOWER LIMBS

**Coordinators: Leandro Flores, Gilda di Masi, Debora Garozzo**

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker, Location</th>
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<tbody>
<tr>
<td>13:30</td>
<td>Peroneal nerve compression</td>
<td>Eric Zager, USA</td>
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<tr>
<td>13:45</td>
<td>Morton’s neuroma</td>
<td>Carlos Rodriguez, Mexico</td>
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<tr>
<td>14:00</td>
<td>Tarsal tunnel</td>
<td>Maria Pedro, Germany</td>
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<td>14:15</td>
<td>Meralgia Parestetica</td>
<td>Fernando Martinez, Uruguay</td>
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<td>14:30</td>
<td>Saphenous neuropathy: diagnosis and management</td>
<td>Thomas J Wilson, USA</td>
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<td>14:45</td>
<td>Failed Back Surgery Syndrome and lower limb entrapments</td>
<td>Ridvan Alimehmeti, Albania</td>
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<tr>
<td>15:00</td>
<td>Tendon transfers for steppage</td>
<td>Manuel Llusa, Spain</td>
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<td>15:15</td>
<td>Discussion</td>
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### PART VIII: PAIN AND PERIPHERAL NERVE SURGERY

**Coordinators: Mario Siqueira, Mohammadreza Emamhadi, Gonzalo Bonilla**

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<thead>
<tr>
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<th>Topic</th>
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<tbody>
<tr>
<td>15:45</td>
<td>Basic science of neuropathic pain &amp; neuroma formation</td>
<td>Allan Belzberg, USA</td>
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<tr>
<td>16:00</td>
<td>The management of neuropathic pain following brachial plexus injuries</td>
<td>Cristopher Winfree, USA</td>
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<tr>
<td>16:15</td>
<td>Clinical aspects of painful neuromas</td>
<td>Shimon Roschkind, Israel</td>
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<tr>
<td>16:30</td>
<td>The DREZ operation</td>
<td>Allan Belzberg, USA</td>
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<tr>
<td>16:45</td>
<td>Discussion</td>
<td></td>
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<tr>
<td>17:15</td>
<td>Coffee break</td>
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### PART IX: WHAT CAN PERIPHERAL NERVE SURGEONS DO FOR TETRAPEGICS?

**Coordinators: Debora Garozzo, Wilson Zack Ray, Luciano Foroni**

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>17:30</td>
<td>Nerve transfers for spinal cord injuries: North-American experience</td>
<td>Wilson Zack Ray, USA</td>
</tr>
<tr>
<td>17:45</td>
<td>Nerve transfers for spinal cord injuries: Iranian experience</td>
<td>Mohammadreza Emamhadi, Iran</td>
</tr>
<tr>
<td>18:00</td>
<td>Muscle transfers in quadriplegic people</td>
<td>Caroline Leclerq, France</td>
</tr>
<tr>
<td>18:15</td>
<td>Discussion</td>
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</tbody>
</table>
08:30  Clinical types of brachial plexus injuries  
       *Manuel Llusa, Spain*

08:45  Anatomy and surgical approaches to the brachial plexus  
       *Linda Yang, USA*

09:00  Indications for surgery in BPI: When should we operate?  
       *Debora Garozzo, Italy*

09:15  Indications for surgery in BPI: When we should not operate?  
       *Piero Raimondi, Italy*

09:30  Quality of life after BPI surgery: The Balkan scale  
       *Lukas Rasulic, Serbia*

09:45  Quality of life outcome assessment in adult plexus injuries: a personal experience of 300 cases  
       *Sumit Sinha, India*

10:00  Brain Plasticity: Keep it in mind  
       *Mariano Socolovsky, Argentina*

10:15  Discussion

10:35  Coffee break

10:50  Nerve grafts versus nerve transfers: Who wins the battle?  
       *Piero Raimondi, Italy*

11:05  Surgical strategy in C5-C6 injuries  
       *Mario Siqueira, Brazil*

11:20  The aUT-MC technique: a new method to reanimate the biceps in C5-C6 injuries of the brachial plexus  
       *Stefano Ferraresi, Italy*

11:35  Normal range of motion after partial upper lesions? Is that possible  
       *Jorge Clifton, Mexico*

11:50  Surgical strategy in C8-D1 injuries  
       *Anil Bathia, India*

12:05  Surgical strategy in complete injuries  
       *Lukas Rasulic, Serbia*

12:20  Discussion

12:15  Lunch

13:00  Where are we in complete palsies?  
       *Piero Raimondi, Italy*

13:15  Sensory reinnervation in BP injuries  
       *Luciano Foroni, Brasil*
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13:30 Sensory nerve transfers are as important as motor nerve transfers?
Mohammadreza Emamhadi, Iran

13:45 Complications in brachial plexus surgery
Fernando Martinez, Uruguay

14:00 Secondary surgery in brachial plexus surgery
Miguel Quadros, Spain

14:15 Arthrodesis of the shoulder: a viable solution
Gustavo Nizzo, Argentina

14:30 Tendon-muscle transfer after peripheral nerve lesion
Robert Schmidhammer, Austria

14:45 Late free muscle transplant: role in BP injuries
Manuel Llusá, Spain

15:00 Infraclavicular palsies: diagnosis and management
Anil Bathia, India

15:15 Discussion

15:45 Coffee break

PART XI: OBSTETRIC BRACHIAL PLEXUS-THE BASICS
Coordinators: Alex Muset, Piero Luigi Raimondi, Alain Gilbert

16:05 Brachial Plexus and OBPP in history: why operate?
Alain Gilbert, France

16:20 Natural history of OBPP and indications for surgery
Piero Luigi Raimondi, Italy

16:35 What to do with a neuroma in continuity that has a positive response under stimulation?
Alex Muset, Spain

16:50 40 years of OBPP surgery: what has changed?
Alain Gilbert, France

17:05 Reinnervation of elbow flexion in OBPP: grafts or nerve transfers?
Mario Siqueira, Brazil

17:20 Results that can be obtained in OBPP
Alex Muset, Spain

17:35 Discussion
Day 4: November 03rd

PRACTICAL PART-CADAVERIC DISSECTIONS

08:00 Welcome addresses:
  Mariano Socolovsky, Argentina
  Lukas Rasulic, Serbia and Branislav Filipovic, Serbia

08:10 Importance of education of cadaver dissection of Brachial Plexus and Peripheral Nerve Surgical practice

08:30 Innervation of the brachial and antebrachial parts of the upper limb
  Zdravko Vitosevic, Serbia and Milan Milisavljevic, Serbia

08:50 Applied anatomy of brachial plexus trunci
  Branislav Filipovic, Serbia

09:10 Applied anatomy of the hand innervation
  Aleksandar Malikovic, Serbia

09:30 Discussion and coffee break

10.00-13.00 Dissections by participants-upper limb

13.00 Lunch

14:00 Lumbar plexus and topographical anatomy of the anterior abdominal wall and anterior femoral regions
  Laslo Puskas, Serbia and Milan Milisavljevic, Serbia

14:20 Sacral plexus and topographical anatomy of gluteal and posterior femoral regions
  Zdravko Vitosevic, Serbia and Milan Milisavljevic, Serbia

14:40 Innervation of the anterior and posterior leg regions.
  Laslo Puskas, Serbia and Milan Milisavljevic, Serbia

15:00 Applied anatomy of the foot innervation
  Milan Milisavljevic, Serbia

15:20 Discussion and coffee break

15.45-18.45 Dissections by participants-lower limb

18:45-19:00 Closing Remarks