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

3<sup>rd</sup> Annual Meeting of Serbian Neurosurgical Society (SNSS)

Joint meeting with Southeast Europe Neurosurgical Society (SEENS)

94<sup>th</sup> Anniversary of Neurosurgery in Serbia 79<sup>th</sup> Anniversary of Clinic for Neurosurgery at Clinical Centre of Serbia

# October 31<sup>st</sup> - November 3<sup>rd</sup> 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 Bumbasirevic, Rector, University of Belgrade Prof. Dr Nebojsa Lalic, Dean, School of Medicine, University of Belgrade Prof. Dr Vladimir Kostic, President, Serbian Academy of Sciences and Arts Prof. Dr Milos Jokovic, Director, Clinic of neurosurgery, Clinical Center of Serbia Dr Mariano Socolovsky, Chairman, Peripheral Nerve Committee, World Federation of Neurosurgical Societies, Course Director Prof. Dr Branislav Filipovic, Chairman of The Institute of Anatomy "Niko Miljanic", Course Director Prof. Dr Kresimir Rotim, SeENS President 9:00 **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 Use of MRI in nerve trauma 09:30 Daniela Binaghi, Argentina Neurosonography in nerve trauma 09:45 Maria Pedro, Germany 10:00 Neurophysiology in peripheral nerve injuries Pablo Calvo, Spain 10:15 Discussion **Coffee Break** 10:45 PART II: CLINICAL EXAMINATION Coordinators: Mario Siqueira, Thomas Kretschmer, Alberto Isla 11:00 Clinical examination in videos: upper limb Gilda di Masi, Argentina Clinical examination in videos: lower limb 11:15 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 Fundamentals of nerve injury and regeneration 12:30 Rajiv Midha, Canada Surgical timing: when should we operate? 12:45 Leandro Pretto Flores, Brasil Neurolisis: Is it useful? In which cases? 13:00 Javier Robla, Spain 13:15 The Nerve Graft Kartik Krischnan. Germany

Discussion 14:00 Lunch 14:15

Miguel Domínguez, Spain

Jorge Clifton, Mexico

13:30

13:45

Neurorraphy with and without grafts: surgical technique

Distal nerve transfers instead of primary graft repair: when, why and how?

#### 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	latrogenical 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 Garozzo, Italy
18:45	The international Schwanomatosis 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

## Day 2: November 01<sup>st</sup>

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

Coordinators: Wilson Zack Ray, Shimon Rochkind, Bassam Addas

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

#### PART VII: NERVE COMPRESSIONS OF THE LOWER LIMBS

Coordinators: Leandro Flores, Gilda di Masi, Debora Garozzo

13:30	Peroneal nerve compression Eric Zager, USA
13:45	Morton´s neuroma Carlos Rodriguez, Mexico
14:00	Tarsal tunnel Maria Pedro, Germany
14:15	Meralgia Parestetica Fernando Martinez, Uruguay
14:30	Saphenous neuropathy: diagnosis and management Thomas J Wilson, USA
14:45	Failed Back Surgery Syndrome and lower limb entrapments Ridvan Alimehmeti, Albania
15:00	Tendon transfers for steppage Manuel Llusa, Spain
15:15	Discussion
	PART VIII: PAIN AND PERIPHERAL NERVE SURGERY Coordinators: Mario Siqueira, Mohammadreza Ememhadi, Gonzalo Bonilla
15:45	Basic science of neuropathic pain & neuroma formation
	Allan Belzberg, USA
16:00	
16:00 16:15	Allan Belzberg, USA  The management of neuropathic pain following brachial plexus injuries
	Allan Belzberg, USA  The management of neuropathic pain following brachial plexus injuries Cristopher Winfree, USA  Clinical aspects of painful neuromas
16:15	Allan Belzberg, USA  The management of neuropathic pain following brachial plexus injuries Cristopher Winfree, USA  Clinical aspects of painful neuromas Shimon Roschkind, Israel  The DREZ operation
16:15 16:30	Allan Belzberg, USA  The management of neuropathic pain following brachial plexus injuries Cristopher Winfree, USA  Clinical aspects of painful neuromas Shimon Roschkind, Israel  The DREZ operation Allan Belzberg, USA
16:15 16:30 <b>16:45</b>	Allan Belzberg, USA  The management of neuropathic pain following brachial plexus injuries Cristopher Winfree, USA  Clinical aspects of painful neuromas Shimon Roschkind, Israel  The DREZ operation Allan Belzberg, USA  Discussion
16:15 16:30 <b>16:45</b>	Allan Belzberg, USA  The management of neuropathic pain following brachial plexus injuries Cristopher Winfree, USA  Clinical aspects of painful neuromas Shimon Roschkind, Israel  The DREZ operation Allan Belzberg, USA  Discussion  Coffee break  PART IX: WHAT CAN PERIPHERAL NERVE SURGEONS DO FOR TETRAPLEGICS?

Mohammadreza Emamhadi, Iran

Caroline Leclerq, France

Discussion

18:00

18:15

Muscle transfers in quadriplegic people

### Day 3: November 02<sup>nd</sup>

#### PART X: ADULT BRACHIAL PLEXUS SURGERY

Coordinators: Fernando Guedes, Jorge Clifton, Bassam Addas

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 assesment 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

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	
16:05 16:20	Coordinators: Alex Muset, Piero Luigi Raimondi, Alain Gilbert  Brachial Plexus and OBPP in history: why operate?
-	Coordinators: Alex Muset, Piero Luigi Raimondi, Alain Gilbert  Brachial Plexus and OBPP in history: why operate?  Alain Gilbert, France  Natural history of OBPP and indications for surgery
16:20	Coordinators: Alex Muset, Piero Luigi Raimondi, Alain Gilbert  Brachial Plexus and OBPP in history: why operate? Alain Gilbert, France  Natural history of OBPP and indications for surgery Piero Luigi Raimondi, Italy  What to do with a neuroma in continuity that has a positive response under stimulation?
16:20 16:35	Coordinators: Alex Muset, Piero Luigi Raimondi, Alain Gilbert  Brachial Plexus and OBPP in history: why operate? Alain Gilbert, France  Natural history of OBPP and indications for surgery Piero Luigi Raimondi, Italy  What to do with a neuroma in continuity that has a positive response under stimulation? Alex Muset, Spain  40 years of OBPP surgery: what has changed?
16:20 16:35 16:50	Coordinators: Alex Muset, Piero Luigi Raimondi, Alain Gilbert  Brachial Plexus and OBPP in history: why operate? Alain Gilbert, France  Natural history of OBPP and indications for surgery Piero Luigi Raimondi, Italy  What to do with a neuroma in continuity that has a positive response under stimulation? Alex Muset, Spain  40 years of OBPP surgery: what has changed? Alain Gilbert, France  Reinnervation of elbow flexion in OBPP: grafts or nerve transfers?

# Day 4: November 03<sup>rd</sup>

#### 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 Milisavljević, 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	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 Milisavljević, 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			