

Society For Connective Tissues CMA J.E. Purkynje & Society for Prosthetics and Orthotics CMA J.E. Purkynje & Czech Society of Biomechanics & Czech Medical Association J.E. Purkynje & Medical University of Lublin & Vincent Pol University in Lublin

invite you to

THE 19TH PRAGUE-LUBLIN-SYDNEY-ST. PETERSBURG SYMPOSIUM

main topic

INTERDISCIPLINARY APPROACH TO GROWING SKELETON

under the auspices of honorary president of the Czech Medical Association J.E. Purkynje **Professor Jaroslav Blahoš, MD, DSc.**

& director of Charles University Hospital Hradec Králové **Professor Vladimir Palička, MD, PhD, Dr.h.c.**

& dean of The Faculty of Health Care Studies, West Bohemia University Assoc. Professor Dr. Ilona Mauritzová, PhD

The Symposium will be held in the Czech Police Museum & the Medical House Sokolská 31, 120 26 Prague 2, Czech Republic September 13–16, 2017



SYMPOSIUM FINAL PROGRAMME

WEDNESDAY, SEPTEMBER 13, 2017

Arrival of participants to Prague

19.30 GALA DINNER WITH FOREIGN GUESTS Restaurant "Historie" (Londýnská 52, Praha 2 – near Metro station I.P. Pavlova http://www.restaurace-historie.cz/en/)

THURSDAY, SEPTEMBER 14, 2017

8.00–9.00 REGISTRATION OF PARTICIPANTS in the Czech Police Museum (Ke Karlovu 1, Praha 2, www.muzeumpolicie.cz)

9.00 OPENING OF THE SYMPOSIUM

Ivo Marik & Tomasz Karski & Mikhail Dudin (or Aleksey Arsenev)

WELCOME SPEECHES

Professor Ivo Marik, MD, PhD President of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje

Professor Mikhail Dudin, MD, DSc. Honorary member of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje

Professor Tomasz Karski, MD, PhD Honorary member of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje

GREETINGS

Assoc. Professor Dr. Ilona Mauritzová, PhD

Dean of The Faculty of Health Care Studies, West Bohemia University

Professor Josef Hyanek, MD, DSc.

Honorary president of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje

9.30-12.00 SESSION I

BIOMECHANICS – VARIA

Chairmen: PETRTYL MIROSLAV, CULIK JAN, MARSIK FRANTISEK

<u>Petrtyl Miroslav</u>¹, Volf Jaromír², Povysil Ctibor³ (Prague, Czech Republic) The subtle electrical energy in bone tissue (30 min.)

¹ Department of Mechanics, Laboratory of Biomechanics and Biomaterial Engineering, Czech Technical University, FCE, Prague, Czech Republic

² Department of Electrical Engineering and Automation, The Faculty of Engineering, Czech University of Life Sciences Prague

³ Institute of Pathology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic

MARSIK FRANTISEK^{1, 2, 3} (PRAGUE, CZECH REPUBLIC)

The irreversibility of natural processes and their consequences for the evolution of biological systems. Entropy and its biological interpretation (30 min.)

¹ Institute of Thermomechanics of the Czech Academy of Sciences, Prague, Czech Republic

² University of West Bohemia, New Technologies - Research Centre, Pilsen, Czech Republic

³ Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic

<u>Tesar Karel^{1, 2}</u>, Sucharda Zbynek³, Zaloudková Margit³, Balik Karel³ (Prague, Czech Republic) **Biodegradable magnesium wires for bone support application** (20 min.)

¹ Department of Materials, Faculty of Nuclear Sciences and Physical Engineering, Czech Republic

² Department of Dielectrics, Institute of Physics of the Czech Academy of Sciences, Czech Republic

³ Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics of the Czech Academy of Sciences, Prague, Czech Republic

<u>Braun Martin</u>, Ryglova Sarka, Supova Monika, Zaloudkova Margit, Krizková Martina, Sucharda Zbynek, Suchy Tomas (Prague, Czech Republic)

Chemical analysis of collagen and non-collagen components of composite biomaterials for implantology (20 min.)

Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics, Academy of Science, Prague, Czech Republic CULIK JAN (PRAGUE, CZECH REPUBLIC) Gait model (20 min.)

Czech Technical University, Division of Informatics of Faculty of Biomedical engineering, Kladno, Czech Republic

<u>Krawczyk Petr</u>¹, Marik Ivo², Jakub Jozef¹, Sykora Ales¹, Zemkova Daniela², Petrasova Sarka², Marik Jan², Uchytil Jaroslav³, Jandacka Daniel³ (Prague & Ostrava, Czech Republic) **Influence of the weight of the transtibial prosthesis on postural stability and locomotion** (20 min.)

¹ PROTEOR CZ I.I.c., Ostrava, Czech Republic

² Ambulant Centre for Defects of Locomotor Apparatus I.I.c., Prague, Czech Republic

³ Diagnostic Centre of Human Movement PdF, Ostrava University, Czech Republic

Faculty of Medical Studies, West Bohemia University, Pilsen, Czech Republic

12.00 LUNCH

13.00-16.30 SESSION II

Invited lecture of the President of the Society for Metabolic Bone Diseases (SMOS), Czech Medical Association J.E. Purkynje PROFESSOR VLADIMIR PALICKA, MD, PHD, DR.H.C.

Introduction: OLGA HUDAKOVA, MD, PHD

PALICKA VLADIMIR (HRADEC KRALOVE, CZECH REPUBLIC) Clinical Osteology in the Czech Republic (organization and development) (30 min.) Charles University and University Hospital Hradec Králové, Czech Republic

Moderator: PROFESSOR JOSEF HYANEK, MD, DSC.

(Honorary president of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje)

OSTEOLOGY, BONE METABOLISM

Chairmen: PALICKA VLADIMIR, LYRITIS GEORGE, HYANEK JOSEF, MARIK IVO

Lyritis George (Emeritus Professor of Orthopedics, President of Hellenic Osteoporosis Foundation Honorary member of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje) (Athens, Greece)

ELECOST: A Greek educational tool for the diagnosis and management of osteoporosis in Greece (30 min.)

Faculty of Medicine, National and Kapodistrian University of Athens, Greece

<u>Rizou Stavroula</u> (Athens, Greece) Are Women Overtreated for Osteoporosis? (30 min.)

Hellenic Osteoporosis Foundation, Kifissia, Greece

NIKOLAOU DIMITRIOS¹, RIZOU STAVROULA² (ATHENS, GREECE)

A novel approach for fracture risk and risk of falling aggregation (30 min.)

¹ Medical School, National and Kapodistrian University of Athens, Greece ² Hellenic Osteoporosis Foundation, Kifissia, Greece

LAMBROU GEORGE I.^{1, 2, 3, 4} (ATHENS, GREECE)

Microgravity and bone metabolism. Issues of orbis novum colonalization (30 min.)

¹ National and Kapodistrian University of Athens, Medical School

- ² Graduate Program "Metabolic Bones Diseases", National and Kapodistrian University of Athens,
- ³ Medical School, Goudi, Athens, Greece
- ⁴ First Department of Pediatrics, University of Athens, Choremeio Research Laboratory, National and Kapodistrian University of Athens, Greece

15.30 COFFEE BREAK

BAYER MILAN^{1, 2}, JIROTKOVA JANA³ (PRAGUE, CZECH REPUBLIC)

Osteogenesis imperfecta - treatment with bisphosphonate from newborn period (30 min.)

¹ Department of Children and Adolescents, Third Faculty of Medicine, Charles University, Prague, Czech Republic

² Department of Pediatrics, Thomayer Hospital of Prague, Czech Republic

³ Department of Pediatrics, Hospital of Ceske Budejovice, Czech Republic

<u>Vyskocil Vaclav</u>¹, Blahos Jaroslav² (Pilsen & Prague, Czech Republic) Alendronate therapy for osteogenesis imperfecta in children: ten-year follow-up (30 min.)

¹ Department of Orthopaedic Surgery, Charles University Hospital, Pilsen, ² 1st Medical Faculty Prague, Charles University, Central Military Hospital, Prague, Czech Republic

17.30 GUIDED VISIT OF THE EXHIBITION MAN-MADE MAN-TECHNOLOGY AND MEDICINE, NATIONAL TECHNICAL MUSEUM PRAGUE (Kostelní 42, 170 78 Prague 7, www.ntm.cz/en/en-muzeum)

20.00 DINNER

Note: transfer to the National Technical Museum and to dinner is secured by bus

FRIDAY, SEPTEMBER 15, 2017

8.00–9.00 REGISTRATION OF PARTICIPANTS in the Medical House, Prague (Sokolská 490/31, 120 00 Praha 2, www.cls.cz/koncepce-vyuziti-ld)

9.00-13.00 **SESSION III:**

SPINE DISORDERS I: PATHOGENESIS, DIAGNOSIS AND TREATMENT

Chairmen: KARSKI TOMASZ, ARSENEV ALEKSEY VALENTINOVICH, REPKO MARTIN

<u>Karski Tomasz</u>¹, Karski Jacek² (LUBLIN, POLAND) Twenty two years of knowledge about aetiology of the so-called idiopathic scoliosis (adolescent idiopathic scoliosis – AIS). Rules of casual prophylactics and new treatment. Examples (20 min.)

¹ Vincent Pol University in Lublin, Poland ² Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin, Poland

PALLOVA IVETA (PRAGUE, CZECH REPUBLIC) Characteristic features of idiopathic scoliosis (20 min.) Center of Rehabilitation, Pediatrics and Acupuncture, Prague, Czech Republic

<u>Arsenev Aleksey Valentinovich</u>, Dudin M.G. (St. Petersburg, Russia) **"Targets" for pathogenetic treatment of patients with adolescent idiopathic scoliosis** (20 min.)

Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia

<u>REPKO MARTIN</u>, FILIPOVIC MILAN (BRNO, CZECH REPUBLIC) **Theme reserved (20 min.)** Orthopaedic department, Faculty Hospital of Masaryk´s University, Brno, Czech Republic

<u>Piet J.M. van Loon</u>¹, Ruud HGP van Erve¹, Eric BTM Thunnissen², Lodewijk W. van Rhijn³, Andre J Grotenhuis⁴ (Deventer, Amsterdam, Maastricht & Nijmegen, Netherlands) Sedentary lifestyle and discongruent neuro-osseous growth relations (M. Roth) as external and internal etiologic factors of spinal deformity and skeletal malalignement. Modern youth and their short cord (20 min.)

¹ Orthopedic surgeon, Care to Move, Centre for Orthopedics, Deventer, Netherlands

² Pathologist, epidemiologist VUMC, Free University, Amsterdam, Netherlands

³ Professor of orthopedic surgery, Maastricht UMC, Maastricht, Netherlands

⁴ Professor of neurosurgery, RadboudMC, University of Nijmegen, Netherlands

11.00 COFFEE BREAK

SPINE DISORDERS II – PATHOGENESIS, DIAGNOSIS AND TREATMENT – VARIA

Chairmen: KOLESNICHENKO VERA, CERNY PAVEL, KARSKI JACEK

<u>Cerny Pavel</u>^{1, 2, 3}, Stolinski Lukasz^{4, 5, 6}, Czaprowski Darius ^{7, 8}, Marik Ivo^{1, 9}, Muranova J.³, Kotwicki T.⁴ (Prague, Pilsen, Czech Republic – Poznan Olsztyn, Poland)

Method of measuring axial pelvis rotation - a pilot study (20 min.)

¹ Faculty of Health Care Studies, University of West Bohemia, Pilsen, Republic

- ² Faculty of Physical Education and Sport, Charles University, Prague, Republic
- ³ ORTOTIKA, I.I.c., the complex of the Faculty Hospital at Motol, Prague, Republic
- ⁴ Department of Spine Disorders and Pediatric Orthopedics, University of Medical Sciences, Poznan, Poland
- ⁵ Rehasport Clinic, Poznan, Poland.
- ⁶ Rehasport Clinic Licensed Rehabilitation Center, Skierniewice, Poland
- ⁷ Department of Physiotherapy, Józef Rusiecki University College, Olsztyn, Poland
- ⁸ Center of Body Posture, Olsztyn, Poland
- ⁹ Ambulant Centre for Defects of Locomotor Apparatus I.I.c., Prague, Czech Republic

<u>Vasilevich SergeyViktorovich</u>³, Arsenev Aleksey Valentinovich¹, Dudin Mikhail Georgiyevic¹, Baloshin Yuriy Aleksandrovich³, Kipke M.V.², Sorokin A.A.² Sukhov T.M.⁸, Sukhova M.A.^c (St. Petersburg, Russia) **The potential of modern mobile technology for the diagnosis of anthropometric parameters of a human** (20 min.)

¹ Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok"

² FSBEI HE Baltic State Technical University "Voenmeh" Named after D.F. Ustinov

³ "Smart-Orto" Ltd, St. Petersburg, Russia

<u>Kolesnichenko Vera</u>¹, Gresko Igor² (Kharkov & Lviv Ukraine) **Motor control dysfunction particularly in patients with chronic low back pain and a variety of myotonic reactions** (20 min.)

¹ SI "Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine", Kharkov, Ukraine ² Lviv National Medical University named after Danila Galitsky, Ukraine

<u>Karski Tomasz</u>¹, Kędzierski Zbigniew², Karski Jacek³, Domagała Marian⁴, Slowinska Beata², Kowalska Magdalena², Boryga Bartosz² (Lublin, Poland) (30 min.) Physiotherapy of spine, hips, knees, feet, shoulders – correct, incorrect, mistakes, wrong conceptions. Examples.

¹ Vincent Pol University in Lublin, Poland

- ² Military Hospital in Lublin, Poland
- ³ Medical University in Lublin, Poland
- ⁴ Medical Centre in Laszczów. Poland

13.00 LUNCH

14.00-18.30 SESSION IV

DISORDERS OF GROWING SKELETON – ORTHOPAEDIC ANTHROPOLOGY – PATHOBIOMECHANICS – VARIA

Chairmen: SAKALOUSKI ALEH, KRAWCZYK PETR, KARSKI TOMASZ

ZEMKOVA DANIELA^{3, 1}, MARIK IVO^{1, 2, 4}, PETRASOVA SARKA¹, HUDAKOVA OLGA¹ (PRAGUE & PILSEN, CZECH REPUBLIC) Skeletal disorders with lower and higher bone density (30 min.)

¹ Ambulant Centre for Defects of Locomotor Apparatus I.I.c.; Prague; Czech Republic

² Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic

³ Dept. of Paediatrics; University Hospital Motol; Prague; Czech Republic

⁴ Orthopaedic and Traumatology Department, Hospital Pribram, Czech Republic

HRUSKOVA LUCIE¹, MARIK IVO^{2, 4}, MAZUROVA STELA¹, HONZIK TOMAS¹, MARTASEK PAVEL^{1, 3}, MAZURA IVAN¹ (Prague & Pilsen, Czech Republic)

Recessive forms of osteogenesis imperfecta (20 min.)

¹ Department of Pediatrics and Adolescent Medicine, First Faculty of Medicine, Charles University and General University Hospital in Prague, Czech Republic;

² Ambulant Centre for Defects of Locomotor Apparatus 1.1.c., Prague, Czech Republic;

³ Institute of Molecular Genetics of the ASCR, v. v. i, Division BIOCEV, Vestec, Czech Republic

⁴ Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic

Marik Ivo^{1, 2, 4}, Zemkova Daniela^{1, 3}, Myslivec Radek^{4, 1}, Marikova Alena¹, Cerny Pavel^{5, 2}, Krawczyk Petr⁶ (Prague & Pilsen, Czech Republic)

Functional adaptation of bones. Explanation of skeletal deformities in skeletal genetic disorders (30 min.)

¹ Ambulant Centre for Defects of Locomotor Apparatus I.I.c.; Prague; Czech Republic

² Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic

³ Dept. of Paediatrics; University Hospital Motol; Prague; Czech Republic

⁴ Orthopaedic and Traumatology Department, Hospital Pribram, Czech Republic

⁵ Ortotica I.I.c., Prague, Czech Republic

⁶ PROTEOR CZ I.I.c., Ostrava, Czech Republic

Funda Jiri (Pribram, Czech Republic)

Leg length discrepancy following total hip arthroplasty (20 min.)

Department of Trauma and Orthopaedic Surgery, Hospital Pribram, Czech Republic

KWIATKOWSKI MICHAL, POPKO JANUSZ (BIALYSTOK, POLAND)

Surgical treatment of flexible flatfoot in children. Early follow up study (20 min.)

Department of Pediatric Orthopaedics and Traumatology, Medical University of Bialystok, Bialystok, Poland

Karski Jacek¹, Okonski Marek¹, Jakubowski Pawel¹, Karska Klaudia², Kandzierski Grzegorz¹ Indications for surgical treatment in Perthes disease. The effectiveness of different methods (20 min.)

¹ Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin, Poland ² Department of Interventional Radiology and Neuroradiology of Medical University in Lublin, Poland

16.30 COFFEE BREAK

Chairmen: ZWIPP HANS, PARIZKOVA JANA, SMRCKA VACLAV

ZWIPP HANS (DRESDEN, GERMANY)

Fractures of the Foot and its Relevance of Foot Development in Children (30 min.)

Orthopedic and Traumatology Department of the University in Dresden, Germany

<u>NEMEC IVO</u>¹, SMRCKA VACLAV², MIHALJEVIC M.³, MAZANEK J.⁴, POKORNY J.⁵ (PRAGUE, CZECH REPUBLIC) Effect of inferior alveolar nerve transection on the inorganic component of the mandible – experimental model (20 min.)

¹ Department of Otorhinolaryngology and Maxillofacial Surgery 3rd Faculty of Medicine of Charles University in Prague & the Military University Hospital Prague, Czech Republic.

- ² Institute for History of Medicine and Foreign Languages & Department of Plastic Surgery, 1st Faculty of Medicine, Charles University in Prague, Bulovka Hospital, Czech Republic
- ³ Institute of Geochemistry, Mineralogy and Mineral Resources, Faculty of Science, Charles University in Prague, Czech Republic
- ⁴ Department of Stomatology, 1st Faculty of Medicine, Charles University in Prague and General University Hospital in Prague, Czech Republic
- ⁵ Institute of Physiology, 1st Faculty of Medicine, Charles University in Prague, Czech Republic

Zarković Dragana¹, Sorfova Monika¹, Groleger-Srsen Katja², Cikajlo Imre³ (Prague, Ljubljana & Soca, Czech Republic & Slovenia)

Can we improve selective voluntary motor control in cerebral palsied children? (20 min.)

- ¹ Charles University in Prague, Faculty of Physical Education and Sport, Department of Anatomy and Biomechanics, Prague, Czech Republic, University of Ljubljana, Faculty of Medicine, Slovenia
- ² University Rehabilitation Institute of Republic Slovenia Soca, Children's rehabilitation department, Ljubljana, Slovenia
- ³ University Rehabilitation Institute of Republic Slovenia Soca, Laboratory of clinical kinesiology, Ljubljana, Slovenia

<u>Ryba Lukas</u>¹, Koudela Karel², Marik Ivo^{1, 3}, Rybova Stepanka¹, Staskova Sarka¹, Vlckova Iva¹ (Pilsen & Prague, Czech Republic)

Physiotherapy treatment in patient with femoroacetabular impingement – systematic review (20 min.)

¹ Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic

² Faculty of Medicine, Charles University, Pilsen, Czech Republic

³ Ambulant Centre for Defects of Locomotor Apparatus; Prague; Czech Republic

<u>PARIZKOVA JANA</u>, SEDLAK PETR, MUSALEK M., DVORAKOVA H. (PRAGUE, CZECH REPUBLIC) Long term changes of physical activity, motor abilities and problems, and body composition in children and adolescents (20 min.)

Obesity Management Centre, Institute of Endocrinology, Prague, Czech Republic

20.00 DINNER – RAUT Restaurant Historie (Londýnská 52, Praha 2 – near Metro station I.P. Pavlova, http://www.restaurace-historie.cz/

SATURDAY, SEPTEMBER 16, 2017

8.00–9.00 REGISTRATION OF PARTICIPANTS in the Medical House, Prague (Sokolská 490/31, 120 00 Praha 2)

9.00-12.00 SESSION V: LECTURES & POSTERS

DISORDERS OF GROWING SKELETON – ORTHOTICS AND PROSTHETICS – BIOMECHANICS – VARIA

Chairmen: POVYSIL CTIBOR, ZEMKOVA DANIELA, KUKLIK MILOSLAV

<u>Povysil Ctibor</u>¹, Marik Ivo^{2, 3}, Zemkova Daniela^{2, 4}, Krepelova Anna⁵, Kuklik Miloslav⁴, Kozlowski Kazimierz⁶ (Prague & Sydney, Czech Republic, Australia) **Diastrophic dysplasia** (20 min.)

¹ Institute of Pathology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic

² Ambulant Centre for Defects of Locomotor Apparatus; Prague; Czech Republic

³ Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic

⁴ Dept. of Paediatrics; University Hospital Motol; Prague; Czech Republic

⁴ Genetic Dept.; Czech Republic, Prague 3; Czech Republic

- ⁵ Dept. of molecular genetics, Institute of biology and medical genetics, University Hospital Motol; Prague; Czech Republic
- ⁶ New Children Hospital, Westmead, Sydney, Australia

<u>SMRCKA VACLAV</u> (PRAGUE, CZECH REPUBLIC) **Challenges of biomolecular paleopathology (20 min.)** Institute for History of Medicine and Foreign Languages, Prague, Czech Republic

Chairmen: PIET J.M. VAN LOON, KRAWCZYK PETR, MARIK IVO, ARSENEV ALEKSEY

PIET J.M. VAN LOON¹, RUUD HGP VAN ERVE¹, ANDRE J GROTENHUIS², ERIC BTM THUNNISSEN³ (DEVENTER, NUMEGEN & AMSTERDAM, NETHERLANDS) Thoracolumbar lordotic intervention (TLI) in spinal deformities. Effective mechanical growth modulation by muscular forces induced by bracing (30 min.) ¹ Orthopedic surgeon, Care to Move, Centre for Orthopedics, Deventer, Netherlands ² Professor of neurosurgery, RadboudMC, University of Nijmegen, Netherlands

³ Pathologist, epidemiologist VUMC, Free University, Amsterdam, Netherlands

<u>SNYTR JAN</u> (ZRUC-SENEC, CZECH REPUBLIC) **Practical Use of Sensomotoric Insoles for Neurologic Patien (30 min.)** *Ottobock CZ I.I.c., Zruc-Senec, Czech Republic*

11.00 COFFEE BREAK

Chairmen: POVYSIL CTIBOR, FEJFAROVA VLADIMIRA, MARIK IVO

BEM ROBERT, FEJFAROVA VLADIMIRA (PRAGUE, CZECH REPUBLIC) Charcot foot – the neglected complication of diabetes (20 min.) Diabetes Centre, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

<u>FEJFAROVA VLADIMIRA</u> (PRAGUE, CZECH REPUBLIC) **Conservative treatment of Charcot foot (20 min.)** Diabetes Centre, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

NAVRATIL KAMIL (PRAGUE, CZECH REPUBLIC) Surgical management of Charcot foot (20 min.) Transplantation Surgery Department, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

E- POSTERS

Presenter: ARSENEV ALEKSEY VALENTINOVICH, CERNY PAVEL

<u>Rybka Dina Olegovna</u>, Dudin Mikhail Georgiyevich, Sharova L.E. (St. Petersburg, Russia) Capabilities of ultrasound diagnostics of paravertebral muscules in healthy children. Preliminary report (5 min.)

Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia

<u>Nikitina A. A.</u>, Dudin Mikhail Georgiyevich (St. Petersburg, Russia) Parameters of electromyogram of paravertebral muscles of healthy children from 6 to 12 years old (5 min.)

Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia

BAZANOVA M.V., DUDIN MIKHAIL GEORGIYEVICH, KOLOSKOVA L.E. (St. PETERSBURG, RUSSIA) Vitamin D 3 and VDR gene role in AIS pathogenesis within infant population. (Preliminary report) (5 min.)

Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia

DUDIN MIKHAIL GEORGIYEVICH, BOBER S., MAXIMOVA N., GAIDUK T., BOGDANOVA N. (ST. PETERSBURG, RUSSIA) Selective biofeedback training of the m. transversospinalis method for AIS (5 min.) Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia

ZALTSMAN P.L. (ST. PETERSBURG, RUSSIA)

Treatment of pain syndrome of vertebrogenic genesis in children and adolescents using differentiated methods of acupuncture (5 min.)

Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia

<u>Pavel Cerny</u>^{1, 2}, PETR Kawczyk^{2, 3}, Ivo Marik^{1, 4} (Pilsen & Prague & Ostrava, Czech Republic) Segment modifications of corrective spinal orthoses (5 min.)

¹ Faculty of Health Studies, University of West Bohemia, Pilsen, Czech Republic
² Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic
³ PROTEOR CZ I.I.c., Ostrava, Czech Republic
⁴ Ambulant Centre for Defects of Locomotor Apparatus I.I.c., Prague, Czech Republic

Ivo Marik & Petr Krawczyk, Tomasz Karski & Arsenev Aleksey Valentinovich Closing of the Symposium Certificates Planning of the 20th Prague-Lublin-Sydney-St. Petersburg Symposium 13.30 LUNCH

16.00 VLTAVA RIVER SIGHTSEEING CRUISE (http://www.prague-boats.cz/)

19.00 GALA DINNER – RESTAURANT APETIT

GOOD BYE!

NOTES FOR ALL PARTICIPANTS

Lectures and text slides will be presented in English. Time of the individual lecture includes time for discussion. A list of lectures/posters and chairmen of sessions can be changed!

Conference fee 50 Euros (including social programme & refreshment) by Bank Transfer Bank: ČSOB, Na Pankráci 310/60, 140 00 Praha 4 Bank account: 500617613/0300 IBAN: CZ84 0300 0000 0005 0061 7613 Swift Code/BIC: CEKOCZPP Owner of the account: Czech Medical Association J.E. Purkynje, Prague, CZ Variable symbol: 2517025 (into recipient information put on your name and surname).

Hotel accommodation is paid individually.

Abstracts of lectures will be published in the Supplement 2 of the journal Locomotor System 24/2017 (electronic version, ISSN 2336-4777, http://www.pojivo.cz/cz/pohybove-ustroji/.) Participants will receive the Programme & Certificate of Attendance & Symposium materials.

More recent information about the Symposium will be available on the websites: www.pojivo.cz & www.pls-symposium.com

Do not hesitate address your questions to International Organizers of the Symposium:

Prof. Ivo Marik, MD, PhD & Petr Krawczyk, MD e-mail: ambul_centrum@volny.cz & krawczyk@proteorcz.cz

Prof. Tomasz Karski, MD, PhD & Jacek Karski, MD, PhD

e-mail: tmkarski@gmail.com & jkarski@vp.pl

Prof. Mikhail Dudin, MD, PhD & Assist. Prof. Aleksey Shashko, MD

E-mail: ogonek@zdrav.spb.ru & shravan@mail.ru

Notes: an information about the Czech Police Museum is at http://www.prague.eu/en/object/places/544/czech-police-museum-muzeum-policie-cr

THE ORGANIZERS ARE GRATEFUL FOR THE SUPPORT OF THE SYMPOSIUM

Partners of the Symposium



