



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

invite you to

THE 20TH PRAGUE-LUBLIN-SYDNEY-ST. PETERSBURG SYMPOSIUM

main topic

INTERDISCIPLINARY APPROACH TO GROWING SKELETON 2

The Symposium will be held in Kroměříž, hotel "Octárna", Czech Republic in September 12–16, 2018

under the auspices of
of the chairman of the Chamber of Deputies of the Parliament of the Czech Republic
Radek Vondráček, MSc
&
the honorary president of the Czech Medical Association J.E. Purkynje
Professor Jaroslav Blahoš, MD, DSc.
&
the honorary president of the Society for Connective Tissues CMA J.E. Purkynje
Professor Josef Hyánek, MD, DSc.

The Symposium belongs to education actions integrated into the life training system of physicians according to professional statute No. 16 of the General Medical Council.

SYMPOSIUM PROGRAMME

WEDNESDAY, SEPTEMBER 12, 2018

Arrival of participants to Kroměříž

19.00–21.00 WELCOME BANQUET & REGISTRATION OF PARTICIPANTS IN THE HOTEL "OCTÁRNA", KROMĚŘÍŽ

THURSDAY, SEPTEMBER 13, 2018

8.30–9.00 REGISTRATION OF PARTICIPANTS IN THE HOTEL "OCTÁRNA"

9.00 OPENING OF THE SYMPOSIUM

Ivo Marik & Tomasz Karski & Mikhail Dudin)

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

WELCOME SPEECHES OF GUESTS

Radek Vondráček, MSc
Chairman of the Chamber of Deputies of the Parliament of the Czech Republic

Professor Jaroslav Blahoš, MD, DSc.
Honorary president of the Czech medical association J.E. Purkynje

Professor Josef Hyánek, MD, DSc.
Honorary president of the Society for Connective Tissues CMA J.E. Purkynje

9.30–12.00 **MORNING SESSIONS**

SESSION I: BIOMECHANICS – CLINICAL APPLICATION

Chairmen: PETRTYL MIROSLAV, BRAUN MARTIN, BELLEMORE MICHAEL

Petrtyl Miroslav[1], Denk Frantisek[1], Lerach Ales[3, 4], Vitek Tomas[5], Lisal Jaroslav[1], Myslivec Radek[2, 6], Marik Ivo[2, 6, 7] *(Prague, Czech Republic)*
The first electronically controlled distraction fixator stimulating the new bone formation in callus (25+5 min.)
1 Laboratory of Biomechanics and Biomaterial Engineering, Department of Mechanics, Faculty of Civil Engineering, CTU, Prague
2 Centre for Defects of Locomotor Apparatus l.l.c., Prague,
3 Faculty of Mechanical Engineering, CTU, Prague,
4 Medin Orthopaedics, a. s., Prague,
5 Faculty of Electrical Engineering, CTU, Prague
6 Orthopaedic and Traumatology Department, Hospital Pribram, Czech Republic
7 Faculty of Health Care Studies, West Bohemia University, Pilsner, Czech Republic

Braun Martin *(Prague, Czech Republic)*
Application and potential of bionanotechnologies in osteology and orthopaedics (20+5 min.)
Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics. The Czech Academy of Sciences, Prague, Czech Republic

Tesar Karel[1,2], Sucharda Zbynek[3], Balik Karel[3] *(Prague, Czech Republic)*
Surface morphology of biodegradable magnesium wires (15+5 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

11.30–12.00 COFFEE BREAK

Chairmen: MARIK IVO, PETRTYL MIROSLAV, CERNY PAVEL

Krawczyk Petr[1], Marik Ivo[2,5], Jakub Jozef[1], Sykora Ales[1], Zemkova Daniela[2], Petrasova Sarka[2], Uchytil Jaroslav[3], Jandacka Daniel[3], Buzga Marek[4] *(Ostrava & Prague & Pilsner, Czech Republic)*
Results of kinematic analysis of walking in patients with different weight of prosthesis (15+5 min.)
1 PROTEOR CZ l.l.c., Ostrava, Czech Republic
2 Ambulant Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic
3 Diagnostic Centre of Human Movement PdF, Ostrava University, Czech Republic
4 Department of Physiology and Pathophysiology, Faculty of Medicine, University of Ostrava, Czech Republic
5 Faculty of Health Care Studies, West Bohemia University, Pilsner, Czech Republic

Cerny Pavel[1,2,3], Drnkova Jana[3], Stolinski Lukasz[4,5,6], Czaprowski Dariusz[7,8], Kotwicki Tomasz[4], Marik Ivo[1,9] *(Prague & Pilsen, Czech Republic – Poznaň & Skierniewice & Olsztyn, Poland)*
Verification of measuring method of axial pelvic rotation from photographs according to scanned 3D models (15+5 min.)
1 Faculty of Health Studies, University of West Bohemia, Pilsner, Czech Republic
2 Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic
3 ORTOTIKA l.l.c., the complex of the Faculty Hospital at Motol, Prague, Czech 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 Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic

Cerny Pavel[1,2,3], Cerny Michal[3], Drnkova Jana[3], Stolinski Lukasz[4,5,6], Czaprowski Dariusz[7,8], Kotwicki Tomasz[4], Marik Ivo[1,9] *(Prague & Pilsen, Czech Republic – Poznaň & Skierniewice & Olsztyn, Poland)*
Measurement of spinal and postural deformities from radiographs and photographs using SCODIAC software (15+5 min.)
1 Faculty of Health Studies, University of West Bohemia, Pilsner, Czech Republic
2 Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic
3 ORTOTIKA l.l.c., the complex of the Faculty Hospital at Motol, Prague, Czech 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 Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic

FAMILY PHOTO OF PARTICIPANTS IN THE HOTEL "OCTÁRNA"

13.00–14.00 LUNCH

14.00–17.00 **AFTERNOON SESSIONS**

SESSION II: OSTEOLOGY, BONE METABOLISM

Chairmen: BAYER MILAN, LYRITIS GEORGE, MARIK IVO

Lyritis George[1] and Stavroula Rizou[2] *(Athens, Greece)*
Peak bone mass (20+5 min.)
1 Emeritus Professor of Orthopedics, Faculty of Medicine, National and Kapodistrian University of Athens, Greece
2 Hellenic Osteoporosis Foundation, Kifissia, Greece

Nikolaou Dimitrios A[1,2] *(Athens, Greece)*
The Importance of Risk of Falling Assessment alongside the "Fracture Risk", when evaluating patients with bone loss (20+5 min.)
1 Medical School, National and Kapodistrian University of Athens, Greece
2 Hellenic Osteoporosis Foundation, Kifissia, Greece

Zemkova Daniela[1,2], Mariková Alena[2], Hudakova Olga[2], Marik Ivo2,3, *(Prague & Pilsen, Czech Republic)*
Bone density of genetic skeletal disorders – introduction (20+5 min.)
1 Dept. of Paediatrics, University Hospital Motol, Prague, Czech Republic
2 Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic
3 Ambulant Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic

INVITED LECTURE OF PROFESSOR MILAN BAYER, MD, PHD.

Introduction: OLGA HUDAKOVA, MD, PHD

Moderator: PROFESSOR JOSEF HYANEK, MD, DSC.
Honorary president of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje

Bayer Milan *(Prague, Czech Republic)*
Pubertal timing and bone health (25+5 min.)
Department of Children and Adolescents, 3rd Faculty of Medicine, Charles University, Hospital Královské Vinohrady, Prague, Czech Republic

16.00–16.30 COFFEE BREAK

Bellemore Michael, Munns Craig *(Sydney, Australia)*
Osteogenesis imperfecta (20+5 min.)
Department of Orthopaedic Surgery, The Children's Hospital at Westmead, Sydney, Australia

Zwipp Hans *(Dresden, Germany)*
Malunited Fractures of the Foot and Ankle in Children – How to correct? (25+5 min.)
Orthopedic and Traumatology Department of the University in Dresden, Germany

17.30 DINNER

18.30 GUIDED TOURS IN KROMERIZ

Archbishop's cellars with wine tasting.

FRIDAY, SEPTEMBER 14, 2018

8.00–8.30 REGISTRATION OF PARTICIPANTS
in the Hotel "OCTÁRNA"

8.30–13.00 **MORNING SESSIONS**

SESSION III: SPINE DISORDERS I: PATHOGENESIS, DIAGNOSIS AND TREATMENT

Chairmen: KARSKI TOMASZ, DUDIN MIKHAIL, MARIK IVO

Lectures dedicated in memory of Milan Roth.

Hudakova Olga[1], Marik Ivo[1,2] *(Prague & Pilsen, Czech Republic)*
Memory of Associate Professor Milan Roth, DSc. (10 min.)
1 Ambulant Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic
2 Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic

Van Loon Piet JM[1], Soeterbroek Andre M[2], Grotenhuis Andre H[3] *(Deventer, Oosterbeek & Nijmegen, Netherlands)*
"A short cord can cause scoliosis": Osteoneural growth relations by Milan Roth (1923–2006) – a concise concept in morphogenesis and a useful scientific base for Orthopedics and Neuroscience. An overview of his legacy in biomedical science (25+5 min.)
1 Orthopedic surgeon, Care to Move, Centre for Orthopedics, Deventer, The Netherlands
2 Chairman Houdingnet (Posture Network Netherlands), Oosterbeek, The Netherlands
3 Professor of neurosurgery, RadboudMC, University of Nijmegen, The Netherlands

Dudin Mikhail Georgiyevich *(St. Petersburg, Russia)*
Reflections about the perspectives of scoliosology (25+5 min.)
Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', Saint-Petersburg, Russia

Arsenev Aleksey Valentinovich, Dudin Mikhail Georgiyevich, Petrov SS *(St. Petersburg, Russia)*
Idiopathic scoliosis treatment or how to 'loose spring' (20+5 min.)
Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' St. Petersburg, Russia

Karski Tomasz *(Lublin, Poland)*
Biomechanical etiology of the so-called idiopathic scoliosis. New classification. New therapy. Clinical material based on observation from 34 years (1984–2018) and presentation from 1995 (23 years) (25+5 min.)
Vincent Pol University in Lublin, Poland

10.30–11.00 COFFEE BREAK

SESSION III: SPINE DISORDERS II: PATHOGENESIS, DIAGNOSIS AND TREATMENT

Chairmen: VAN LOON, PIET, REPKO MARTIN, KOLESNICHENKO VERA

Van Loon Piet JM[1], Erve van Ruud HG[1], Thunnissen Erik BT[2], Grotenhuis Andre JM[3] *(Deventer, Amsterdam & Nijmegen, Netherlands)*
Growth of the human skeleton, a lifestyle dependant, tension based biomechanical and neurodynamic process. Connected research out of a trail in etiopathogenetic search in spinal deformities and endemic postural changes (20+5 min.)
1 Orthopedic surgeon, Care to Move, Centre for Orthopaedics, Deventer, The Netherlands
2 Pathologist, epidemiologist VUMC, Free University, Amsterdam, The Netherlands
3 Professor of neurosurgery, RadboudMC, University of Nijmegen, The Netherlands

Petrov SS *(St. Petersburg, Russia)*
What do we know about intervertebral discs? (the short literature review) (15+5 min.)
Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia

Nikitina AA, Komantsev VN, Dudin MG *(St. Petersburg, Russia)*
Electrophysiological aspects of paraspinal muscle activity in children 9–12 years old without spinal deformity (15+5 min.)
Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', Saint-Petersburg, Russia

Kolesnichenko Vera[1], Golka Gregory[2], Gresko Igor[3] *(Kharkov & Lviv Ukraine)*
Structural asymmetry of lumbar vertebrae as a risk factor for the developmental of paravertebral muscle dysfunction (15+5 min.)
1 SI "Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine", Kharkov, Ukraine
2 Kharkov National Medical University, Ukraine
3 Lviv National Medical University named after Danila Galitsky, Ukraine

Repko Martin[1,2], Filipovic Milan[1,2] *(Brno, Czech Republic)*
Growing scoliotic spine – limits of conservative treatment and indication of surgery (15+5 min.)
1 Orthopaedic department, Faculty Hospital of Masaryk´s University Brno
2 Centre for Spinal Surgery, Faculty Hospital Brno

Filipovic Milan[1,2], Repko Martin[1,2], Horak Jan[1,2], Leznar Milan[1,2], Prymek Martin[1,2] *(Brno, Czech Republic)*
The role of growth guidance systems in surgical treatment of early onset scoliosis (15+5 min.)
1 Orthopaedic department, Faculty Hospital of Masaryk´s University Brno
2 Centre for Spinal Surgery, Faculty Hospital Brno

FAMILY PHOTO OF PARTICIPANTS IN THE HOTEL "OCTÁRNA"

13.30–14.30 LUNCH

14.00–17.00 **AFTERNOON SESSIONS**

SESSION IV: DIAGNOSTICS AND COMPREHENSIVE TREATMENT

Chairmen: KARSKI JACEK, KRAWCZYK PETR, MARIK IVO

Bellemore Michael *(Sydney, Australia)*
Perthes disease, irritable hip and other causes of a painful hip (20+5 min.)
Department of Orthopaedic Surgery, The Children's Hospital at Westmead, Sydney, Australia

Karski Jacek, Wilczyński Michał, Karska Klaudia[1], Ostrowski Jerzy, Starobrat Grzegorz[2], Latalski Michał[2], Kałakucki Jarosław, Kandzierski Grzegorz *(Lublin, Poland)*
Bowleg deformities in children and adolescents. Various treatment methods (15+5 min.)
Paediatric Orthopaedic and Rehabilitation Department of Medical University of Lublin
1 Paediatric Radiology Department of Medical University of Lublin
2 Paediatric Orthopaedic Department of Medical University of Lublin

Karski Jacek, Klaudia Karska[1], Tomasz Karski[2] *(Lublin, Poland)*
Is the way of sitting important at childhood and adolescent age? (15+5 min.)
Paediatric Orthopaedic and Rehabilitation Department of Medical University of Lublin
1 Paediatric Radiology Department of Medical University of Lublin
2 Vincent Pol University in Lublin, Poland

Karski Tomasz[1], Karski Jacek[2], Beata Slowinska[3], Bartosz Boryga[3], Karski Janusz[4], Żurakowski Wojciech[4] *(Lublin, Poland)*

Physiotherapy correct and incorrect in patients from Sanatorium of Dr Janusz Korczak in Krasnobród in period of 1977–2018 (15+5 min.)

1 Vincent Pol University in Lublin, Poland
2 Medical University in Lublin, Poland
3 Military Hospital in Lublin, Rehabilitation Department
4 Sanatorium under the name of Dr Janusz Korczak in Krasnobród, Poland

16.00–16.30 COFFEE BREAK

Chairmen: KARSKI TOMASZ, SMRCKA VACLAV, MARIK IVO

Karski Tomasz[1], Karski Jacek[2], Domagala Marian[3], Kowalska Magdalena[3] *(Lublin, Poland)*

Problems of ankle joint, knee and in some cases of hips caused by rotation distortion in daily activity (15+5 min.)

1 Vincent Pol University in Lublin, Poland
2 Medical University in Lublin, Poland
3 Medical Centrum in Laszczów near to Tomaszów Lubelski

Karski Jacek[1], Karski Tomasz[2], Pyrc Jarosław[3] *(Lublin, Poland)*

Knee problems – instability. Causes. Symptoms. Prophylactics (15+5 min.)

1 Medical University in Lublin, Poland
2 Vincent Pol University in Lublin, Poland
3 Medical Department of Technical University in Dresden, Germany

Smrcka Vaclav[1,2], Mařík Ivo[3], Kuželka Vítězslav[4], Dick David[2], Bejvlová Jarmila[2] *(Prague, Czech Republic)*

Surgery of metacarpal aplasia (15+5 min.)

1 Institute for History of Medicine and Foreign Languages & Department of Plastic Surgery, 1st Faculty of Medicine, Charles University in Prague, Bulovka Hospital, Czech Republic
2 ESME l.l.c., Prague, Czech Republic
3 Centre for Defects of locomotor apparatus l.l.c, Prague, Czech Republic
4 Anthropological Department of National Museum, Prague, Czech Republic

Smrčka Václav[1,2], Rástočný Štefan[2], Marek Karel[2], Dick David[2], Bejvlová Jarmila[2] *(Prague, Czech Republic)*

Dupuytren disease in the Czech population in the 20th century (15+5 min.)

1 Institute for History of Medicine and Foreign Languages & Department of Plastic Surgery, 1st Faculty of Medicine, Charles University in Prague, Bulovka Hospital, Czech Republic
2 ESME l.l.c., Prague, Czech Republic

19.00 GALA DINNER WITH FOLKLORE MUSIC

SATURDAY, SEPTEMBER 15, 2018

8.30–9.00 REGISTRATION OF PARTICIPANTS
in the Hotel "OCTÁRNA"

9.00–13.00 **MORNING SESSIONS**

SESSION V: DISORDERS OF GROWING SKELETON – ORTHOPAEDIC ANTHROPOLOGY – PATHOBIOMECHANICS – ORTHOTICS AND PROSTHETICS – VARIA

Chairmen: ZEMKOVA DANIELA, BELLEMORE MICHAEL, MARIK IVO

Petrasova Sarka[1], Morvova Zuzana[1,4], Zemkova Daniela[1,2], Marik Ivo[1,3] *(Prague & Pilsen, Czech Republic)*
Characteristics of the tibiofemoral angle, rearfoot angle and plantar arch in healthy children aged 6 to 15 years (20+5 min.)
1 Ambulant Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic
2 Dept. of Paediatrics, University Hospital Motol, Prague, Czech Republic
3 Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic
4 Faculty of Science, Department of anthropology and human genetics, Charles University, Prague

Zemkova Daniela[1,3], Anyzova Tereza[3,4], Mariková Alena[2], Marik Ivo[2,3] *(Prague & Pilsen, Czech Republic)*
Growth data of Czech achondroplasia patients (20+5 min.)
1 Dept. of Paediatrics, University Hospital Motol, Prague, Czech Republic
2 Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic
3 Ambulant Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic
4 Faculty of Science, Department of anthropology and human genetics, Charles University, Prague

Shpileuski I., Sakalouski A. *(Minsk, Belarus)*
The peculiarities of surgical treatment of benign bone neoplasms in growing patients (20+5 min.)
Belarusian Research Centre of Traumatology and Orthopedics, Minsk, Belarus

Marik Ivo[1,2,4], Hudaková Olga[2], Marikova Alena[2], Zemkova Daniela[2,3], Myslivec Radek[2,4], Kozlowski Kazimierz[5]
(Prague & Pilsen, Czech Republic & Sydney, Australia)
Subtypes of enchondromatosis: case reports (20+5 min.)
1 Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic
2 Ambulant Centre for Defects of Locomotor Apparatus I.l.c., Prague, Czech Republic
3 Dept. of Paediatrics, University Hospital Motol, Prague, Czech Republic
4 Orthopaedic and Traumatology Department, Hospital Pribram, Czech Republic
5 Department of Medical Imaging, Children's Hospital at Westmead, Sydney, Australia

11.00–11.30 COFFEE BREAK

Chairmen: PARIZKOVA JANA, KRAWCZYK PETR, MARIK IVO

Bellemore Michael *(Sydney, Australia)*
Deformity correction and limb lengthening (15+5 min.)
Department of Orthopaedic Surgery, The Children's Hospital at Westmead, Sydney, Australia

Musil Michal *(Vienna, Austria)*
Indication-related strategy for orthotic aids applied to upper extremities affected by a neuromuscular disease (15+5 min.)
Pohlig Austria GmbH&CoKG, Vienna, Austria

Snytr Jan *(Zruč-Senec, Czech Republic)*
Comparison of GRAFO and reaction AFO orthoses in patient treatment (15+5 min.)
Ottobock CZ I.l.c., Zruč-Senec, Czech Republic

Popovicova Vera, Ryba Lukas, Rybova Stepanka *(Pilsner, Czech Republic)*
Monitoring the effect of fascial stretching on the range of motion in hip joint – a pilot study (15+5 min.)
Faculty of Health Care Studies, West Bohemia University, Pilsner, Czech Republic

Parizkova Jana (Prague, Czech Republic)
Predispositions for adiposity, motor abilities and muskuloskeletal development (15+5 min.)
Obesity Management Centre, Institute of Endocrinology, Prague Czech Republic

Bláha Pavel (Prague, Czech Republic)
Anthropological surveys in Czech Republic (Czechoslovakia) (15+5 min.)
Dept. of Biomedical Sciencis College of Physical Education and Sport PALESTRA

13.30–14.30 LUNCH

14.30–16.00 **AFTERNOON SESSIONS**

SESSION VI: E- POSTERS: SPINE DISORDERS III: PATHOGENESIS, DIAGNOSIS AND TREATMENT

Chairmen: KARSKI JACEK, DUDIN MIKHAIL, MARIK IVO

Presenters: DUDIN MIKHAIL GEORGIYEVICH, CERNY PAVEL

Dudin M.G.[1], Popov I.Yu.[2], Baloshin Yu.A[2], Lisitsa N.I.[2], Bober S.V.[1] *(St. Petersburg, Russia)*
Characteristics of linear sizes of vertebral bodies and intervertebral disks in children in the beginning of puberty (7+3 min.)
1 Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia
2 St. Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO University).

Bazanova MV, Dudin MG, Koloskova LE *(St. Petersburg, Russia)*
The value of vitamin D receptor gene polymorphism (VDR) by BSMI-B/b marker as a participant of adolescent idiopathic scoliosis (AIS) pathogenesis in children (7+3 min.)
Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok'& OOO "Medlab" SPb, Saint-Petersburg, Russia

Rybka DO[1], Dudin MG[1], Sharova LE[2] *(St. Petersburg, Russia)*
Ultrasonic characteristics of paravertebral muscles in children with idiopathic scoliosis and without deformity of the spine (7+3 min.)
1 Children's Rehabilitation Center of Orthopaedics and Traumatology «Ogonyok»,
2 North-Western State Medical University named after I.I. Mechnikov, Sankt-Petersburg, Russia

Vasilevich SV[1], Arseniev AV[1], Dudin MG[1], Sukhov TM[2] *(St. Petersburg, Russia)*
Experience diagnostics using the modern mobile technology in practice of physician orthopedist (7+3 min.)
1 Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok'
2 Baltic State Technical University 'VOENMECH' named after D. F. Ustinov, Saint-Petersburg, Russia

Vasilevich SV[1], Arseniev AV[1], Dudin MG[1], Khomutov VP[2], Komlev AE[2] *(St. Petersburg, Russia)*
Prospects the possible applications of the electret effects of the bones in pediatric orthopedics- preliminary report (7+3 min.)
1 Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok'
2 St. Petersburg Electrotechnical University 'LETI', St. Petersburg, Russia

Afanasyeva OP, Bober SV, Gyduc TG *(St. Petersburg, Russia)*
Psychological peculiarities of adolescents with scoliosis of various gravity degree (5+2 min.)
Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia.

Zaltsman P.L. *(St. Petersburg, Russia)*
The advantage of using a differential acupuncture technique in combination with traditional rehabilitation methods for stopping the pain syndrome of vertebrogenic genesis in children and adolescents (5+2 min.)
Children's Rehabilitation Center for Orthopaedics and Traumatology «Ogonyok», St. Petersburg, Russia

Cerny Pavel[1,2,3], Cerny Michal[3], Drnkova Jana[3], Stolinski Lukasz[4,5,6], Czaprowski Dariusz[7,8], Kotwicki Tomasz[4], Marik Ivo[1,9] *(Pilsen & Prague & Poznan & Skierniewice & Olsztyn, Czech Republic & Poland)*
Measurement of spinal and postural deformities from radiographs or photographs using dedicated software for computers and smartphones (7+3 min.)
1 Faculty of Health Studies, University of West Bohemia, Pilsner, Czech Republic
2 Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic
3 ORTOTIKA l.l.c., the complex of the Faculty Hospital at Motol, Prague, Czech Republic
4 Department of Spine Disorders and Pediatric Orthopedics, University of Medical Sciences, Poznan, Poland
5 Rehasport Clinic, Poznan, Poland
6 SPINE DISORDERS CENTER, 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 Centre for Defects of Locomotor Apparatus l.l.c., Prague, Czech Republic

Ivo Marik & Petr Krawczyk, Tomasz Karski & Mikhail Dudin
Closing of the Symposium
and planning The 21st Prague-Lublin-Sydney-St. Petersburg Symposium

FAMILY PHOTO OF PARTICIPANTS IN THE HOTEL "OCTÁRNA"

16.00 TOUR OF THE CASTLE AND GARDENS

18.00 FAREWELL DINNER

SUNDAY, SEPTEMBER 16, 2018

9.00 CELEBRATORY BREAKFAST IN THE HOTEL "OCTÁRNA"

GOOD BYE!

NOTES FOR ALL PARTICIPANTS

Lectures and text slides will be presented in English.
Time of the individual lectures and for discussion of each lecture is indicated in round brackets.
A list of lectures/posters and chairmen of sessions can be changed!

The registration conference fee 100 Euros (it includes registration, social program and refreshments throughout the symposium) will be paid by Bank Transfer.

Bank: **ČSOB, Na Pankráci 310/60, 140 00 Praha 4**
Bank account: **500617613/0300**
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Variable symbol: **2518022** (into recipient information put on your name and surname).

There is a possibility to pay during registration, too!

Hotel accommodation is paid individually.

Abstracts of lectures will be published in the Supplement 2 of the journal Locomotor System 25/2018 (electronic version, ISSN 2336-4777, http://www.pojivo.cz/cz/pohybove-ustroji/)
Participants will receive the Programme & Certificate of Attendance & Symposium materials.

NOTES TO SOCIAL PROGRAMME

Landmark protected by UNESCO:
Castle, a unique castle gardens. http://www.zamek-kromeriz.cz/en)

Social Evening at the wine Archbishop's cellars with wine tasting.

More recent information about the Symposium will be available on the websites:
www.pojivo.cz & www.ortoprotetika.cz

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

Professor Ivo Marik, MD, PhD & Petr Krawczyk, MD & RNDr. Martin Braun, PhD
e-mails: ambul_centrum@volny.cz & krawczyk@proteorcz.cz & braun@irsm.cas.cz

Prof. Tomasz Karski, MD, PhD & Jacek Karski, MD, PhD
e-mail: tmkarski@gmail.com & jkarski@vp.pl

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Notes:

A list of other hotels and websites where it is possible to provide accommodation:

http://www.octarna.cz/en)
http://www.hotelboucek.cz/hotel
http://www.lafresca.cz/english.html)
http://cernyorel.webnode.cz/en)
http://www.hotelpurkmistr.cz
http://www.wellness-kromeriz.cz/en)
http://www.penzionhrozen.cz/en)

Transport to Kromeriz

We ask the foreign participants to notify the organizers of the number of people and the way of transport to the symposium in order to facilitate travel no later than 14 days before the beginning of the symposium.

Transport from Prague or Ostrava (airport) to Kromeriz

Foreign participants of the symposium will report the date and time of the arrival to the airport to Prague or Ostrava no later than 14 days before the symposium begins. The organizers of the symposium will then arrange an transport from the airport to the railway station and transport to the accommodation in Kroměříž. The detailed shipping plan will be sent no later than 1 week before the symposium begins.

Partners of the symposium

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