



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

invite you to

THE 24TH PRAGUE-LUBLIN SYMPOSIUM

Locomotor Apparatus Adaptation III – Interdisciplinary Aspects

The Symposium will be held under the auspices
of the president of the Czech Medical Association (CMA) J.E. Purkyně

Professor Štěpán Svačina, MD, DSc.

&

the honorary president of the Society for Connective Tissues CMA J.E. Purkyně

Professor Josef Hyánek, MD, DSc.

The Symposium will be held at the
Medical House, Sokolská 31, 120 26 Prague 2, Czech Republic, in November 5, 2022

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



PROGRAMME

SATURDAY, NOVEMBER 5, 2022

8.00–9.00 REGISTRATION OF PARTICIPANTS

9.00 OPENING OF THE CONFERENCE

WELCOME SPEECHES

Professor Ivo Marik, MD, PhD

President of the Society for Connective Tissues, Czech Medical Association J.E. Purkyně

Professor Tomasz Karski, MD, PhD

Honorary member of the Society for Connective Tissues CMA J.E. Purkyně and the CMA J.E. Purkyně

Braun Martin, RNDr, PhD

Introduction of Assistant Professor Dr. Jacek Karski (Lublin, Poland)

9.20–12.20 | MORNING SESSIONS

9.20 | SESSION I: ADAPTATION OF LOCOMOTOR APPARATUS – MECHANOBIOLOGY – BIOCHEMICAL AND BIOMECHANICAL ASPECTS 1

Chairmen: Mařík Ivo, Krawczyk Petr, Karski Tomasz

Current treatment options for Avascular Necrosis (AVN) of the hip joint in oncohaematological patients. Preliminary report
Současné možnosti léčby avaskulární nekrózy (AVN) kyčelního kloubu u onkohematologických pacientů. Předběžná zpráva

Karski Jacek¹, Dudkiewicz Ewa², Madej Tomasz³, Karska Klaudia³ (Lublin, Poland)

¹ Paediatric Orthopaedic and Rehabilitation Department of Medical University of Lublin, Poland

² Department of Paediatric Haematology and Oncology and Transplantology Department of Medical University of Lublin, Poland

³ Department of Paediatric Radiology of Medical University of Lublin, Poland
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Partial astragalectomy in treatment of severe neurogenic clubfoot Parciální astragalektomie při léčbě těžké neurogení „golfové“ nohy

Okoński Marek, Kandzierski Grzegorz, Karski Jacek

Paediatric Orthopaedic and Rehabilitation Department of Medical University of Lublin, Poland

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Is better prevention on cancer reachable and shouldn't it be aimed in childhood? Lze dosáhnout lepší prevence rakoviny a neměla by být zaměřena již na dětství?

Carcinogenesis in the light of Discongruent Osteoneural Growth Relations and Two-Growth-Types (Egg-Sperm) Concepts by Milan Roth and the suboptimal morphogenesis of contemporary youth

Karcinogeneze ve světle diskongruentních osteoneurálních růstových vztahů a koncepce dvou růstových typů (vajíčko-sperma) Milana Rotha a suboptimální morfogeneze současné mládeže
P.J.M. van Loon¹, Soeterbroek A.M.², Grotenhuis J.A.³ and Smit T.H.⁴

¹ *Orthopedic surgeon, Proktovar, Hengelo, the Netherlands;*

² *Analyst, Chairman of Posture Network Netherlands, the Netherlands*

³ *Em. Prof. of Neurosurgery Radboud University Nijmegen, the Netherlands;*

⁴ *Professor of Tissue Engineering; Mechanobiology of development and disease; Amsterdam UMC, the Netherlands*

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Evaluation of the effect of ageing on collagen and elastin-based tissues from the biochemical and biomechanical point of view

Hodnocení vlivu stárnutí na tkáně na bázi kolagenu a elastinu z biochemického a biomechanického hlediska

Braun Martin¹, Suchý Tomáš^{1,2}, Šupová Monika¹, Horný Lukáš², Adámek Tomáš³

¹ *Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics, Czech Academy of Sciences, Prague, Czech Republic*

² *Faculty of Mechanical Engineering, Czech Technical University in Prague, Prague Czech Republic*

³ *Regional Hospital Liberec, Department of Forensic Medicine and Toxicology, Liberec, Czech Republic*

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TIME FOR LECTURE INCLUDING DISCUSSION IS 20 MIN.

DISCUSSION AFTER EACH LECTURE

10.40–11.00 COFFEE BREAK

11.00 | SESSION II: ADAPTATION OF LOCOMOTOR APPARATUS – NEUROMUSCULAR AND SKELETAL RELATIONS

Chairmen: Piet von Loon, Mařík Ivo, Karski Jacek, Zemková Daniela

INVITED LECTURE – 30 MIN.

Artificial Intelligence – Apocalypse or Salvation Umělá inteligence – apokalypsa nebo spása

Assoc. Professor Eng. Ján Šípoš

GUTTA Slovakia spol. s r.o.

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INVITED LECTURE – 30 MIN.

History of Discoveries of Biomechanical Etiology of the So-Called Idiopathic Scoliosis (Adolescent Idiopathic Scoliosis [AIS]) in dates and “think over” / meditations

Historie objevů biomechanické etiologie tzv. idiopatické skoliózy (adolescentní idiopatická skolióza [AIS]) v datech a „zamyšlení“ / meditace

Karski Tomasz

Professor Lecturer in Vincent Pol University in Lublin, Poland / In years 1995 – 2009 – Head of Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin, Poland

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Bodily resilience of army-soldiers, a measure of congruent or incongruent Osteoneural Growth Relations?

Tělesná odolnost vojáků – měřítko kongruentních nebo diskongruentních osteoneurálních růstových vztahů? Bude mít vliv sedavého způsobu života v raném dětství rozhodující vliv na výdrž “bot v terénu”?

P.J.M. van Loon¹, Soeterbroek A.M.², Grotenhuis J.A.³ and Smit T.H.⁴

¹ *Orthopedic surgeon, Proktovar, Hengelo, the Netherlands*

² *Analyst, Chairman of Posture Network Netherlands the Netherlands*

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Influence of COVID-19-Related Restrictions on the Prevalence of Overweight and Obese Czech Children

Vliv opatření souvisejících s COVID-19 na výskyt nadváhy a obezity u českých dětí

Vážná Anna¹, Vignerová Jana², Brabec Marek^{3,4}, Novák Jan¹, Procházka Bohuslav⁵, Gabera Antonín⁶ and Sedlak Petr¹

¹ Department of Anthropology and Human Genetics, Faculty of Science, Charles University, Prague, Czech Republic

² Institute of Endocrinology, Prague, Czech Republic;

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⁴ National Institute of Public Health, Prague, Czech Republic

⁵ MUDr. Bohuslav Procházka I.L.c., Kutná Hora, Czech Republic;

⁶ Medical Department Krásné Březno, Ústí nad Labem, Czech Republic

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TIME FOR LECTURE INCLUDING DISCUSSION IS 15 MIN.

DISCUSSION AFTER EACH LECTURE

12.30–13.15 | LUNCH

13.15–17.30 | AFTERNOON SESSIONS

13.15 | SESSION III: BONE DYSPLASIAS. ETIOPATHOGENESIS OF GENETIC SKELETAL DISORDERS

Chairmen: Kutílek Štěpán, Bayer Milan, Zemková Daniela, Mařík Ivo

Hypophosphasia

Hypofosfázie

Kutílek Štěpán (Klatovy, Czech Republic)

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Two heterozygous sequence variants of the CTSK gene in a girl with very small stature

Dvě heterozygotní sekvenční varianty genu CTSK u dívky s velmi malým vzrůstem

Bayer M.¹, Gregorova A.², Romanova M.¹

¹ Department of Children and Adolescents, 3rd. Faculty of Medicine, Charles University and University Hospital Královské Vinohrady, Prague, Czech Republic

² Department of Medical Genetics, University Hospital Ostrava, Czech Republic

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Beals-Hecht syndrome: comparison of radioclinical findings and molecular genetic testing of DNA isolated from blood and bone tissue. Long term follow up **Beals-Hechtův syndrom: srovnání radioklinických nálezů a molekulárně genetického vyšetření DNA izolované z krve a kostní tkáně. Dlouhodobé sledování**

Mařík Ivo^{1,2}, Krulišová Veronika³, Zemková Daniela^{1,4}, Smrčka Václav⁵, Myslivec Radek^{1,6}, Maříková Alena¹, Paszeková Helena³, Michalovská Renáta³, Vlčková Zdenka³

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Phenotypic continuum of pathogenic COMP variants. Comparison MED1 and PSACH **Fenotypové kontinuum patogenních variant COMP. Srovnání MED1 a PSACH**

Zemková Daniela^{1,2}, Krulišová Veronika⁵, Vážná Anna^{1,4}, Krutilková Věra⁶, Petrášová Šárka¹, Mařík Ivo^{1,3}

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⁶ Clinical Genetics Outpatient Clinic, Laboratories of Agel a.s., Member of the AGEL Group; Prague, Czech Republic

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Radioulnar Synostosis – uncommon manifestation of Feingold syndrome **Radioulnární synostóza – neobvyklý projev Feingoldova syndromu**

Krulišová Veronika¹, Mařík Ivo^{2,3}, Zemková Daniela^{2,4}, Paszeková Helena¹, Michalovská Renáta¹, Vlčková Zdenka¹

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Early molecular genetic diagnosis of Spondylometaphyseal dysplasia – Kozłowski typ
Časná molekulárně genetická diagnostika spondylometafyzární dysplazie – typ Kozłowski

Černa Šárka¹, Laštůvková Jana¹, Zemková Daniela^{2,4}, Černý Jan⁵, Mařík Ivo^{2,3}

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TIME FOR LECTURE INCLUDING DISCUSSION IS 15 MIN.

DISCUSSION AFTER EACH LECTURE.

14.45–15.00 | COFFEE BREAK

15.00 | SESSION IV: SESSION IV: NEUROMUSCULAR AND SKELETAL ADAPTATION – REMODELLING OF CONNECTIVE TISSUES

Chairmen: Kraus Josef, Mařík Ivo, Krawczyk Petr

Adaptation to extrapyramidal lesion in extrapyramidal form of cerebral palsy
Adaptace na extrapyramidovou lézi u extrapyramidové formy mozkové obrny

Kraus Josef

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Clinical and psychological symptoms of Minimal Brain Dysfunction (MBD). Causes. Children and adults. Examples of pathology. Methods of therapy
Klinické a psychologické příznaky minimální mozkové dysfunkce (MBD). Příčiny. Děti a dospělí. Příklady patologie. Metody terapie

Karski Tomasz¹, Karski Jacek², Kędzierski Zbigniew³, Domagała Marian⁴

¹ Professor Tomasz Karski MD, Ph.D., Vincent Pol University, Lublin, Poland

² Assist. Professor Jacek Karski MD Ph.D., Medical University in Lublin, Poland

³ Dr med. Zbigniew Kędzierski, Orthopedic Scientific Center in Lublin, Poland

⁴ Dr Domagała Marian, Medical Center in Laszczów, District Tomaszów Lubelski, Poland
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Exopulse Mollii Suit – the first neuromodulation suit **Exopulse Mollii Suit – první neuromodulační oblek**

Vostracká Karolína

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TIME FOR LECTURE INCLUDING DISCUSSION IS 20 MIN.

DISCUSSION AFTER EACH LECTURE.

16.00 | SESSION V: REMODELLING OF CONNECTIVE TISSUES

Chairmen: Krawczyk Petr, Černý Pavel, Karski Jacek

Development and testing of a 3D printed protective cranial orthosis **Vývoj a testování 3D tištěné ochranné lebeční ortézy**

Rosický Michael, Martínek Matěj, Rosický Jiří

Invent Medical Group, Ostrava, Czech Republic

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Ongoing evaluation of the treatment of pectus excavatum with a vacuum bell and pectus carinatum with a thoracic brace **Průběžné hodnocení léčení pectus excavatum vakuovým zvonem a pectus carinatum hrudní ortézou**

Černý Pavel^{1,3}, Mařík Ivo^{1,4}, Doucha Miloš², Kučerová Barbora², Zemková Daniela⁵

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Risk of knee osteoarthritis in patients with transtibial amputation – effect of prosthesis weight
Riziko osteoartrózy kolenního kloubu u pacientů s transtibiální amputací – vliv hmotnosti protézy

Krawczyk Petr¹, Rygelová Markéta², Kutáč Petr², Uchytíl Jaroslav², Bužga Marek², Zemková Dana^{3,4}, Mařík Ivo^{4,5}

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The use of technical aids to prevent serious consequences of falls in the elderly
Využití technických pomůcek k prevenci závažných následků pádů u starších osob

Šorfova Monika, Islami Timur

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Analysis of the contact area of the upper limb for three types of blows
Analýza kontaktní plochy horní končetiny pro tři typy úderů

Beranek Václav¹, Šťastný Petr², Turquier Frederic³, Nováček Vít^{1,4}, Votápek Petr⁵

¹ *Department of Rehabilitation, Faculty of Health Care Studies, University of West Bohemia in Pilsen, Pilsen, Czech Republic*

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⁴ *Biomechanical modelling of the human body, New Technologies – Research Centre, University of West Bohemia in Pilsen, Czech Republic*

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TIME FOR LECTURE INCLUDING DISCUSSION IS 15 MIN.

DISCUSSION AFTER EACH LECTURE.

17.30 | CLOSING OF THE SYMPOSIUM AND PLANNING
THE 25TH PRAGUE-LUBLIN SYMPOSIUM

Ivo Marik & Petr Krawczyk & Tomasz Karski & Jacek Karski & Piet van Loon

18.00 | DINNER

ORGANIZERS OF THE SYMPOSIUM

Professor Ivo Mařík, MD, PhD & Petr Krawczyk, MD, PhD & Martin Braun, RNDr., PhD

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Participants will receive the Programme and Certificate of Attendance

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More recent information about the Symposium will be available on the websites:

www.pojivo.cz & www.ortoprotetika.cz