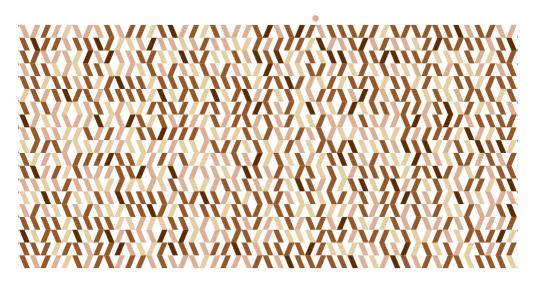
Programme

6th International Anthropological Congress of Dr. Aleš Hrdlička

150th anniversary of birth

The 21th Prague-Lublin-Sydney-St. Petersburg Symposium Orthopaedic Anthropology 2

3rd-5th September 2019 | Humpolec | Czech Republic



All mankind is of one origin



Systém výživy kloubů dle výzkumu prof. MUDr. Milana ADAMA, DrSc.

Originální český kolagenní doplněk stravy **GELADRINK**® byl vyvinut na základě výzkumu revmatologa a spoluzakladatele společnosti Orling s.r.o. prof. MUDr. Milana ADAMA, DrSc., člena Akademie věd v New Yorku, oceněného prestižní cenou UNESCO za celoživotní přínos lékařské vědě.



DOPORUČUJÍ odborné společnosti



doplněk stravy



22 let existence na trhu!

GELADRINK® obsahuje:

- 👂 kolagenní peptidy GELITA® kolagenní bílkovina přispívá k udržování normálních kostí
- vitamín C přispívá k normální formaci kolagenu pro normální funkci kostí a chrupavek
- 🖊 glukosamin a chondroitin sulfáty jsou součástí kloubní chrupavky
- 🛾 antioxidanty, MSM a další látky s příznivými nutričními a fyziologickými účinky doplňujícími běžnou stravu a vyživující kosti, chrupavky, klouby a pojivové tkáně

BEZPLATNÁ LINKA - 800 108 999 - WWW.ORLING.CZ









6th International Anthropological Congress of Dr. Aleš Hrdlička 150th anniversary of birth

"All mankind is of one origin"

ጲ

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 for

The 21st Prague-Lublin-Sydney-St Petersburg Symposium topic

Orthopaedic Anthropology 2

that will be held in frame of the 6th International Anthropological Congress of Dr. Aleš Hrdlička in Fabrika Hotel in Humpolec, Czech Republic, September 3–5, 2019.

The Symposium will be taken place under the auspices of the president of the Czech medical association (CMA) J.E. Purkynje

Professor Štěpán Svačina, MD, DSc

Ω

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.



International Organizers of the Symposium:

Professor Ivo Marik, MD, PhD & Petr Krawczyk, MD & RNDr. Martin Braun, PhD & Professor RNDr. Miroslav Janura, Dr.

E-mails: ambul_centrum@volny.cz & krawczyk@proteorcz.cz & braun@irsm.cas.cz
Faculty of Health Care Studies, West Bohemia University, Pilsen & Ambulant Centre for Defects of Locomotor
Apparatus I.I.c., Prague, Czech Republic, e-mail: ambul_centrum@volny.cz

& PROTEOR CZ I.l.c., Ostrava, Czech Republic, e-mail: krawczyk@proteorcz.cz & Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics. The Czech Academy of Sciences, Prague, Czech Republic, e-mail: braun@irsm.cas.cz & International Society for Prosthetics and Orthotics, Czech Republic, info@ispo.cz

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

University of Vincent Pol & Medical University in Lublin, Lublin, Poland, e-mail: tmkarski@gmail.com & jkarski@vp.pl

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

Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok, St. Petersburg, Russia, e-mail: ogonek@zdrav.spb.ru & stivamat@rambler.ru

Participants will receive the Programme of The 6th International Anthropological Congress of Dr. Aleš Hrdlička, the Supplement 2 of the journal "Locomotor System" with abstracts of all lectures of the Congress and Certificate of Attendance of the 21st Prague-Lublin-Sydney-St. Petersburg Symposium. Abstracts of lectures will be published in Supplement of the journal "Locomotor System" (electronic version, ISSN 2336-4777), www.pojivo.cz/cz/pohybove-ustroji/ More recent information about the Symposium will be available on the websites:

www.pojivo.cz & www.ortoprotetika.cz & www.IACAH.eu



















ORTHOPAEDIC ANTHROPOLOGY

annotation

The topic **Orthopaedic Anthropology** covers with application of pieces of knowledge on skeleton development and its functional adaptation in orthopaedic profession. It engages in precise verification of body and skeleton abnormalities (including asymmetry), deformities and disproportions (congenital and acquired) and their development is verified by anthropometric, X-ray, densitometric, CT, MRI, microscopic, histological, histochemical, electronmicroscopic, biochemical, biomechanical, 3D scanning methods and the like. It means exact description of both congenital and acquired skeletal disorders (after injuries and/or due to metabolic and infectious diseases) at macro-, meso-, micro- and nanolevels. Archaeological material is suitable subject of investigation, too. Etiopathogenetic causes of skeleton abnormalities (gene mutations), growth diseases and genetic skeletal disorders are included in the topic.

The terminology **Orthopaedic Anthropology** was for the 1st time used by Professor Phillip V. Tobias (Johannesburg, South Africa) in 2003 when he from the status of president of "International Anthropological Congress – Anthropology and Society" (Prague-Humpolec, May 22-24, 2003) assessed the session of the Congress titled "Comprehensive approach to congenital and acquired deformities of locomotor system" by this designation.

Prague, September 14, 2018

Note: The topic of The 11th Prague-Sydney-Lublin Symposium was Orthopaedic Anthropology. This Symposium was held in the frame of the Vth International Anthropological Congress of Aleš Hrdlička "Quo vadis homo …societas humana?" in September 2–5, 2009, Praha, Humpolec, Czech Republic (Locomotor system journal, 16, 2009, no. 3+4, p. 257–258, www. pojivo.cz/pu/PU_34_2009.pdf)

Professor Ivo Marik, MD, PhD, FABI

Faculty of Health Care Studies, West Bohemia University, Pilsen, CZ
Chief of the Centre for patients with Locomotor Defects, I.I.c., Prague, CZ
President of the Society for Connective Tissue, Czech Medical Association J.E. Purkyně
Research Secretary of the Society for Prosthetics and Orthotics, Czech Medical Association J.E. Purkyně
Chief Editor of the journal Locomotor System – Advances in Research, Diagnostics and Therapy
Olšanská 7, 130 00 Prague 3, Czech Republic | Tel./fax: +420 222 582 214 | E-mail: ambul_centrum@volny.cz



ORTOPEDICKÁ ANTROPOLOGIE

anotace

Téma **Ortopedická antropologie** se zabývá aplikací poznatků o vývoji skeletu a jeho funkční adaptaci v ortopedické praxi. Věnuje se přesnému ověřování abnormalit lidského těla (včetně asymetrie), vrozeným nebo získaným deformitám a jejich vývoji, disproporcionalitě verifikované metodami antropometrickými, denzitometrií, výpočetní tomografií, magnetickou rezonancí, mikroskopicky, histologicky, histochemicky, elektronmikroskopicky, biochemickými a biomechanickými metodami, 3D skenováním apod. Obor ortopedická antropologie si klade za cíl přesně charakterizovat vrozené skeletální vady nebo získané deformity kostry po úrazech anebo v důsledku ortopedických, metabolických a infekčních chorob na makro, meso-, mikro- a nanoúrovni. Pro výzkum je vhodný i archeologický skelet. Oblast zájmu zahrnuje genetické choroby skeletu, etiopatogenetické příčiny abnormalit skeletu (mutace genů), růstové poruchy vrozené a získané.

Název **Ortopedická antropologie** poprvé použil pan profesor Philip Valentin Tobias (Johannesburg, South Africa), když jako president "Mezinárodního antropologického kongresu – Antropologie a společnost" (Praha-Humpolec, 22.–24. května 2003) hodnotil sekci kongresu "Komplexní přístup k vrozeným a získaným vadám pohybového ústrojí".

Praha, 14.10.2018

Poznámka: Tématem "The 11th Prague-Sydney-Lublin Symposia" byla Orthopedická Anthropologie. Symposium se konalo v rámci V. mezinárodního kongresu Aleše Hrdličky "Quo vadis homo ...societas humana?" 2.–5. září 2009 v Praze a Humpolci. (Pohybové ústrojí, 16, 2009, č. 3+4, s. 257–258, www.pojivo.cz/pu/PU_34_2009.pdf)

Prof. MUDr. Ivo Mařík, CSc.

Fakulta zdravotnických studií, Západočeská universita v Plzni
Ambulantní centrum pro vady pohybového aparátu s.r.o.
Předseda Společnosti pro pojivové tkáně ČLS JEP
Vědecký sekretář Ortopedicko-protetické společnosti ČLS JEP
Vedoucí redaktor recenzovaného časopisu Pohybové ústrojí – pokroky ve výzkumu, diagnostice a terapii
Olšanská 7, 130 00 Prague 3, Czech Republic | Tel./fax: +420 222 582 214 | E-mail: ambul_centrum@volny.cz

Welcoming Speech of

The 21st Prague-Lublin-Sydney-St. Petersburg Symposium – Orthopaedic anthropology 2: Interdisciplinary approach to growing skeleton

Professor Ivo Marik, MD, PhD, FABI

Chief of the Centre for Patients with Locomotor Defects I.l.c., Prague, Czech Republic
Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic
President of the Society for Connective Tissue, Czech Medical Association, J.E. Purkynje
Scientific secretary of the Society for prosthetics and orthotics Czech Medical Association J. E. Purkynje
Chief-Editor of the journal Locomotor System – advances in research, diagnostics and therapy

Dear Ladies and Gentlemen, my dear colleagues!

I cordially welcome you at The 21th Prague-Lublin-Sydney-St. Petersburg Symposium. This year the Symposium is for the fourth time a part of the International Anthropological Congress of Dr. Aleš Hrdlička and is taken place under the auspices of the president of the Czech medical association (CMA) J.E. Purkynje Professor Štěpán Svačina, MD, DSc and the honorary president of the Society for Connective Tissues CMA J.E. Purkynje Professor Josef Hyánek, MD, DSc.

My special reception and thanks belongs to the International Organizers of the Symposium. These are: Prof. Tomasz Karski, MD, PhD & Jacek Karski, MD, PhD from University of Vincent Pol & Medical University in Lublin, Lublin, Poland, next Prof. Mikhail Dudin, MD, DSc & Assist. Prof. Aleksey Arsenev, MD from Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok, St. Petersburg, Russia furthermore Petr Krawczyk, MD & RNDr. Martin Braun, PhD & Professor RNDr. Miroslav Janura, Dr., president of the International Society for Prosthetics and Orthotics, Czech Republic.

My pleasure is to welcome among us the next distinguished Czech celebrities Professor Jana Pařízková, MD, DSc, well known endocrinologist specialized on obesity, Professor Ctibor Povýšil, MD, DSc, well known pathologist specialized on pathomorphology of bone and joint disorders and tumours, Professor Václav Smrčka, MD, PhD, plastic surgeon specialized also on hand surgery and paleopathology, Professor Miroslav Petrtýl, Eng, DSc, well-known biomechanics – specialist in functional adaptation of skeleton and last but not least Dr. Piet Van Loon from Deventer, The Netherlands, orthopaedic surgeon interested in "care to move" based on aspects of Osteovertebral and Osteoneural growth relations by Milan Roth.

I cordially welcome all colleagues, specialists of various medical branches, specialists in biomechanics, orthotics, physiotherapy and the other participants who are interested in disorders of neuro-musculo-skeletal system from different aspects.

At present, interdisciplinary approach to congenital and acquired skeletal deformities was accepted as the main line of thought how recognize the new connections regarding etiology, pathogenesis and last but not least the comprehensive and even causative therapy of genetic skeletal disorders. The new discoveries arise just at interface of scientific branches. I believe that scientific lectures will amplify our knowledge which will become a profit for our disabled patients.

My great thanks belong to the Organizing Committee of the 6th Congres of Dr. Aleš Hrdlička namely Associate Professor RNDr. Eva Drozdová, PhD, who arranged for us very interesting cultural programme.

The organizers are grateful for the support of The 21st Symposium to the Partner "ottobock." and Exhibitors IBI, spol. s r.o. and KYOWA KIRIN.

I wish you to enjoy new scientific information, the beauty historical landmarks of Humpolec and I wish you to make new friendships which will help us to arrange international and interdisciplinary scientific research.

Now, let me a short reminiscence of a few moments that we spent together with most of you in beautiful Kroměříž in September 2018. Look at photos.



 6^{th} International Anthropological Congress of Dr. Aleš Hrdlička

















 6^{th} International Anthropological Congress of Dr. Aleš Hrdlička





 6^{th} International Anthropological Congress of Dr. Aleš Hrdlička

Welcoming Speech of

Professor Tomasz Karski, MD, PhD

Retired head of the Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin (1995–2009), Poland

Actually: Professor Lecturer in Vincent Pol University in Lublin, Poland

Dear Participants of the 21st Prague-Lublin-Sydney-St. Petersburg Symposium, dear Authorities of the Czech Medical Association (CMA) J.E. Purkyně, dear Friends of the Society for Connective Tissues and Society for Prosthetics and Orthotics CMA J.E. Purkynje, dear Professors, dear Doctors, orthopaedic surgeons, physiotherapist, paediatricians, general doctors gathering for the Anthropology Congress and Symposium, and also dear Professor Ivo Mařík. it is a great privilege for the Polish Group to attend the 21st Prague-Lublin-Sydney-St. Petersburg Symposium in Humpolec and special honour for me to be together with World Scientists in this Scientific Meeting – now for the twentieth time.

Here and now, I would definitely say that every scientific progress in the area of internal medicine, orthopaedics, rehabilitation, anthropology is possible only with the "friendly cooperation" and "friendly exchanges of meanings and exchange of medical observations". I am very lucky – to have such a friendly cooperation with Professor Ivo Mařík and His Team over the history of 20 years. All our work and activity is oriented to improvement the effectiveness of our treatment and reaching better results at our patients. This close orthopaedic cooperation is extremely important, profitable and effective because we can as frankly discuss the concrete problems during the Symposium as we can publish our experience and clinical materials in the Locomotor System Journal.

I would like to express my great thanks for this profitable cooperation and all the honours that have been directed to the Polish Group. I wish all participants of the Congress and the Symposium an enjoyable time in Humpolec and fruitful scientific and amicable discussions.

Greetings of

Professor Mikhail Dudin, MD, DSc

Former Director and Actual Professor consultant of Children's Rehabilitation Centre of Orthopedics and Traumatology "Ogonyok" St. Petersburg, Russia

Dear friends!

Another year flew by and we meet again on the margins of the 2019 Symposium in the beautiful Czech Republic! I believe that it would not be a great exaggeration to evaluate the main direction of the Symposium – the study of the locomotor system – a direct continuation of the traditions of one of the oldest universities in the world – Charles University. Indeed, among the first four of its faculties was a medical one, the symbol of which was the pelican. In mythology, the pelican "feeding his children" is a symbol of selfless parental love and care. And in order for our children to grow up happy, the PLSS Symposium solves one of the most important tasks – to provide them with the opportunity to walk and run, learn and play sports without interference. Unfortunately, the human locomotory apparatus has its weaknesses and a rather long range of its diseases appears at an early age. I consider it a fair idea: "All adult orthopaedics begin in childhood." I would like to wish the participants of the Symposium to take another successful step on a great and long journey – to give the young generation a healthy musculoskeletal system, so that after they grow up they will have the opportunity to "Fight-or-Flight".

SYMPOSIUM PROGRAMME

TUESDAY, SEPTEMBER 3, 2019

Cinema Hall

08.30–11.00 Registration of participants

11.00–11.30 Opening ceremony

11.30–12.30 Jane E. Buikstra (Arizona State University, United States of America)

"... a pyramid that stands on its point "- Ales (Alois) Hrdlicka's vision

of research in physical anthropology

12.30–13.00 Pavel Bláha (Palestra, Prague)

History of congresses of Dr. Aleš Hrdlička

13.00-14.30 LUNCH

Session 3 - Orlík room (hotel Fabrika)

Opening of The 21st Prague-Lublin-Sydney-St Petersburg Symposium

Main topic: ORTHOPAEDIC ANTHROPOLOGY: Interdisciplinary approach to growing skeleton

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

Professor Josef Hyánek, MD, DSc

Honorary president of the Society for Connective Tissues CMA J.E. Purkynje

Anniversary of Professor Tomasz Karski, MD, PhD

Introduction: Olga Hudáková, MD, PhD

Moderator: Professor Josef Hyánek, MD, DSc

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

14.30-14.50

KARSKI TOMASZ¹, KARSKI JACEK², DOMAGALA MARIAN³

Syndrome of standing 'at ease' on the right leg as an important factor in the development of the so-called adolescent idiopathic scoliosis (AIS) and an influencing factor in the pathology of right shank, knee, hip and back pain

- ¹ Vincent Pol University in Lublin, Poland
- ² Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin, Poland
- ³ Medical Center, Laszczów by Tomaszów Lubelski, Poland

Anniversary of Prof. Mikhail Dudin, MD, DSc

Introduction: Olga Hudáková, MD, PhD

Moderator: Professor Ivo Marik, MD, PhD

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

14.50-15.10

DUDIN M., PINCHUK D., PANKRATOVA G.

Interdisciplinary collaboration in the study of the children's musculoskeletal system: facts, reflections, conclusions

Children's Rehabilitation Center for Orthopedics and Traumatoloay 'Oaonyok', St. Petersbura, Russia

15.10-15.30 FAMILY PHOTO OF PARTICIPANTS

15.30-16.00 COFFEE BREAK

16.00-17.20

Session 4 - Orlík room (hotel Fabrika)

Biomechanics - Functional adaptation of human locomotor system

Chairmen: Parizkova Jana, Petrtyl Miroslav, Marik Ivo

16.00-16.20

Parizková Jana¹, Sedlak Petr¹, Musalek Martin²

The impact of adaptation to hypokinesia during early growth

- ¹ Dept. of Anthropology and Human Genetics, Prague, Czech Republic
- ² Faculty of Physics, Education and Sport, Charles University, Prague, Czech Republic

16.20-16.40

KOTT OTTO, VRBSKA VERONIKA

Sedentary work – The importance of adopting and maintaining correct sitting posture. Knowledge translation

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

16.40-17.00

Karski Tomasz¹, Karski Jacek², Domagala Marian³, Słowińska Beata⁴, Boryga Bartosz⁴, Pyrc Jaroslaw⁵ Improper sitting position in Children, Adolescents and Adults. Causes. Clinic. Physiotherapy

- ¹ Vincent Pol University in Lublin, Poland
- ² Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin, Poland
- ³ Medical Center, Laszczów by Tomaszów Lubelski, Poland
- ⁴ Military Hospital in Lublin, Poland
- ⁵ Elblandkliniken Stiftung &Co.KG. Abteilung Orthopädie, Unfallchirurgie und Wirbelsäulenchirurgie. Krankenhaus Radebeul, Germany

17.00-17.20

VAN LOON PIET JM¹, SOETERBROEK ANDRE M², GROTENHUIS ANDRE H³

Homo Erectus and backpain? Being Homo Sedens from birth is an unhealthy evolution!

- 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, Radboud MC, University of Nijmegen, The Netherlands

18.00-19.00 SIGHTSFFING OF HUMPOLEC

20.00 ORGAN CONCERT IN ST. NICOLAS CHURCH COMPLETED OF APPEARANCE OF BAND ARS CAMERATA

WEDNESDAY SEPTEMBER 4, 2019

Cinema Hall

9.00-9.30

MARIA KACZMAREK

Female reproductive potential throughout the lifespan: an anthropological perspective

Adam Mickiewicz University, Poland

9.30-10.00

ELIZAVETA V. VESELOVSKAYA

Russian school of anthropological reconstruction. Achievements and projects

Russian Academy of Science, Russian Federation

10.00-10.30 COFFEE BREAK

10.30-12.00

Session 8 - Orlík room (hotel Fabrika)

Patho-biomechanics – diagnostics – orthopaedic prosthetics

Chairmen: Cerny Pavel, Krawczyk Petr, Petrtyl Miroslav

10.30-10.50

ARSENEV ALEKSEI, DUDIN MIKHAIL

Cuneiform vertebral deformation in patients with AIS

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia

10.50-11.10

KRAWCZYK PETR

Possibilities of orthotic treatment in children with cerebral palsy

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

11.10-11.25

Pankratova Galina¹, Dudin Mikhail²

Evaluation of the brace treatment effectiveness in patients with progressive scoliosis

- ¹ Orthopedics clinic, Ryazan, Russia
- ² Children's Rehabilitation Center of Orthopedics and Traumatology "Ogonyok", Saint-Petersburg, Russia

11.25-11.40

CERNY PAVEL 1,2, DRNKOVA JANA2, KOTT OTTO1, NEGRINI STEFANO3

Design of spinal brace shape classification

- ¹ Faculty of Health Care Studies, University of West Bohemia, Pilsen, Czech Republic
- ² ORTOTIKA I.I.c., the complex of the Faculty Hospital at Motol, Prague, Czech Republic
- ³ ISICO Italian Scientific Spine Institute, Milan, Italy

11.40-12.00

Arsenev Aleksei, Vasilevich Sergey, Dudin Mikhail, Falinskii Aleksandr

Prospects of application of 3D scanner in terms of children's orthopediccenter

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia

12.00-12.15 COFFFF BRFAK

12.15-13.35

Session 11 - Orlík room (hotel Fabrika)

Biomechanics - Bone diseases - diagnosis

Chairmen: Vasilevich Sergey, Petrtyl Miroslav, Marik Ivo

12.15-12.35

Vasilevich Sergey, ArsenevAleksei, Kurchenko Sergey, Dudin Mikhail, Falinskii Aleksandr Piezoelectric effect in bone during extracorporeal shock wave therapy in experiment

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia

12.35-12.55

Pankratova Galina¹, Dudin Mikhail²

Functional violations of urinary system in children with idiopathic scoliosis

- ¹ Orthopedics clinic, Ryazan, Russia
- ² Children's Rehabilitation Center of Orthopedics and Traumatology "Ogonyok", Saint-Petersburg, Russia

12.55-13.15

Khaymina Tatyana, AvalianiTatyana, Karpenko Marina, Dudin Mikhail, PinchukDmitrii Features of endogenous neuropeptides in children with initial symptoms of AIS

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia

E-poster

13.15-13.25

RYBKA DINA¹, DUDIN MIKHAIL¹, SHAROVA LIDIY²

Ultrasound diagnosis of paravertebral muscles in children with AIS before and after treatment

- ¹ Children's Rehabilitation Center of Orthopedics and Traumatology "Ogonyok", Saint-Petersburg, Russia
- ² NW State Medical University I.I.Mechnikova, St. Petersburg, Russia

E – poster

13.23-13.35

BOBER STEPAN, DUDIN MIKHAIL, UZDENNIKOVA MARINA

Characteristics of the spatial orientation of the vertebral column, shoulder and pelvic girdle in patients 7–17 years of age with initial symptoms of scoliosis

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok', St. Petersburg, Russia

- 14.00-16.30 TOURS TO ŽELIV MONASTERY AND/OR LIPNICE CASTLE
- 16.30 18.00 CONCERT OF BAND OF THE CASTLE GUARDS AND THE POLICE OF THE CZECH REPUBLIC
- 19.00 20.00 AWARDING HRDLIČKA'S MEMORIAL MEDALS WITH PERFORMANCE OF SAXO-PHONE BAND SWINGING CHIPSES
- **20.00** CASUAL CONGRESS DINNER WITH MUSICAL ACCOMPANIMENT OF LOCAL BANDS "RADOVANKA" AND "HUDBADVOŘÁK"

THURSDAY SEPTEMBER 5, 2019

Cinema Hall

Moderator: Professor Josef Hyánek, MD, DSc

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

9.00-9.30

<u>Ivo Mařík</u>^{1,2,4}, Daniela Zemková^{2,3}, Alena Maříková², Šárka Petrášová², Radek Myslivec^{2,4}, Olga Hudáková², Miroslav Petrtýl⁵, Ctibor Povýšil⁶, Josef Hyánek⁷, Miloslav Kuklík⁸, Kazimierz Kozlowski⁹

Orthopaedic anthropology

- ¹ Faculty of Health Care Studies, West Bohemia University, Pilsen, Czech Republic
- ² Centre forDefects of LocomotorApparatusl.l.c., Prague, Czech Republic
- ³ Pediatric Dpt., University Hospital Motol, Prague, Czech Republic
- ⁴ Orthopaedic and Traumatology Department, HospitalPribram, Czech Republic
- ⁵ Department of Mechanics, CTU, Prague, Czech Republic
- ⁶ Institute of Pathology, Charles University and General FacultyHospital, Prague, Czech Republic
- ⁷ Hospital Homolka Prague, Czech Republic
- ⁸ Endocrinologic institute Prague, Czech Republic
- ⁹ Children's Hospital at Westmead, Sydney, Australia

Moderator: Professor Václav Smrčka, MD, PhD

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

9.30-10.00

CTIBOR POVÝŠIL¹, VÁCLAV SMRČKA²

Microscopical principles for differentiation of diagenetic and pathological intra vitam changes of archaeological bone

- ¹ Institute of Pathology
- ² Institute for History of Medicine1st Faculty of Medicine, Charles University Prague, Czech Republic

10.00-10.30 COFFEE BREAK

10.30-12.00

Session 13 - Orlík room (hotel Fabrika)

Biomechanics - Bone diseases - diagnosis

Chairmen: Povysil Ctibor, Zemkova Daniela, Marik Ivo

10.30-10.50

POVYSIL CTIBOR

 $Pathomorphology\ of\ crystal-associated\ osteo arthropathies\ in\ bioptic\ and\ archaelogical\ materials$

Institute of Pathology, 1st Medical Faculty and General Faculty Hospital, Prague, Czech Republic

10.50-11.15

ZEMKOVA DANIELA. 1,2, MARIK IVO^{2,3}, MARIKOVÁ ALENA², PETRASOVÁ SARKA², HUDAKOVÁ OLGA^{2,4} Hypophosphatemic rickets: growth and body proportions in a group of Czech patients conventionally treated

- ¹ Pediatric Dpt., University Hospital Motol, Prague
- ² Centre for Defects of Locomotor Apparatus I.I.c., Prague
- ³ Faculty of Medical Studies, West Bohemia University, Pilsner, Czech Republic
- ⁴ Health Centre I.P. Pavlova, Prague

11.15-11.40

Marik Ivo^{1,2,4}, Zemkova Daniela^{2,3}, Mariková Alena², Myslivec Radek^{2,4}, <u>Hudakova Olga</u>^{2,5}, Kuklik Miloslav⁶, Povysil Ctibor⁷

The orthopaedic problems connected with vitamin D metabolism: Rickets, Osteomalacia, Hypophosphatemic rickets (X-linked hypophosphataemia)

- ¹ Faculty of Health Care Studies; West Bohemia University; Pilsen
- ² Centre for Defects of Locomotor Apparatus; Prague;
- ³ Dept. of Paediatrics: University Hospital Motol: Praque
- ⁴ Orthopaedic and Traumatology Department; Hospital Pribram; Czech Republic
- ⁵ Health Centre I.P. Pavlova, Prague
- ⁶ Department of molecular genetics, Endocrinologic institute, Prague
- ⁷ Institute of Pathology, 1st Medical Faculty and General Faculty Hospital, Prague

11.40-12.00

VODICKA ONDREJ

Burosumab in the treatment of pediatric patients with XLH: results of recent clinical trials

Kyowa Kirin Pharma I.I.c., Prague, Czech Republic

12.00-13.00 IUNCH

13.00-15.00

Session 16 - Orlík room (hotel Fabrika)

Disorders of growing skeleton

Chairmen: Hyanek Josef, Karski Jacek, Van Loon Piet

13.00-13.20

SMRCKA VACLAV^{1,3}, <u>Dick Davio</u>², Shahed Samir³, Musilova Zdenka⁴, Köhler Kitti⁵, Tvrdy Zdenek⁶
Congenital Anomalies in Neolithic Lengyel Culture

- ¹ Institute for History of Medicine and Foreign Languages &
- ² Department of Plastic Surgery, 1st Faculty of Medicine, Charles University in Prague, Bulovka Hospital, Czech Republic
- ³ ESME I.I.c., Prague, Czech Republic
- ⁴ Municipality of the town Letovice
- ⁵ Research Centre for the Humanities, Institute of Archaelogy Hungarian Academy of Sciences, Budapest
- ⁶ The Moravian Museum, Anthropos Institute, Brno

13.20-13.40

ZEMKOVA DANIELA^{1,2}, BALASCÁKOVÁ MIROSLAVA³, PAPRSKAROVA MARTINA ⁵, MOSLEROVA VERONIKA³, MARIK IVO^{2,4} Pycnodysostosis in a Czech toddler, sclerosing bone dysplasia

- ¹ Pediatric Dpt., University Hospital Motol, Prague
- ² Centre for Defects of Locomotor Apparatus I.I.c., Prague
- ³ Institute of Biology and Medical Genetics, University Hospital Motol, Prague
- ⁴ Faculty of Medical Studies, West Bohemia University, Pilsen, Czech Republic
- ⁵ Dpt. of Genetics, University Hospital Ostraya, Czech Republic

13.40-14.00

Doktorova Helena¹, Hrabeta Jan¹, Groh Tomas¹, Mohamed AbdelRahman¹, Feriancikova Barbara¹, Cerna Tereza^{1,2}, Podhorska Natalia¹, Eckschlager Tomas¹

Neuroblastoma in musculoskeletal system, tumor hypoxia, HIF-1 and chemoresistance

- ¹ Department of PediatricHematology and Oncology, 2nd Medical School, Charles University and University Hospital Motol. Praaue
- ² Department of Biochemistry, Faculty of Science, Charles University, Prague; Czech Republic

14.00-14.20

RYBA LUKAS¹, RYBOVA STEPANKA¹, NECHUTNY JIRI¹, MARIK IVO^{1,2}

Perthes' disease and femoroacetabular impingement in a growing patient

- ¹ Faculty of Health Care Studies: West Bohemia University: Pilsen
- ² Centre for Defects of Locomotor Apparatus; Prague; Czech Republic

14.20-14.40

Karski Jacek¹, Okoński Marek¹, Ostrowski Jerzy¹, Matuszewski Łukasz¹, Kandzierski Grzegorz¹, Karski Tomasz^{2,3} 50th Anniversary of Dega pelvic osteotomy in treatment of DDH – dysplasia, subluxation or luxation of the hip joint

- ¹ Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin, Poland
- ² Vincent Pol University in Lublin, Poland
- ³ Military Hospital in Lublin, Poland

14.40-15.00

VAN LOON PIET JM¹, SOETERBROE ANDRE M², GROTENHUIS ANDRE H³

Anthropology and the physical presentation of Homo sapiens in the 21th century. Modern man and his posture

- 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

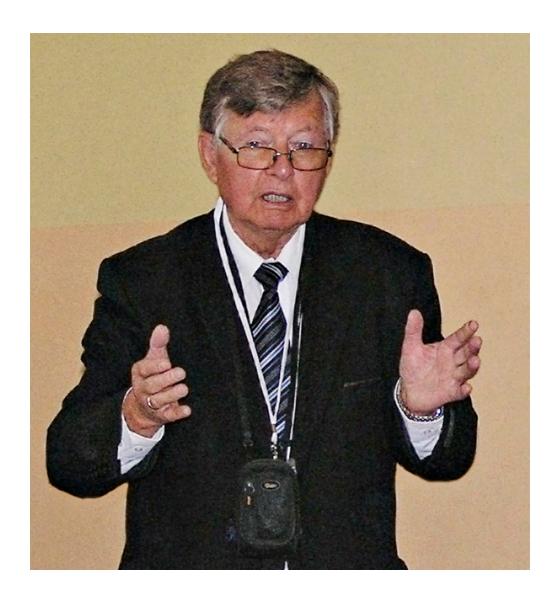
IVO MAŘÍK, PETR KRAWCZYK, TOMASZ KARSKI, ALEKSEIARSENEV, MIKHAIL DUDIN Closing of the Symposium and planning
The 22nd Prague-Lublin-Sydney-St. Petersburg Symposium

15.00-15.30 FAMILY PHOTO OF PARTICIPANTS

15:30 OFFICIAL CLOSING OF THE CONGRESS (CINEMA HALL)

Professor Tomasz Karski, MD, PhD - octogenarian

Professor Emeritus since 1st October 2009 Former Head of Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin (1995–2009). 58 years orthopedic activity to 2019.



Professor Tomasz Karski was born in January 2, 1939 in Rudka / Zwierzyniec / Zamość district (southeast part of Poland). Primary school in Zwierzyniec, secondary school in Zamość. In the years **1956–1963** study on Medical University in Lublin.

In **1963** he received medical doctor degree. During the studies he worked 3 years in Students Scientific Orthopedic Association and later after graduation he began orthopedic activity.

In **1967** first grade of specialization, in **1971** second grade of specialization in orthopedics, orthopedic surgery and traumatology of movement apparatus.

In 1972 and 1982 he passed degrees to receive PhD degree and Associate Professor title.

In **1993** he was nominated for Professor and President of Poland confer him the scientific degree Professor ordinaries (full Professor).

Since **1995 till 2009** he was a Head of Chair and Department of Pediatric Orthopedics and Rehabilitation of Medical University in Lublin/Poland. It is the biggest University Pediatric Hospital in Eastern Poland (USzD in Lublin).

He is a member of Polish Orthopedic and Traumatology Association (PTOiTr) since 1963. For 12 consecutive years he was elected as Secretary of Lublin Branch (Section) of Polish Orthopedic and Traumatology Association, for 4 years he was Vice-President of the Section and for next 4 years he was President of the Lublin Section. He works in Editorial Board of Polish Hand Surgery, of the Journal of Paediatric Orthopaedics part-B (till 2004), of *Biblioteka Ortopedii Dziecięcej* (Pediatric Orthopedics' Library) and of the journal Locomotor System – "Pohybové ústrojí" (Czech Republic). In the years 2009–2019 he is a Reviewer – Member of Editorial Offices of many Scientific Journals in USA. He is a member of EPOS since 1985 and a member of *Société Internationale de Chirurgie Orthopédique et de Traumatologie* (SICOT) since 2002.

Scholarships abroad: Orthopedic Departments: Neuruppin (German Democratic Republic – one month every year in years 1963–1972), Heidelberg (1972) – together 10 months & Essen (1973) – as DAAD scholarship holder, Budapest (one weeks – many times), Hajduszoboszlo (Congress), Szekesfehervar (Congress), Brno (one month), Neubrandenburg (German Democratic Republic Congress), Chemnitz (Congress), London (one month and Congress), Amsterdam (two weeks and Congress), Montpellier (Congress), Leipzig (one week and Congress), Erfurt (German Democratic Republic) one week and Congress, Paris (one week and Congress), Bratislava (many times), Szeged (many times), Debrecen (many times), Vienna (many times and EPOS Congress), Stolzalpe (three times, in period of one – two weeks), Berlin (many times), Hubertusburg (Wermsdorf – many times), Siebenlehn (as Lecturer – many times), Rummelsberg (one month), Copenhagen (two weeks), Björred (Sweden – some days), Heinola / Finland (many times – every time – one month), Oulu (Congress), Milano (Italy – Congress), Lubjana (short stay), Hong Kong (2004 – one week stay and Symposium), Beijing (2005 – one week stay and Congress), Helsinki (2005 – lecturer at Orthopedic Summer School / Place: Invalid Foundation Hospital / Helsinki / Teholantie 10).

He was awarded by the Rector (main Director of University) of Medical University of Lublin 39 times for scientific and educational work. He received three times award from the Ministry of Health of Poland (1975, 1986, 1993). He was also awarded with medals: "Przyjaciel Dziecka" (1978r.), "Medal Pamiątkowy

Sześćdziesięciolecia TPD" and "Międzynarodowego Roku Dziecka" (1979r.), Złotą Odznakę TWK (1984r.), Złoty Krzyż Zasługi (1987r.), Medal im. dr Henryka Jordana (2000r.) and Krzyż Kawalerski Polonia Restituta (2000r.) and Medal Komisji Edukacji Narodowej (2003r.), medal Vincentego Pola (2010). Since 1996 he is Honorary Member of Hungarian and since 2003 of Slovak Orthopedic and Traumatology Association and since 2005 of Czech Orthopedic and Traumatology Association. In 2006 he was awarded by Honorary Membership of The Society for Connective Tissues, Czech Medical Association, J.E. Purkynje, in 2008 by a Medal of honour of the Czech Medical Association J.E. Purkynje and in 2009 by a Medal for Clinical and Scientific Merits of The Society for Connective Tissues, Czech Medical Association, J.E. Purkynje.

In 2003 he was awarded by International Biographical Center Cambridge, England as Outstanding Intellectual of the 21th Century. Since 2005 his name is putting on list in The Contemporary Who's Who of Professionals ABI (USA).

He described the biomechanical etiopathogenesis of the so-called idiopathic scoliosis (1995–2007) and he is the author of a new rehabilitation treatment of this spine deformity. In the year 1997 he found that all children with scoliosis has the habit to stand 'at ease' only on the right leg and it was deciding for development of "C" 2nd/A scoliosis and "S" 2nd/B group of scoliosis and additional cause of development of "S" I group of scoliosis. In 2001 he described two etiopathological groups (1st and 2nd) and in 2004 the 3rd group of the development of so-called idiopathic scoliosis which proved to be crucial for prophylactics and new conservative treatment. In 2006 he described the "model of hips movement" – deciding in "development of every types of scoliosis". In 2007 he found the answer – why the blind children do not have scoliosis and in this year he also described the "indirect influences coming from CNS in small children and their influence for development of scoliosis in future".

He published these clinical findings in numerous polish and foreign publications and also in four books on scoliosis (2000, 2002, 2003 and 2011). His articles have been published also by International Research Society or Spinal Deformities – IRSSD Meetings in Athens (2002), in Ghent (2006) and in Liverpool (2008) and in Poznań (2012) – together 5 articles. He presented his ideas about etiology of scoliosis during SICOT Congress in Egypt (2002), in Cuba (2004), in Turkey (2005), in Marrakech (2007) and in Prague (2011).

In years 2012–2014 he attended many Symposia and Congresses IRSSD – in Liverpool, SOSORT – in Wiesbaden, in Hungary, in Czech Republic, in Germany, in Belgium, in England, in Greece, in Egypt. The recent information about so-called idiopathic scoliosis he published in many articles: in 2005, in 2007 and in 2010 in Pan Arab Journal of Orthopedics and Trauma and in 2011 in Spain and in US-China Orthopedic Journal (USA). In the time 2009–2019 he published many articles – mostly about etiology, about new classification and new therapy of the so-called idiopathic scoliosis in 44 articles in USA, Canada, Spain, Czech Republic. All these paper are presented in website www.ortopedia.karski.lublin.pl in point 17.

His scientific interest is first of all pediatric orthopedic surgery and specially:

- DDH etiopathogenesis, new functional treatment at newborn, babies and small children; new concept of femur osteotomy and innominate bone osteotomy of dysplasia hips – here many successes in treatment,
- 2. congenital feet deformities (club foot) modification of skin incision,

- torticollis effective early new conservative treatment of new-born and small babies (described in Orthopädische Praxis in Germany and in American Research Journal of Medicine and Surgery),
- 4. Morbus Blount explanation of etiology and operative procedures and since 33 years effective conservative treatment children in age of 1.5 3 years (described in Orthopädische Praxis in Germany and in Pohybove Ustroji Locomotors System Journal in Czech Republic and in many articles in USA),
- 5. genua valga new operative procedure "lateral high realize". The fasciotomy of tractus ilio tibilis it was described in Locomotors System Journal edited in Czech Republic,
- cerebral palsy (CP) concept of new treatment through the RAO method [R rehabilitation, A apparatus, O – operation (if needed)]. It was described in the Locomotors System Journal edited in Czech Republic
- coxarthrosis (arthrosis in hips) adults patients, new concept for rehabilitation, new prevention's methods. This preventive method was presented in many Meetings in many countries. Two articles are published in USA. The paper about "Syndrome of Standing 'at ease' on the Right Leg" presented rules of prophylaxis of the coxarthrosis is publish in Locomotors System in Czech Republic.
- 8. gonarthrosis (arthrosis in knees) adults patients, new rehabilitation, new prevention, preventive surgery (simple surgery) fasciotomy of tracts ilio-tibialis
- 9. hallux valgus and other foot insufficiency adults patients, new rehabilitation, new prevention. Importance of "toes flexion test" (described in Beitrage zur Orthopädie / GDR).
- back pain adults patients, new rehabilitation, new prevention and physiotherapy methods.
 Many articles about this problem were published in USA and two articles published in Neurologia Praktyczna in Poland.

He is author of 7 original orthopedic devices (apparatus).

Publications in medical literature: Author of 6 monographs, author or co-author of 453 papers + 11 manuscripts after 2009 (plenty in English and in German). In 2011 he published a monograph about aetiology of the so called idiopathic scoliosis and about new treatment and causal prophylaxis of this spine deformity (4th Edition).

Foreign languages: German (full active), English (full active), Italian (passive/active), French (passive/active), Russian (passive/active).

Last ten years: in 2009 (30th September / 1st October 2009) he become the status "Professor Emeritus" (retirement) in Medical University. In these years (till now) he is working as Professor Lecturer in Vincent Pol University / Lublin / Poland, on Faculty of Physiotherapy. All years he is active and took place in many Congresses and Symposia in Poland and aboard (Orthopaedic Congresses in Hungary, in Germany, in SOSORT, SICOT, Prague-Lublin-Sydney-St. Petersburg Symposia. Since 2009 till 2018 he was Orthopaedic Surgeon Consultant in Military Hospital in Lublin.

In 2013 he had the series of lectures for German Students in April (one week) in University in Dresden and in December (one week) in University in Idstein / north of Frankfurt / Main (in program of ERASMUS). Others ERASMUS lectures were in Belgium, Italy, Spain in the years 2015–2019.

Dear Tomasz.

The committee of the Czech Medical Association J. E. Purkyně granted you the Honorary membership for your lifelong scientific work and care for paediatric orthopaedic patients. The award will be handed you by the president of the Czech Medical Association J. E. Purkyně Professor Štěpán Svačina, MD, DSc

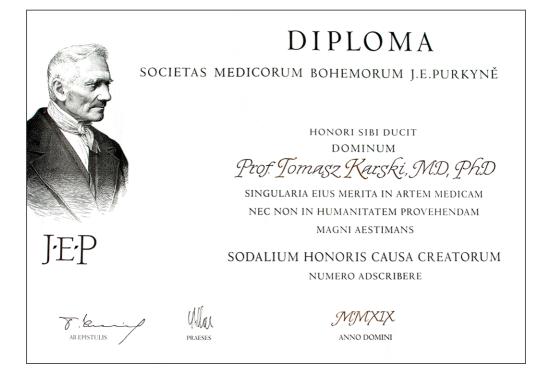
Allow us all to wish you good health and subsequent success during your professional work and university activities.

Sincerely Yours

Ivo

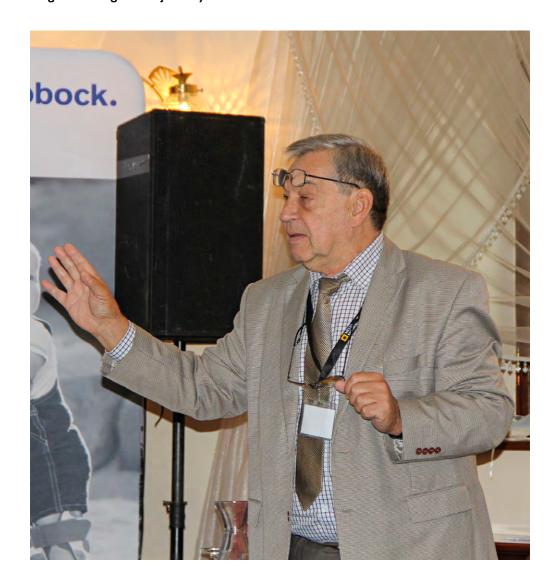
Professor Ivo Marik, MD, PhD

President of The Society for Connective Tissues, CMA J.E. Purkynje Research Secretary of The Society for Prosthetics and Orthotics CMA J.E. Purkynje



Prof. Mikhail Dudin, MD, PhD, DSc - septuagenarian

This year, one of the active participants in the symposium, Professor Dudin, is celebrating his 70th birthday. Over 47 years of his professional life, he has traveled a long and thorny path in orthopedics. Let me briefly mention the main stages of this glorious journey.



Mikhail Dudin was born on the 21st of October, 1949.

In 1972 – graduated with honors from the Leningrad Pediatric Medical Institute (now St. Petersburg).

1972–1974 – specialization (residency) in pediatric orthopedics and traumatology at the Turner Leningrad Research Children's Orthopedic Institute for obtaining the status of an orthopedic specialist.

1974–1984 – Internship at the clinic of the Leningrad rehabilitation center for children's orthopedics and traumatology "OGONEK".

In **1982** he defended his thesis on the topic "Idiopathic scoliosis with atypical pathological rotation of the vertebra: diagnosis, course, treatment tactics", which describes a special type of scoliosis with a benign course.

1984–1986 – Consultant, orthopedic surgeon, specialist in pediatric orthopedics and traumatology at the hospital Lenin in the city of Holguin, Republic of Cuba.

After 16 years of work as an orthopedic surgeon, after gaining experience and thinking about the results of this activity, a natural conclusion was made: most of the many treated patients could have avoided surgery! However, this required three conditions: the first is knowledge of the etiology and pathogenesis of the disease (in pediatric orthopedics, this information remains a big "white spot"!). The second is a reliable early diagnosis and prediction of the outcome of the lesions of the dorsal musculo-skeletal system (in most cases the solution to this problem is determined by the subjective experience of an individual doctor and rarely has an objective basis). The third is the available medical technology for controlling the functional state of all parts of the musculoskeletal system (bones and connective tissues, as well as the neuromuscular complex).

The absence of these conditions completely determines the real position of the children's orthopedist – wait for the appearance of indications for surgical intervention. And during this wait, all classes were reduced to kinesitherapy and massage, which are often combined with the term "rehabilitation". On the basis of this idea, a new concept of pediatric orthopedics was developed – it must be conservative. It should be emphasized that we are talking about conservative orthopedics, and not about rehabilitation. By the way, the term rehabilitation literally means restoration of lost health and it expresses the main task of all medical specialties – from classical therapy to modern HiTech surgery. Therefore, for children's orthopedics it is more correct to use the term "habilitation". To achieve its goal it was necessary to solve a number of scientific problems. That is why in 1986–1996 Mikhail Dudin returned to the Leningrad Turner Research Institute for Children in the status of a researcher. According to the results of the in-depth analysis of the world scientific literature on osteogenesis, two control systems, the nervous and endocrine, were put in the spotlight.

The initial period of studying these systems in children with orthopedic pathology coincided with the work of M. Dudin in the Russian region affected by the disaster at the Chernobyl nuclear power plant – he was appointed head of the orthopedic section of the state program "Children of Chernobyl" (1989–1996). This appointment was "random." But in the end, invaluable experience was gained in studying the two main control systems in children in a population and at an environmental disaster.

The main question posed to the research group was: "How does the musculoskeletal system of the child population of the region responds to factors related to a nuclear catastrophe?" It was assumed that the main damaging factor is ionizing radiation from radioactive contamination. However, as a result, an unexpected conclusion was made: interference with the metabolic processes in the bone tissue of unstable iodine isotopes (I¹²⁹ - I¹³¹) and an excess of stable I¹²⁷, widely used as a protector of the thyroid gland, had the greatest impact. This new experience and purposeful study of the osteotropic hormone profile (growth hormone, cortisol, calcitonin, parathyrin) in children with the most common and striking mysterious skeletal disorder, idiopathic scoliosis, made it possible to see the pathogenetic role of these hormones. In addition, the data obtained show the material basis of the most indisputable fact in the theory and practice of scoliosis – the direct dependence of the development of pathological three-plane spinal deformity on the child's growth process.

In **1993**, Dr. M. Dudin defended his doctoral thesis on "Features of the hormonal regulation of bone metabolism as an etiopathogenetic factor for idiopathic scoliosis." His key messages were presented at the SICOT / SIROT World Congress in Amsterdam in 1996 and in 1999 at the GICD congress (congress chairman – Jean F. Dubousset) at which the author was presented with the First Prize for "new developments in the diagnosis and treatment of AIS in children and adolescents".

To implement the obtained scientific conclusions, M. Dudin transferred to work at the St. Petersburg rehabilitation center for pediatric orthopedics and traumatology "OGONEK", which he headed from 1996 to 2017 as director. At the same time, from 1997 – Professor of the Department of Pediatric Orthopedics and Traumatology, St. Petersburg Institute of Postgraduate Education. In 2001 he was awarded the title of professor.

In **2005** M.G. Dudin received the honorary title "Honored Doctor of Russia", and in 2009 he won the A.N. Kosygin Prize (for technology and innovation in pediatric orthopedics).

Professor M. Dudin is the author of 4 monographs on idiopathic scoliosis. They cover a wide range of issues – from diagnosis and pathogenesis to prevention and conservative treatment. In addition to these monographs, the professor has written 4 textbooks for students and doctors. Under his leadership, were defended 15 master's and doctoral theses in the field of developing ideas of conservative orthopedics. He was a free organizer of the 15th Prague-Lublin-Sydney Symposium in St. Petersburg (St. Petersburg, Russia, September 15–22, 2013). For this, M. Dudin was awarded the Diploma of the Honorary member of the Society for Connective Tissues, Czech Medical Association J.E. Purkynje and the Honorary medal of the Czech Medical Association J.E. Purkynje. Now Professor M.G. Dudin, already as a center consultant, continues his scientific and practical activity and its main goal is to transfer experience to young doctors.

Dear Mikhail

We all high value your knowledge and experience in paediatric orthopaedics, we appreciate your reseach particularly of adolescent idiopathic scoliosis and results of comprehensive treatment of this grave illness.

President Professor Štěpán Svačina, DSc and the Committee of the Czech Medical Association (CMA) J.E. Purkyně granted you a Diploma of Honorary Membership for your professional work, longtime international cooperation and support of The 15th to 21st Prague-Lublin-Sydney -St. Petersburg Symposium.

We sincerely wish you good health and many succes in scientific, practical and university activities.

Sincerely Yours

Ivo

Professor Ivo Marik, MD, PhD

President of The Society for Connective Tissues, CMA J.E. Purkynje Research Secretary of The Society for Prosthetics and Orthotics CMA J.E. Purkynje



DIPLOMA

SOCIETAS MEDICORUM BOHEMORUM J.E.PURKYNĚ

HONORI SIBI DUCIT DOMINUM

Prof. Mikhail Dudin, MD, PhD, DSc

SINGULARIA EIUS MERITA IN ARTEM MEDICAM NEC NON IN HUMANITATEM PROVEHENDAM MAGNI AESTIMANS

SODALIUM HONORIS CAUSA CREATORUM

NUMERO ADSCRIBERE

ANNO DOMINI

Assoc. Professor Petr Korbelář, PhD - septuagenarian

It is unbelievable how fast the time passes, and that our dear colleague reached the age, which was described in the last century as a respectable one. Together with Petr Korbelář, we spent a flourishing period of the Orthopaedic Clinic of the University Hospital in Prague – Motol under the leadership of Professor MUDr. Stanislav Popelka, DSc. (in the old building on Charles Square, where is now located part of the workplace of the Ministry of Labor and Social Affairs) and Professor MUDr. Rudolf Kubát, DSc.



Jubilant was born on June 6th, 1949, in Prague, into a medical family. His father and uncle were doctors.

Here are the milestones of the professional growth of the jubilant:

1967–1973 studied at the 3rd Medical Faculty of Charles University in Prague, graduated on June 28th, 1973

1978 – 1st degree from surgery

1980 – 1st degree in orthopaedic surgery and traumatology

 $1985 - 2^{\text{nd}}$ degree in orthopaedic surgery and traumatology

1986 – defended his dissertation thesis: "Experimental implantation of hydrogel in bone!"

1990 – appointed Associate Professor of orthopaedic surgery and traumatology

After taking a rigorous of anatomy in 1970, he worked as an auxiliary scientific force, later as an assistant at the Department of Anatomy, led by Professor Radomír Čihák, DSc., where he pub-

lished his first scientific papers in 1970–1976. He obtained surgical erudition at the First Surgical Clinic of the Faculty of Medicine (1974–1976) and at the Surgical Department of the Regional Hospital in České Budějovice (Professor Antonín Kostelecký 1976–1977).

Since January 1, 1978, he is joining the 2nd Orthopaedic Clinic of Paediatric Faculty Charles University and Teaching Hospital Motol in Prague, where he currently works part time. He worked under the leadership of Professor MUDr. Stanislav Popelka, DSc., Professor MUDr. Rudolf Kubát, DSc. (as his deputy in 1983–1991), Assoc. Professor MUDr. Václav Smetana and at present under the leadership of Professor MUDr. Tomáš Trč, Ph.D.

He contributed to the preservation of the workplace at Charles Square and the development of the new clinic in Motol. He focused on spondylosurgery and spinal deformities in children and adults. After gaining experience and training with Professors MUDr. Otto Vlach, DSc. in Brno, and later on in many foreign workplaces (Germany, Austria, England, Russia). He developed conservative and surgical treatment of spinal deformities and injuries at the Orthopaedic Clinic of the University Teaching Hospital in Motol.

Throughout his orthopaedic career, he has also focused on the education of paediatricians and general paediatricians in spondylology. In 2004, he actively participated in regional seminars of continuous education of general practitioners for children (topic "Spinal deformities – diagnostics and treatment), organized by the Society of General Practitioners for Paediatric Physicians of the Czech Medical Association (CMA) J.E. Purkyně in cooperation with the Centre for Defects of Locomotor Apparatus in Prague.

While working in Bad Wildungen (Germany), he trained other colleagues in spondylosurgery, as Eng. Pavel Černý in brace treatment. He supported the activities of the Foundation for Children with Congenital Locomotor Defects in Kostelec nad Černými Lesy.

He has lectured at numerous domestic and foreign congresses (Germany, Austria, Poland, Switzerland, Holland, England and others), has published 100 scientific papers, 17 of them in abroad. In 1989–1991 he worked at the German Center for the Treatment of Scoliosis in Bad Wildungen under the leadership of Dr. Zielke and Dr. Metz, where he worked with a number of major European spondylosurgeons of today (Dr. Jezsensky, Prof. Halm, Doc. Beele, Dr. Meier).

He is a member of SICOT, AAOS, Czech Orthopaedic Society and several professional societies of the Czech Medical Society J.E: Purkyně. In 1994, he was a co-founder and member of the editorial board of the peer-reviewed journal Locomotor System – Advances in Research, Diagnosis and Therapy, published by the Society for Connective Tissues of CMA J.E. Purkyně. He is a member of the Committee of the Orthopaedic-Prosthetic Society of CMA J.E. Purkyně.

Since 1987 he has worked as a professional consultant with foreign pharmaceutical companies (Luitpold, Zimmer). Since 1991 he has been working also in the private sector. He founded with his partners companies dealing with import and distribution of pharmaceutical products (BMS, Luitpold, IBSA, Daichia-Sankyo, Haras, Gerlicher, Orthomol, Optima, Wolff) and medical devices (Surgicraft, Axialif, Apatech, Biotissue, X-stop, Ergoactives etc). In addition, he also works in a private non-state medical facility in Prague 2.

He still participates in part-time clinical work at the Clinic of Paediatric and Adult Orthopaedics at the University Teaching Hospital in Motol, where he is focused primarily on conservative and operative treatment of spinal deformities. In spite of his lifelong full working load he finds a while for his hobbies – golf, travelling and veteran cars.

Dear Petr.

to the next years of your life, we sincerely wish you first of all good health, continuing living optimism, successful private enterprise, many satisfied patients, subjective satisfaction in circle of your large family and friends and let your admirable workforce engagement holds on for a long time.

Festina lente!

Professor Ivo Mařík, MD, Ph.D.

president and committee members of The Society for Connective Tissues, CMA J.E. Purkyně

and

Petr Krawczyk, MD

president and committee members of The Orthopaedic-Prosthetic Society CMA J.E. Purkyně

Docent MUDr. Petr. Korbelář, CSc. - sedmdesátiletý

Je neuvěřitelné, jak hodiny času rychle ubíhají a že se náš milý kolega dožil věku, který v minulém století byl označován jako úctyhodný. S Petrem Korbelářem jsme společně prožili dobu rozkvětu dětské ortopedické kliniky FN v Motole pod vedením pana prof. MUDr. Stanislava Popelky, DrSc. (ještě v budově na Karlově náměstí, kde je nyní umístěna část pracoviště Ministerstva práce a sociálních věcí) a pana prof. MUDr. Rudolfa Kubáta, DrSc.

Jubilant se narodil 6. 6. 1949 v Praze v lékařské rodině. Jeho otec a strýc byli lékaři, jeho sestra, bratranci a sestřenice dodnes působí jako lékaři nebo zdravotníci.

Dále heslovitě uvádíme milníky odborného růstu jubilanta:

1967–1973 studium na 3. LF UK v Praze, promoce 28. 6. 1973

1978 – atestace I. st. z chirurgie

1980 – atestace I. st z ortopedie a traumatologie

1985 – atestace II. st z ortopedie a traumatologie

1986 – obhájil kandidátskou disertační práci: "Experimentální implantace hydrogelu do kosti!", řešil úkoly plánu základního výzkumu "použití esterů kyseliny methakrylové v kostní chirurgii.

1990 – jmenován docentem pro obor ortopedie a traumatologie

Po složení rigorosa z anatomie v r. 1970 pracoval jako pomocná vědecká sila, později jako asistent na anatomickém ústavu FVL pod vedením prof. MUDr. Radomíra Čiháka, DrSc., kde publikoval první vědecké práce v letech 1970–1976. Chirurgickou erudici získal na l. chirurgické klinice FVL (1974–1976) a na chirurgickém oddělení krajské nemocnice v Českých Budějovicích (prof. MUDr. Antonín Kostelecký,1976–1977).

1. 1. 1978 nastoupil na II. ortopedickou kliniku FDL UK a FN Motol, kde pracuje na částečný úvazek dosud. Pracoval pod vedení prof. MUDr. Stanislava Popelky, Prof. MUDr. Rudolfa Kubáta (jako jeho zástupce LPP v letech 1983–1991), doc. MUDr. Václava Smetany a nyní pracuje pod vedením Prof. MUDr. Tomáše Trče, CSc.

Zasloužil se o zachování pracoviště na Karlově náměstí a o rozvoj kliniky v Motole. Věnoval se především problematice spondylochirurgie a deformit páteře dětí i dospělých. Po získání zkušeností a vyškolení u Prof. MUDr. Otto Vlacha, CSc. v Brně a později na četných zahraničních pracovištích (Německo, Rakousko, Anglie, Rusko) rozvinul konservativní i operační léčení deformit a úrazů páteře na ortopedické klinice FN v Motole. Řadu let zajišťoval výuku ortopedie a traumatologie pro mediky 2. LF UK

v Motole. Po celou dobu své ortopedické kariéry se věnoval i vzdělávání dětských lékařů a praktických dětských lékařů ve spondylologii. V roce 2004 se aktivně zapojil do krajských seminářů kontinuálního vzdělávání Praktických dětských lékařů (téma "Deformity páteře – diagnostika a léčení), který byl pořádán Odbornou společností praktických dětských lékařů ČLS JEP ve spolupráci s Ambulantním centrem pro vady pohybového aparátu v Praze.

Při svém působení v Bad Wildungenu (SRN) zajistil vyškolení dalších kolegů ve spondylochirugii, Ing. Pavla Černého v korzetoterapii. Podporoval činnost Nadace pro děti s vrozenými vadami v Kostelci n. Č. I.

Přednášel na četných domácích i zahraničních kongresech (NSR, Rakousko, Polsko, Švýcarsko, Holandsko, Anglie a další). Publikoval více než 100 vědeckých prací, z toho 17 v zahraničí. Absolvoval studijní pobyty v Rakousku, Německu, Anglii, USA. V letech 1989-1991 pracoval na Německém centru pro léčení skolios v Bad Wildungen pod vedení Dr. Zielkeho a Dr. Metze kde spolupracoval s celou řadou dnes významných evropských spondylochirurgů (Dr. Jezsensky, prof. Dr. Halm, doc. Dr. Beele, Dr. Meier).

Je členem SICOT, AAOS, České ortopedické společnosti a několika odborných společností České lékařské společnosti J.E. Purkyně.

V roce 1994 byl spoluzakladatelem a je členem redakční rady odborného recenzovaného časopisu Pohybové ústrojí – pokroky ve výzkumu, diagnostice a terapii. Ve stejném roce byl jedním ze zakladatelů Ortopedicko-protetické společnosti ČLS JEP. V současné době své zkušenosti uplatňuje ve funkci člena výboru této společnosti. Zúčastňuje se sympozií "Kubátovy dny" a mezinárodního "Praha-Lublin-Sydney-St. Petersburg symposia", které jsou každoročně pořádány Společností pro pojivové tkáně ČLS J.E. Purkyně, z.s. a Ortopedicko-protetickou společností ČLS J.E. Purkyně, z.s.

Od roku 1987 spolupracoval jako odborný konzultant se zahraničními farmaceutickými firmami (Luitpold, Zimmer). Od r. 1991 pracuje v soukromé sféře, Založil se společníky několik firem věnujících se dovozu a distribuci farmaceutických přípravků (BMS, Luitpold, IBSA, Daichii-Sankyo, Haras, Gerlicher, Orthomol, Optima, Wolff) a prostředků zdravotnické techniky (Surgicraft, Axialif, Apatech, Biotissue, X-stop, Ergoactives). Kromě toho pracuje i v soukromém nestátním zdravotnickém zařízení na Praze 2.

Stále se účastní klinické práce na částečný úvazek na klinice dětské a dospělé ortopedie FN v Motole, kde se věnuje především konservativnímu a operativnímu léčení deformit páteře. I přes celoživotní vysoké pracovní vytížení si najde chvíle pro své záliby, a to golf, cestování a automobily veterány.

Milý Petře,

upřímně Ti přejeme do dalších let především pevné zdraví, trvající životní optimismus, úspěchy v podnikání, mnoho spokojených pacientů, osobní uspokojení v kruhu Tvé široké rodiny a přátel a ať Tvé obdivuhodné pracovní nasazení vydrží co nejdéle.

Festina lente!

prof. MUDr. Ivo Mařík, CSc.

předseda a členové výboru Společnosti pro pojivové tkáně ČLS J.E. Purkyně, z.s.

a

MUDr. Petr Krawczyk

předseda a členové výboru Ortopedicko-protetické společnosti ČLS J.E. Purkyně, z.s.

A LIST OF SPEAKERS AND CO-AUTHORS OF PAPERS

Arsenev Aleksei, MD, PhD

Children's Rehabilitation Center of Orthopaedics and Traumatology 'Ogonyok' | St. Petersburg | Russia | stivamat@rambler.ru

Avaliani Tatvana, MD, PhD

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

Balaščákova Miroslava, MD, PhD

Institute of Biology and Medical Genetics | University Hospital Motol | Prague | Czech Republic

Bláha Pavel, Assoc. Professor, Dr, PhD

Palestra | Prague | Czech Republic

Bober Stepan, Res

 $Children's \ Rehabilitation \ Center of Orthopaedics \ and \ Traumatology \ 'Ogonyok' | \ St. \ Petersburg \ | \ Russia \ | \ culter 88@yandex.ru$

Boryga Bartosz, MSc

Military Hospital | Lublin | Poland | b.boryga@wp.pl

Černá Tereza, MSc

 $Department of Pediatric Hematology and Oncology \mid 2^{nd} \ Medical School Charles \ University \ and \ University \ Hospital \ Motol \mid Prague \mid Czech \ Republic$

Černý Pavel, Eng, PhD

Faculty of Health Care Studies | University of West Bohemia | Prague | Czech Republic | pavel@ortotika.cz

Dick David, Bc

Department of Plastic Surgery,1st Faculty of Medicine Charles University | Bulovka Hospital Prague | Czech Republic | ddick26@gmail.com

Doktorová Helena, MSc

Department of Pediatric Hematology and Oncology $| 2^{nd}$ Medical School Charles University and University Hospital Motol | Prague | Czech Republic, h.doktorova@gmail.com

Domagała Marian, MD

Medical Center in Laszczów by Tomaszow Lubelski | Lasczów | Poland | mariandomagala1213@yahoo.pl

Drnková Jana, MSc

ORTOTIKA I.I.c. | the complex of the University Hospital Motol | Prague | Czech Republic

Dudin Mikhail, Professor, MD, DSc

Children's Rehabilitation Center of Orthopaedics and Traumatology 'Ogonyok' | St. Petersburg | Russia | stivamat@rambler.ru

Eckschlager Tomas, Professor, MD, PhD

Department of Pediatric Hematology and Oncology, 2nd Medical School Charles University and University Hospital Motol, Prague, Czech Republic

Feriančíkova Barbara, MSc

 $\label{eq:continuous} Department of Pediatric Hematology and Oncology \mid 2^{nd} \ Medical School Charles \ University \ and \ University \ Hospital \ Motol \mid Prague \mid Czech \ Republic$

Falinskii Alexander, MD, PhD

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' | St. Petersburg, Russia

Groh Tomáš, MSc

Department of Pediatric Hematology and Oncology | 2nd Medical School Charles University and University Hospital Motol | Prague | Czech Republic

Grotenhuis Joachim Andre, Professor, MD, PhD., IFAANS

University of Nijmegen | RadboudMC | Nijmegen | Netherlands

Hraběta Jan, DVM, PhD

 $Department \ of \ Pediatric \ Hematology \ and \ Oncology \ | \ 2^{nd} \ Medical \ School \ Charles \ University \ and \ University \ Advantage \ Ad$

Hospital Motol | Prague | Czech Republic

Hudáková Olga, MD, PhD

Centre for Defects of Locomotor Apparatus Prague | Prague | Czech Republic | o.marikova@email.cz

Hyánek Josef, Professor, MD, DSc

Honorary president of the Society for Connective Tissues CMA J.E. Purkynje | Prague | Czech Republic

Kandzierski Grzegorz, Professor, MD, PhD

Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin | Lublin | Poland

Karpenko Marina, MD, PhD

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' St. Petersburg | Russia

Karski Jacek, MD, PhD

Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin | Lublin | Poland | jkarski@vp.pl

Karski Tomasz, Professor, MD, PhD

Vincent Pol University | Lublin | Poland | tmkarski@gmail.com

Khaimyna Tatyana, MD

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' St. Petersburg | Russia | htv80@mail.ru

Köhler Kitti, Dr., PhD

Research Centre for the Humanities | Institute of Archaelogy Hungarian Academy of Sciences | Budapest | Hungary

Kott Otto, MD, PhD

Faculty of Health Care Studies; West Bohemia University Pilsen | Pilsen | Czech Republic | kotto@fzs.zcu.cz

Kozlowski Kazimierz, Professor, MD, PhD

Children's Hospital at Westmead | Sydney | Australia

Kuklík Miloslav, MD., Ph.D

Endocrinologic institute Prague | Prague | Czech Republic

Kurchenko Sergev, MD

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' | St. Petersburg | Russia

Krawczyk Petr, MD

PROTEOR CZ I.I.c | Ostrava, Czech Republic | petr.krawczyk@seznam.cz

Mařík Ivo, Professor, MD, PhD

Faculty of Health Care Studies | University of West Bohemia | Centre for Defects of Locomotor Apparatus Prague | Prague, Czech Republic, ambul_centrum@volny.cz

Maříková Alena, MD

Centre for Defects of Locomotor Apparatus Prague | Prague, Czech Republic | tatralenka@seznam.cz

Matuszewski Łukasz MD, PhD

Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin | Lublin | Poland

Mohamed Abdel Rahman, MD, PhD

Department of Pediatric Hematology and Oncology | 2nd Medical School Charles University and University Hospital Motol | Prague | Czech Republic

Moslerová Veronika, MSc, PhD

Institute of Biology and Medical Genetics | University Hospital Motol | Prague | Czech Republic

Musálek Martin

Faculty of Physica, Education and Sport | Charles University | Prague | Czech Republic | musalek.martin@seznam.cz

Musilová Zdeňka

ESME I.I.c.| Prague, Letovice | Czech Republic

Myslivec Radek, MD

Centre for Defects of Locomotor Apparatus Prague | Hospital Pribram | Prague - Pribram | Czech Republic

Negrini Stefano, Assoc. Professor, MD, PhD

ISICO – Italian Scientific Spine Institute | Milan | Italy

Nechutný Jiří, Bc

Faculty of Health Care Studies | West Bohemia University | Pilsen | Czech Republic

Okonski Marek, MD, PhD

Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin | Lublin | Poland

Ostrowski Jerzy. MD

Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin | Lublin | Poland

Pankratova Galina

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' St. Petersburg | Russia | qalinaorto@mail.ru

Paprskářová Martina, MSc

Department of Genetics | University Hospital Ostrava | Ostrava | Czech Republic

Pařízková Jana, Professor, MD, DSc

Department of Anthropology and Human Genetics | Prague | Czech Republic | Prague | Czech Republic | parizkova.jan@qmail.com

Petrášová Šárka, MSc

Centre for Defects of Locomotor Apparatus Prague | Prague | Czech Republic

Petrtýl Miroslav, Professor, Eng, DSc

The Czech Technical University in Prague | Prague | Czech Republic | petrtylmir@seznam.cz

Pinchuk Dmitry Yuryevich, Professor, MD, DSc

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' St. Petersburg | Russia

Podhorská Natalia, MSc

Department of Pediatric Hematology and Oncology | 2nd Medical School Charles University and University Hospital Motol | Prague | Czech Republic

Povýšil Ctibor, Professor, MD, DSc

Institute of Pathology | 1st Medical Faculty and General Faculty Hospital | Charles University | Prague | Czech Republic | ctibor.povysil@lf1.cuni.cz

Pyrc Jarosław, MD

Elblandkliniken Stiftung & Co.KG. Abteilung Orthopädie | Unfallchirurgie und Wirbelsäulenchirurgie |

Krankenhaus Radebeul | Dresden | Germany

Rvba Lukáš, MSc

Faculty of Health Care Studies | University of West Bohemia | Pilsen | Czech Republic | rybal@centrum.cz

Rybka Dina, MD

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' | St. Petersburg | Russia | dolspb@mail.ru

Rybová Štěpánka, MSc

Faculty of Health Care Studies | University of West Bohemia | Pilsen | Czech Republic

Shahed Samir, Bc

 $Institute for \ History \ of \ Medicine \ and \ Foreign \ Languages \ \& \ Department \ of \ Plastic \ Surgery \ | \ 1^{st} \ Faculty \ of \ Medicine$

Charles University in Prague | Bulovka Hospital Prague | Czech Republic

Słowińska Beata, MSc

Military Hospital | Lublin | Poland | beataslowinska2016@gmail.com

Sharova Lidia, Professor, MD, DSc

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' | St. Petersburg | Russia

Smrčka Václav, Professor, MD, PhD

 $Institute for \ History \ of \ Medicine \ and \ For eign \ Languages \ \& \ Department \ of \ Plastic \ Surgery \ 1^{st} \ Faculty \ of \ Medicine \ Charles \ Plastic \ Surgery \ 1^{st} \ Plastic \ Plastic$

University in Prague | Bulovka Hospital | ESME I.I.c | Prague | Czech Republic | sedlcany1@seznam.cz

Tvrdý Zdeněk, Dr

The Moravian Museum | Anthropos Institute | Brno | Czech Republic

Uzdennikova Marina, Res

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' | St. Petersburg | Russia

Vasilevich Sergey, MD, PhD

Children's Rehabilitation Center for Orthopedics and Traumatology 'Ogonyok' | St. Petersburg | Russia | svasilevich@mail.ru

Van Loon Piet JM, MD

Care to Move | Centre for Orthopedics | Deventer | Netherlands | pvanloon@planet.nl

Vodička Ondřej, MSc

KyowaKirinPharmas.r.o | Prague | Czech Republic | ondrej.vodicka@kyowakirin.com

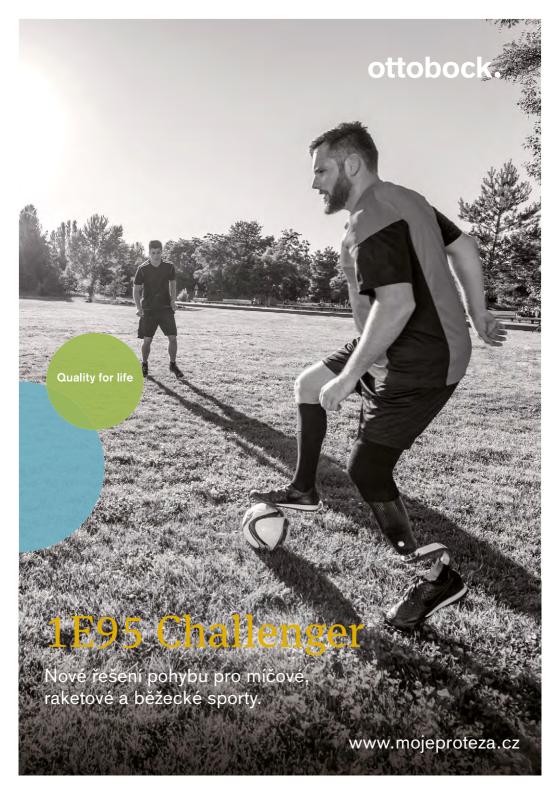
Vrbská Veronika, MSc

Faculty of Health Care Studies | University of West Bohemia | Pilsen | Czech Republic | vvrbska@kfe.zcu.cz

Zemková Daniela, Dr, PhD

Centre for Defects of Locomotor Apparatus Prague | Dept. of Paediatrics | University Hospital Motol | Prague |

Czech Republic | dezem@email.cz



All mankind is of one origin

