

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

# Interdisciplinary approach to growing skeleton

13<sup>th</sup> –16<sup>th</sup> September 2017 | Prague | Czech Republic







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

invite you to

# THE 19<sup>TH</sup> PRAGUE-LUBLIN-SYDNEY-ST. PETERSBURG SYMPOSIUM

main topic

### INTERDISCIPLINARY APPROACH TO GROWING SKELETON

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

&

director of Charles University Hospital Hradec Králové

Professor Vladimir Palička, MD, PhD, Dr.h.c.

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

Assoc. Professor Dr. Ilona Mauritzová, PhD

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

















# Speech of welcome to

# The 19<sup>th</sup> Prague-Lublin-Sydney-St. Petersburg Symposium – Interdisciplinary approach to growing skeleton

Prague, September 13, 2017

### Dear Ladies and Gentlemen, my dear colleagues!

I cordially welcome you all at this traditional international symposium which establishment will be mentioned by my friend Professor Tomasz Karski who is an honorary member of the Society for Connective Tissues, Czech Medical Association J.E.Purkynje. It is my great honour to welcome among us Associate Professor Dr. Ilona Mauritzova, PhD, the dean of The Faculty of Health Care Studies, West Bohemia University and invited speaker Professor Vladimir Palicka, MD, PhD., Dr.h.c., the director of Charles University Hospital Hradec Králové and president of the Czech Society for Metabolic Bone Diseases. Professor Jaroslav Blahos, MD, DSc., honorary president of the Czech Medical Association (CMA) J.E. Purkynie (JEP) was unable to join us because of his health problems. He sends his regards to all participants and he wishes success to the Symposium. It is my pleasure to welcome Professor Milan Bayer, PhD who is one of the founders of the Czech Society for Metabolic Bone Diseases and chief editor of the medici journal Osteological Bulletin. I cordially welcome all colleagues and especially these who participate in the Symposium for the first time. I am very pleased that this year the programme of the Symposium attracted colleagues from Belarus, Greece, Germany, the Netherlands, Poland, Russia and Ukraine and I hope for a future close not only scientific cooperation.

My great thanks belong to all International organizers – these are Professor Tomasz Karski, his son Assistant Professor Jacek Karski, MD, PhD from Lublin, further Prof. Mikhail Dudin, MD, DSc. and Assistant Professor Aleksey Shashko, MD from St. Petersburg. My warm thanks belong mainly to my close college Petr Krawczyk, MD(Ostrava, Czech Republic), president of the Orthotic and Prosthetic Society CMA JEP and last but not least to members of the Committee of the Society for Connective Tissues CMA JEP who prepared for you interesting social program.

The organizers are grateful for the support of The Symposium especially to the General Partner "ottobock." and the Partner "Orling s.r.o."
I believe that scientific lectures will amplified our knowledge which will become a profit for our disabled patients. I wish you to enjoy new scientific information, your stay in Prague and I wish you to make new friendships which will help us to arrange international and interdisciplinary scientific research.
At the end of my speech I would like to remember you well known Professors: Jacques Cheneau, Georg Neff, Kazimierz Kozlowski and Michael Bellemore. They sincerely wish a great success to The19 <sup>th</sup> Prague-Lublin-Sydney-St Petersburg Symposium.
Now, let me a short reminiscence of a few moments that we spent with most of you in Zwierzyniec (District Zamość, Poland) in September 2016. Look at photos.

Professor Ivo Marik, MD, PhD, FABI

Prague, Czech Republic E-mail: ambul\_centrum@volny.cz

Faculty of Health Care Studies, West Bohemia University, Pilsen, CZ Chief of the Centre for Patients with Locomotor Defects, Prague, CZ President of the Society for Connective Tissue, CMA J.E.Purkynje

Scientific secretary of the Society for Prosthetics and Orthotics, CMA J. E. Purkynje Chief-Editor of the journal Locomotor System – advances in research, diagnostics and therapy

### Dear Friends, Dear Colleagues,

it is my very big privilege to be together with our Friends – Professors, Doctors of various specializations, Physiotherapists, Orthopaedic-Prosthetics & Technicians in the 19<sup>th</sup> Symposium in Prague.

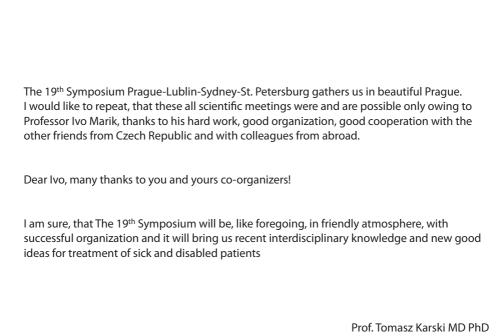
I would like to remember you, that majority of Symposia went on here, in Prague in Czech Republic, one time in Kroměříž, Czech Republic (The 17<sup>th</sup> Symposium, 2015). The first meeting of the interested specialists in genetic skeletal disorders took place in 1999 year in Sydney a next year in Prague due to close cooperation with Associate Professor Kazimierz Kozlowski M.R.A.C.R. and Associate Professor Michael Bellemore F.R.A.C.S. from Sydney (both from Children's Hospital Medical Centre in Westmead Australia). These meetings were retrospectively called "The 1st and the 2nd Prague-Sydney Symposium". In 2006 the symposium was re-called to The Prague-Lublin-Sydney Symposium because of close cooperation with Lublin orthopaedic paediatric surgeons.

In 2011, The 13<sup>th</sup> Symposium Prague-Sydney-Lublin & Biomechanical workshop was taken place in Rhodos (Greece), next year in Sarbinowo (Poland).

In 2013, The 15<sup>th</sup> Symposium was held in St. Petersburg (Russia) in "Ogonyok" Rehabilitation Centre and the designation of the symposium was again extended.

In 2014, The  $16^{th}$  Prague-Lublin-Sydney-St. Petersburg Symposium took place in Military Hospital in Lublin (Poland).

The 18th Symposium took place in Guest House "Zacisze" in Zwierzyniec (Poland) in 2016.



Former head of the Paediatric Orthopaedic and Rehabilitation Department

Actually: Professor Lecturer in Vincent Pol University in Lublin

of Medical University in Lublin (1995–2009)

tmkarski@gmail.com t.karski@neostrada.pl www.ortopedia.karski.lublin.pl

## Hello, Golden Prague! Dobrý Den! Ladies and gentlemen!

One more year flies by and we meet again at The 19<sup>th</sup> Symposium! It is quite special to us, because exactly four years ago, you, dear friends and colleagues, welcomed specialists from Saint-Petersburg Children's Rehabilitation Centre of Orthopedics and Traumatology "Ogonyok" into the kind and friendly family of yours!

Since that memorable year, 2013, the ideology of the Symposium has taken the leading role in planning and realization of all the scientific-practical work of our Centre.

Jan Evangelista Purkynje, a great Czech encyclopaedist, who was born 230 years ago, and was the founder of present day science about tissues of a living organism, the man, after who was named not only a number of anatomic structures, but also a crater on the Moon, always stood for cooperation of people, organizations, and nations in the fields of science and culture.

With good reason, I think, that Prague-Lublin-Sydney-Saint-Petersburg Symposium, which cultivates the interdisciplinary cooperation in solving problems connected to locomotor system, is a well-deserved follower of the ideas of the great Czech. And thus, we are proud that we are able to make our humble contribution.

From all my heart, I wish the Symposium, which will undoubtedly give us all new knowledge and ideas, to work successfully

Sincerely yours

Professor Mikhail Dudin

Director of Children's Rehabilitation Centre of Orthopedics and Traumatology "Ogonyok" St. Petersburg, Russia E-mail: ogonek@zdrav.spb.ru













# SYMPOSIUM FINAL PROGRAMME

# **WEDNESDAY, SEPTEMBER 13, 2017**

Arrival of participants to Prague

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

# **THURSDAY, SEPTEMBER 14, 2017**

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

9.00 OPENING OF THE SYMPOSIUM

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

#### **WELCOME SPEECHES**

### Professor Ivo Marik, MD, PhD

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

### Professor Mikhail Dudin, MD, DSc.

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

### Professor Tomasz Karski, MD, PhD

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

#### **GREETINGS**

Assoc. Professor Dr. Ilona Mauritzová, PhD

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

Professor Josef Hyanek, MD, DSc.

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

9.30-12.00 **SESSION I** 

### **BIOMECHANICS - VARIA**

Chairmen: PETRTYL MIROSLAV, CULIK JAN, MARSIK FRANTISEK

PETRTYL MIROSLAV<sup>1</sup>, VOLF JAROMÍR<sup>2</sup>, POVYSIL CTIBOR<sup>3</sup> (PRAGUE, CZECH REPUBLIC)

### The subtle electrical energy in bone tissue (30 min.)

- <sup>1</sup> Department of Mechanics, Laboratory of Biomechanics and Biomaterial Engineering, Czech Technical University, FCE, Prague, Czech Republic
- <sup>2</sup> Department of Electrical Engineering and Automation, The Faculty of Engineering, Czech University of Life Sciences Prague

### Marsik Frantisek<sup>1, 2, 3</sup> (Prague, Czech Republic)

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

- <sup>1</sup> Institute of Thermomechanics of the Czech Academy of Sciences, Prague, Czech Republic
- <sup>2</sup> University of West Bohemia, New Technologies Research Centre, Pilsen, Czech Republic

# <u>Tesar Karel</u><sup>1, 2</sup>, Sucharda Zbynek <sup>3</sup>, Zaloudková Margit <sup>3</sup>, Balik Karel <sup>3</sup> (Prague, Czech Republic) **Biodegradable magnesium wires for bone support application** (20 min.)

- Department of Materials, Faculty of Nuclear Sciences and Physical Engineering, Czech Republic
- <sup>2</sup> Department of Dielectrics, Institute of Physics of the Czech Academy of Sciences, Czech Republic
- <sup>3</sup> Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics of the Czech Academy of Sciences, Prague, Czech Republic

<sup>&</sup>lt;sup>3</sup> Institute of Pathology, 1<sup>st</sup> Faculty of Medicine, Charles University, Prague, Czech Republic

<sup>&</sup>lt;sup>3</sup> Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic

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

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

Department of Composites and Carbon Materials, Institute of Rock Structure and Mechanics, Academy of Science, Prague, Czech Republic

### CULIK JAN (PRAGUE, CZECH REPUBLIC)

### Gait model (20 min.)

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

KRAWCZYK PETR<sup>1</sup>, MARIK IVO<sup>2, 4</sup>, JAKUB JOZEF<sup>1</sup>, SYKORA ALES<sup>1</sup>, ZEMKOVA DANIELA<sup>2</sup>, PETRASOVA SARKA<sup>2</sup>, MARIK JAN<sup>2</sup>, UCHYTIL JAROSLAV<sup>3</sup>, JANDACKA DANIEL<sup>3</sup> (PRAGUE & OSTRAVA, CZECH REPUBLIC)

Influence of the weight of the transtibial prosthesis on postural stability and locomotion (20 min.)

- <sup>1</sup> PROTEOR CZ I.I.c., Ostrava, Czech Republic
- <sup>2</sup> Ambulant Centre for Defects of Locomotor Apparatus I.I.c., Prague, Czech Republic
- <sup>3</sup> Diagnostic Centre of Human Movement PdF, Ostrava University, Czech Republic

12.00 LUNCH

13.00-16.30 **SESSION II** 

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

Introduction: OLGA HUDAKOVA, MD, PHD

PALICKA VLADIMIR (HRADEC KRALOVE, CZECH REPUBLIC)

Clinical Osteology in the Czech Republic (organization and development) (30 min.)

Charles University and University Hospital Hradec Králové, Czech Republic

Moderator: PROFESSOR JOSEF HYANEK, MD, DSC.

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

<sup>&</sup>lt;sup>4</sup> Faculty of Medical Studies, West Bohemia University, Pilsen, Czech Republic

### **OSTEOLOGY, BONE METABOLISM**

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

PROFESSOR GEORGE LYRITIS, MD, PHD, DR.H.C.

Introduction: OLGA HUDAKOVA, MD, PHD

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

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

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

RIZOU STAVROULA (ATHENS, GREECE)

### Are Women Overtreated for Osteoporosis? (30 min.)

Hellenic Osteoporosis Foundation, Kifissia, Greece

NIKOLAOU DIMITRIOS<sup>1</sup>, RIZOU STAVROULA<sup>2</sup> (ATHENS, GREECE)

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

<sup>1</sup> Medical School, National and Kapodistrian University of Athens, Greece

<sup>2</sup> Hellenic Osteoporosis Foundation, Kifissia, Greece

### LAMBROU GEORGE I.<sup>1, 2, 3, 4</sup> (ATHENS, GREECE)

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

- <sup>1</sup> National and Kapodistrian University of Athens, Medical School
- <sup>2</sup> Graduate Program "Metabolic Bones Diseases", National and Kapodistrian University of Athens,
- <sup>3</sup> Medical School, Goudi, Athens, Greece

#### 15.30 COFFEE BREAK

### BAYER MILAN<sup>1, 2</sup>, JIROTKOVA JANA<sup>3</sup> (PRAGUE, CZECH REPUBLIC)

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

- <sup>1</sup> Department of Children and Adolescents, Third Faculty of Medicine, Charles University, Prague, Czech Republic
- <sup>2</sup> Department of Pediatrics, Thomayer Hospital of Prague, Czech Republic
- <sup>3</sup> Department of Pediatrics, Hospital of Ceske Budejovice, Czech Republic

<sup>&</sup>lt;sup>4</sup> First Department of Pediatrics, University of Athens, Choremeio Research Laboratory, National and Kapodistrian University of Athens, Greece

Vyskocil Vaclav<sup>1</sup>, Blahos Jaroslav<sup>2</sup> (Pilsen & Prague, Czech Republic)

Alendronate therapy for osteogenesis imperfecta in children: ten-year follow-up (30 min.)

<sup>1</sup> Department of Orthopaedic Surgery, Charles University Hospital, Pilsen,

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

20.00 DINNER

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

## FRIDAY, SEPTEMBER 15, 2017

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

9.00-13.00 **SESSION III:** 

# SPINE DISORDERS I: PATHOGENESIS, DIAGNOSIS AND TREATMENT

Chairmen: KARSKI TOMASZ, ARSENEV ALEKSEY VALENTINOVICH, REPKO MARTIN

KARSKI TOMASZ<sup>1</sup>, KARSKI JACEK<sup>2</sup> (LUBLIN, POLAND)

Twenty two years of knowledge about aetiology of the so-called idiopathic scoliosis (adolescent idiopathic scoliosis – AIS). Rules of casual prophylactics and new treatment. Examples (20 min.)

PALLOVA IVETA (PRAGUE, CZECH REPUBLIC)

Characteristic features of idiopathic scoliosis (20 min.)

Center of Rehabilitation, Pediatrics and Acupuncture, Prague, Czech Republic

<sup>&</sup>lt;sup>2</sup> 1st Medical Faculty Prague, Charles University, Central Military Hospital, Prague, Czech Republic

<sup>&</sup>lt;sup>1</sup> Vincent Pol University in Lublin, Poland

<sup>&</sup>lt;sup>2</sup> Pediatric Orthopedic and Rehabilitation Department of Medical University in Lublin, Poland

ARSENEV ALEKSEY VALENTINOVICH, DUDIN M.G. (St. Petersburg, Russia)

"Targets" for pathogenetic treatment of patients with adolescent idiopathic scoliosis (20 min.)

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

REPKO MARTIN, FILIPOVIC MILAN (BRNO, CZECH REPUBLIC)

Surgical Treatment Strategy of Early Onset Scoliosis (20 min.)

Orthopaedic department, Faculty Hospital of Masaryk's University, Brno, Czech Republic

PIET J.M. VAN LOON<sup>1</sup>, RUUD HGP VAN ERVE<sup>1</sup>, ERIC BTM THUNNISSEN<sup>2</sup>, LODEWIJK W. VAN RHIJN<sup>3</sup>, ANDRE J GROTENHUIS<sup>4</sup> (DEVENTER, AMSTERDAM, MAASTRICHT & NIJMEGEN, NETHERLANDS)

Sedentary lifestyle and discongruent neuro-osseous growth relations (M. Roth) as external and internal etiologic factors of spinal deformity and skeletal malalignement. Modern youth and their short cord (20 min.)

- <sup>1</sup> Orthopedic surgeon, Care to Move, Centre for Orthopedics, Deventer, Netherlands
- <sup>2</sup> Pathologist, epidemiologist VUMC, Free University, Amsterdam, Netherlands
- <sup>3</sup> Professor of orthopedic surgery, Maastricht UMC, Maastricht, Netherlands

11.00 COFFFF BREAK

# SPINE DISORDERS II – PATHOGENESIS, DIAGNOSIS AND TREATMENT – VARIA

Chairmen: KOLESNICHENKO VERA, CERNY PAVEL, KARSKI JACEK

CERNY PAVEL<sup>1, 2, 3</sup>, STOLINSKI LUKASZ<sup>4, 5, 6</sup>, CZAPROWSKI DARIUS <sup>7, 8</sup>, MARIK IVO<sup>1, 9</sup>, MURANOVA J.<sup>3</sup>, KOTWICKI T.<sup>4</sup> (PRAGUE, PILSEN, CZECH REPUBLIC – POZNAN OLSZTYN, POLAND)

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

- <sup>1</sup> Faculty of Health Care Studies, University of West Bohemia, Pilsen, Republic
- <sup>2</sup> Faculty of Physical Education and Sport, Charles University, Prague, Republic
- <sup>3</sup> ORTOTIKA, I.I.c., the complex of the Faculty Hospital at Motol, Prague, Republic
- <sup>4</sup> Department of Spine Disorders and Pediatric Orthopedics, University of Medical Sciences, Poznan, Poland
- <sup>5</sup> Rehasport Clinic, Poznan, Poland.
- <sup>6</sup> Rehasport Clinic Licensed Rehabilitation Center, Skierniewice, Poland
- <sup>7</sup> Department of Physiotherapy, Józef Rusiecki University College, Olsztyn, Poland
- 8 Center of Body Posture, Olsztyn, Poland
- <sup>9</sup> Ambulant Centre for Defects of Locomotor Apparatus I.I.c., Prague, Czech Republic

<sup>&</sup>lt;sup>4</sup> Professor of neurosurgery, RadboudMC, University of Nijmegen, Netherlands

Vasilevich SergeyViktorovich³, Arsenev Aleksey Valentinovich¹, Dudin Mikhail Georgiyevic¹, Baloshin Yuriy Aleksandrovich³, Kipke M.V.², Sorokin A.A.² Sukhov T.M.³, Sukhova M.A.¢ (St. Petersburg, Russia)

# The potential of modern mobile technology for the diagnosis of anthropometric parameters of a human (20 min.)

- <sup>1</sup> Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok"
- <sup>2</sup> FSBEI HE Baltic State Technical University "Voenmeh" Named after D.F. Ustinov

### KOLESNICHENKO VERA<sup>1</sup>, GRESKO IGOR<sup>2</sup> (KHARKOV & LVIV UKRAINE)

# Motor control dysfunction particularly in patients with chronic low back pain and a variety of myotonic reactions (20 min.)

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

<u>Karski Tomasz</u><sup>1</sup>, Kędzierski Zbigniew<sup>2</sup>, Karski Jacek <sup>3</sup>, Domagała Marian<sup>4</sup>, Slowinska Beata<sup>2</sup>, Kowalska Magdalena<sup>2</sup>, Boryga Bartosz<sup>2</sup> (Lublin, Poland) (30 min.)

# Physiotherapy of spine, hips, knees, feet, shoulders – correct, incorrect, mistakes, wrong conceptions. Examples.

- <sup>1</sup> Vincent Pol University in Lublin, Poland
- <sup>2</sup> Military Hospital in Lublin, Poland
- <sup>3</sup> Medical University in Lublin, Poland
- <sup>4</sup> Medical Centre in Laszczów, Poland

13.00 LUNCH

14.00-18.30 **SESSION IV** 

# DISORDERS OF GROWING SKELETON – ORTHOPAEDIC ANTHROPOLOGY – PATHOBIOMECHANICS – VARIA

Chairmen: ZEMKOVÁ DANIELA, KARSKI TOMASZ, KRAWCZYK PETR

ZEMKOVA DANIELA<sup>3, 1</sup>, MARIK IVO<sup>1, 2, 4</sup>, PETRASOVA SARKA<sup>1</sup>, HUDAKOVA OLGA<sup>1</sup> (PRAGUE & PILSEN, CZECH REPUBLIC) **Skeletal disorders with lower and higher bone density** (30 min.)

- <sup>1</sup> Ambulant Centre for Defects of Locomotor Apparatus I.I.c.; Prague; Czech Republic
- <sup>2</sup> Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic
- <sup>3</sup> Dept. of Paediatrics; University Hospital Motol; Prague; Czech Republic
- <sup>4</sup> Orthopaedic and Traumatology Department, Hospital Pribram, Czech Republic

<sup>&</sup>lt;sup>3</sup> "Smart-Orto" Ltd, St. Petersburg, Russia

Hruskova Lucie<sup>1</sup>, Marik Ivo<sup>2, 4</sup>, Mazurova Stela<sup>1</sup>, Honzik Tomas<sup>1</sup>, Martasek Pavel<sup>1, 3</sup>, Mazura Ivan<sup>1</sup> (Prague & Pilsen, Czech Republic)

### Recessive forms of osteogenesis imperfecta (20 min.)

- <sup>1</sup> Department of Pediatrics and Adolescent Medicine, First Faculty of Medicine, Charles University and General University Hospital in Prague, Czech Republic;
- <sup>2</sup> Ambulant Centre for Defects of Locomotor Apparatus 1.1.c., Prague, Czech Republic;
- <sup>3</sup> Institute of Molecular Genetics of the ASCR, v. v. i, Division BIOCEV, Vestec, Czech Republic
- <sup>4</sup> Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic

MARIK Ivo<sup>1, 2, 4</sup>, Zemkova Daniela<sup>1, 3</sup>, Myslivec Radek<sup>4, 1</sup>, Marikova Alena<sup>1</sup>, Cerny Pavel<sup>5, 2</sup>, Krawczyk Petr<sup>6</sup> (Prague & Pilsen, Czech Republic)

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

- <sup>1</sup> Ambulant Centre for Defects of Locomotor Apparatus I.I.c.; Prague; Czech Republic
- <sup>2</sup> Faculty of Health Care Studies, West Bohemia University: Pilsen, Czech Republic
- <sup>3</sup> Dept. of Paediatrics; University Hospital Motol; Prague; Czech Republic
- <sup>4</sup> Orthopaedic and Traumatology Department, Hospital Pribram, Czech Republic
- <sup>5</sup> Ortotica I.I.c., Prague, Czech Republic
- <sup>6</sup> PROTEOR CZ I.I.c., Ostrava, Czech Republic

#### FUNDA JIRI (PRIBRAM, CZECH REPUBLIC)

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

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

### KWIATKOWSKI MICHAL, POPKO JANUSZ (BIALYSTOK, POLAND)

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

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

Karski Jacek<sup>1</sup>, Okonski Marek<sup>1</sup>, Jakubowski Pawel<sup>1</sup>, Karska Klaudia<sup>2</sup>, Kandzierski Grzegorz<sup>1</sup>
Indications for surgical treatment in Perthes disease. The effectiveness of different methods (20 min.)

- <sup>1</sup> Paediatric Orthopaedic and Rehabilitation Department of Medical University in Lublin, Poland
- <sup>2</sup> Department of Interventional Radiology and Neuroradiology of Medical University in Lublin, Poland

#### 16.30 COFFFF BREAK

19th Prague-Sydney-Lublin-St. Petersburg

Chairmen: ZWIPP HANS, PARIZKOVA JANA, SMRCKA VACLAV

PROFESSOR HANS ZWIPP, MD, PHD, DR.H.C.

Introduction: OLGA HUDAKOVA, MD, PHD

ZWIPP HANS (DRESDEN, GERMANY)

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

Orthopedic and Traumatology Department of the University in Dresden, Germany

Nemec Ivo<sup>1</sup>, Smrcka Vaclav<sup>2</sup>, Mihaljevic M.<sup>3</sup>, Mazanek J.<sup>4</sup>, Pokorny J.<sup>5</sup> (Prague, Czech Republic) Effect of inferior alveolar nerve transection on the inorganic component of the mandible – experimental model (20 min.)

- <sup>1</sup> Department of Otorhinolaryngology and Maxillofacial Surgery 3<sup>rd</sup> Faculty of Medicine of Charles University in Prague & the Military University Hospital Prague, Czech Republic.
- <sup>2</sup> Institute for History of Medicine and Foreign Languages & Department of Plastic Surgery, 1<sup>st</sup> Faculty of Medicine, Charles University in Prague, Bulovka Hospital, Czech Republic
- <sup>3</sup> Institute of Geochemistry, Mineralogy and Mineral Resources, Faculty of Science, Charles University in Prague, Czech Republic
- <sup>4</sup> Department of Stomatology, 1<sup>st</sup> Faculty of Medicine, Charles University in Prague and General University Hospital in Prague, Czech Republic
- <sup>5</sup> Institute of Physiology, 1st Faculty of Medicine, Charles University in Prague, Czech Republic

ZARKOVIĆ DRAGANA<sup>1</sup>, SORFOVA MONIKA<sup>1</sup>, GROLEGER-SRSEN KATJA<sup>2</sup>, CIKAJLO IMRE<sup>3</sup> (PRAGUE, LJUBLJANA & SOCA, CZECH REPUBLIC & SLOVENIA)

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

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

RYBA LUKAS<sup>1</sup>, KOUDELA KAREL<sup>2</sup>, MARIK IVO<sup>1, 3</sup>, RYBOVA STEPANKA<sup>1</sup>, STASKOVA SARKA<sup>1</sup>, VLCKOVA IVA<sup>1</sup> (PILSEN & PRAGUE, CZECH REPUBLIC)

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

- <sup>1</sup> Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic
- <sup>2</sup> Faculty of Medicine, Charles University, Pilsen, Czech Republic
- <sup>3</sup> Ambulant Centre for Defects of Locomotor Apparatus; Prague; Czech Republic

Parizkova Jana, Sedlak Petr, Musalek M., Dvorakova H. (Prague, Czech Republic)

Long term changes of physical activity, motor abilities and problems, and body composition in children and adolescents (20 min.)

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

20.00 DINNER - RAUT

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

# **SATURDAY, SEPTEMBER 16, 2017**

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

9.00-12.00 SESSION V: LECTURES & POSTERS

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

Chairmen: POVYSIL CTIBOR, ZEMKOVA DANIELA, KUKLIK MILOSLAV

Povysil Ctibor<sup>1</sup>, Marik Ivo<sup>2, 3</sup>, Zemkova Daniela<sup>2, 4</sup>, Krepelova Anna<sup>5</sup>, Kuklik Miloslav<sup>4</sup>, Kozlowski Kazimierz<sup>6</sup> (Prague & Sydney, Czech Republic, Australia)

### Diastrophic dysplasia (20 min.)

- <sup>1</sup> Institute of Pathology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic
- <sup>2</sup> Ambulant Centre for Defects of Locomotor Apparatus; Prague; Czech Republic
- <sup>3</sup> Faculty of Health Care Studies, West Bohemia University; Pilsen, Czech Republic
- <sup>4</sup> Dept. of Paediatrics; University Hospital Motol; Prague; Czech Republic
- <sup>4</sup> Genetic Dept.; Czech Republic, Prague 3; Czech Republic
- <sup>5</sup> Dept. of molecular genetics, Institute of biology and medical genetics, University Hospital Motol; Prague; Czech Republic
- <sup>6</sup> New Children Hospital, Westmead, Sydney, Australia

SMRCKA VACLAV (PRAGUE, CZECH REPUBLIC)

### Challenges of biomolecular paleopathology (20 min.)

Institute for History of Medicine and Foreign Languages, Prague, Czech Republic

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

<u>PIET J.M. VAN LOON</u><sup>1</sup>, RUUD HGP VAN ERVE<sup>1</sup>, ANDRE J GROTENHUIS<sup>2</sup>, ERIC BTM THUNNISSEN<sup>3</sup> (DEVENTER, NIJMEGEN & AMSTERDAM, NETHERLANDS)

# Thoracolumbar lordotic intervention (TLI) in spinal deformities. Effective mechanical growth modulation by muscular forces induced by bracing (30 min.)

SNYTR JAN (ZRUC-SENEC, CZECH REPUBLIC)

Practical Use of Sensomotoric Insoles for Neurologic Patien (30 min.)

Ottobock CZ I.I.c., Zruc-Senec, Czech Republic

11.00 COFFEE BREAK

Chairmen: POVYSIL CTIBOR, FEJFAROVA VLADIMIRA, MARIK IVO

BEM ROBERT, FEJFAROVA VLADIMIRA (PRAGUE, CZECH REPUBLIC)

Charcot foot – the neglected complication of diabetes (20 min.)

Diabetes Centre, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

FEJFAROVA VLADIMIRA (PRAGUE, CZECH REPUBLIC)

Conservative treatment of Charcot foot (20 min.)

Diabetes Centre, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

Navratil Kamil (Prague, Czech Republic)

Surgical management of Charcot foot (20 min.)

Transplantation Surgery Department, Institute for Clinical and Experimental Medicine, Prague, Czech Republic

### **E-POSTERS**

Presenter: ARSENEV ALEKSEY VALENTINOVICH, CERNY PAVEL

RYBKA DINA OLEGOVNA, DUDIN MIKHAIL GEORGIYEVICH, SHAROVA L.E. (St. Petersburg, Russia)

Capabilities of ultrasound diagnostics of paravertebral muscules in healthy children. Preliminary report (5 min.)

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

<sup>&</sup>lt;sup>1</sup> Orthopedic surgeon, Care to Move, Centre for Orthopedics, Deventer, Netherlands

<sup>&</sup>lt;sup>2</sup> Professor of neurosurgery, RadboudMC, University of Nijmegen, Netherlands

<sup>&</sup>lt;sup>3</sup> Pathologist, epidemiologist VUMC, Free University, Amsterdam, Netherlands

NIKITINA A. A., DUDIN MIKHAIL GEORGIYEVICH (St. PETERSBURG, RUSSIA)

Parameters of electromyogram of paravertebral muscles of healthy children from 6 to 12 years old (5 min.)

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

<u>Bazanova M.V.</u>, Dudin Mikhail Georgiyevich, Koloskova L.E. (St. Petersburg, Russia) **Vitamin D 3 and VDR gene role in AIS pathogenesis within infant population.** (Preliminary report) (5 min.)

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

<u>Dudin Mikhail Georgiyevich</u>, Bober S., Maximova N., Galduk T., Bogdanova N. (St. Petersburg, Russia) **Selective biofeedback training of the m. transversospinalis method for AIS** (5 min.) *Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok", St. Petersburg, Russia* 

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

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

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

Pavel Cerny<sup>1, 2</sup>, Petr Kawczyk<sup>2, 3</sup>, Ivo Marik<sup>1, 4</sup> (Pilsen & Prague & Ostrava, Czech Republic) **Segment modifications of corrective spinal orthoses** (5 min.)

IVO MARIK & PETR KRAWCZYK, TOMASZ KARSKI & ARSENEV ALEKSEY VALENTINOVICH
Closing of the Symposium
Certificates
Planning of the 20<sup>th</sup> Prague-Lublin-Sydney-St. Petersburg Symposium

13.30 LUNCH

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

19.00 GALA DINNER - RESTAURANT APETIT

### **GOOD BYE!**

19th Prague-Sydney-Lublin-St. Petersburg

<sup>&</sup>lt;sup>1</sup> Faculty of Health Studies, University of West Bohemia, Pilsen, Czech Republic

<sup>&</sup>lt;sup>2</sup> Faculty of Physical Education and Sport, Charles University, Prague, Czech Republic

<sup>&</sup>lt;sup>3</sup> PROTEOR CZ I.I.c., Ostrava, Czech Republic

<sup>&</sup>lt;sup>4</sup> Ambulant Centre for Defects of Locomotor Apparatus I.I.c., Prague, Czech Republic

#### **NOTES FOR ALL PARTICIPANTS**

Lectures and text slides will be presented in English.

Time of the individual lecture includes time for discussion.

A list of lectures/posters and chairmen of sessions can be changed!

Conference fee 50 Euros (including social programme & refreshment) by Bank Transfer

Bank: ČSOB, Na Pankráci 310/60, 140 00 Praha 4

Bank account: 500617613/0300

IBAN: CZ84 0300 0000 0005 0061 7613

Swift Code/BIC: CEKOCZPP

Owner of the account: Czech Medical Association J.E. Purkynje, Prague, CZ

Variable symbol: **2517025** (into recipient information put on your name and surname).

Hotel accommodation is paid individually.

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

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

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

Prof. Ivo Marik, MD, PhD & Petr Krawczyk, MD

e-mail: ambul\_centrum@volny.cz & krawczyk@proteorcz.cz

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

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

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

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

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





# DR. DANESOVA, PHD.

The date of birth: 6<sup>th</sup> May 1945

### **Education**

1968: graduated at Mathematical and Physical Faculty of the Charles University in Prague (focussed on the mathematical analyses);

1968–1971: Pedagogical Assistant at the Department of Mathematics in the Faculty of Civil Engineering of the Czech Technical University in Prague;

since 1971: Assistant Professor in the Faculty of Civil Engineering of the Czech Technical University;

1977: espoused the Doctorate of Natural Sciences (RNDr.) at the Mathematical and Physical Faculty of the Charles University in Prague;

1984: espoused the PhD dissertation thesis focused on functional analyses with specialization on differential and integral equations.

### Scientific activities

Co-author of a row of final research reports (the faculty research, the research for Ministry of Education, the research for Ministry of Health etc.);

since 1990 co-investigator of 4 grants and 2 scientific intentions (with main themes of mathematical applications in biomechanics).

#### **Publications**

Author and co-author of many scientific papers, specialized articles and reports. The most important work is the General theory of bone remodelling. Processes of bone remodelling were exactly expressed in this works by means of original stoichiometric equations and linear differential equations. Exactly were defined the bifurgation points. Many variations of metabolic processes begin in cortical bone by reaching of bifurgation points. The general theory of bone remodelling was the first zooming to the exact view on the remodelling processes of bone tissue. Dr. Danesova, PhD. meaningfully cooperated at priority work about exact definitions of limited cycles of functional bone stability. Exact describing of processes of thickening and thinning of bone tissue and ways of regulation of these processes, their slowing down and acceleration became worldwide famous. Her clinical verification of formation of new hyaline cartilage at the local osteochondral defects and in the long-term cooperation at the work on specification of domains of nanostructure and domains of submicrostructure of cortical femoral bone in older patients were significantly beneficial.

Dr. Danesova, PhD. has been a member of The Society for Connective Tissues Czech Medical Association J. E. Purkyne (SCT CMA JEP) from the year 2004. She helps with organization of conferences by the Society for Connective Tissues CMA JEP every year. The Society for connective tissues CMA JEP appreciates her work in the field of theoretical biomechanics and decided to award Dr. Jana Danesova, PhD. by the Diploma of Honourable Membership of the Society for Connective Tissues.

### Some relevant publications

PETRTÝL M., **DANEŠOVÁ J.**: "<u>Limitní cykly vzniku, funkční stability a zániku kostní tkáně v jejím</u> objemovém elementu", Osteologický bulletin, č. 4, 2000, str. 37-42;

PETRTÝL M., **DANEŠOVÁ J**.: "Obecná teorie remodelace kostní tkáně", Pohybové ústrojí, roč. 6, č. 4, 1999, str. 30-47;

PETRTÝL M., **DANEŠOVÁ J**.: "Weakly stationary states during the bone remodelling", Proceedings from 12<sup>th</sup> Conference of the European Society of Biomechanics", Trinity College, Dublin, 28-30, August 2000, p.342;

PETRTÝL M., **DANEŠOVÁ J.**: "Bifurgation points in the fields of weakly steady states at bone remodelling". Proc. from the 33<sup>rd</sup> Solid Mechanics Conference, Zakopane, Institute of fundamental technological research of Polish Academy of Sciences, 5-9 September, 2000, pp. 309;

PETRTÝL M., **DANEŠOVÁ J**.: <u>"Principles of bone remodelling - the limit cycles of bone remodelling"</u>, Acta of Bioengineering and Biomechanics, Vol. 3, No.1, 2001, pp. 75-91;

PETRTÝL M., **DANEŠOVÁ J.**: <u>"Bio-mechanochemical interactions at cellular level in cortical bone during the bone remodelling cycle"</u>, In: Proc. from 5<sup>th</sup> International Conference on Cellular Engineering, Aachen, Germany, July 2001, pp. S12-13;

PETRTÝL M., **DANEŠOVÁ J**.: "Steady states and bifurgation points within the bone remodelling", In: Proc. from 2<sup>nd</sup> International Symposium on Mechanics of Human Movement and Biomaterials, ISMHMB 2001, Ottawa, Ontario, Canada, pp. 18-23

PETRTÝL M., **DANEŠOVÁ J**.: "<u>Genetic control and biomechanical control of the bone remodelling",</u> Sborník z konference Workshop 2000, ČVUT, Praha, str.549

PETRTÝL M., **DANEŠOVÁ J.**: "<u>Vnější silové a momentové účinky determinující tvar rostoucího skeletu za fyziologického a patologického stavu</u>", Sborník z mezinárodní konference SKELET 2001, KU-FTVS, Praha, str. 38-41;

PETRTÝL M., **DANEŠOVÁ J**.: "<u>The algorithm of biomechanical properties in an unsatisfactory environment</u>", In: Proc. from 2<sup>nd</sup> Intern. Seminar on ECS, International Association for Shell and Spatial Structures, Prague, May 2001, pp. 21-25.

# RNDr. JANA DANESOVA, PHD.

Paní RNDr. Jana Danešová, CSc. se narodila v roce 1945 v Sychrově u Havlíčkova Brodu. V roce 1968 promovala na Matematicko-fyzikální fakultě Karlovy univerzity se zaměřením na matematickou analýzu. V letech 1968–1971 působila jako asistentka na katedře matematiky Stavební fakulty ČVUT a poté, od roku 1971, jako odborná asistentka. V roce 1977 vykonala rigorózní zkoušku na Matematicko-fyzikální fakultě Karlovy univerzity v Praze a obhájila doktorát přírodních věd- RNDr. V roce 1984 obhájila kandidátskou disertační práci se zaměřením na funkcionální analýzu se specializací na diferenciální a integrální rovnice a získala titul CSc. Po celou dobu svého působení na Českém vysokém učení technickém v Praze byla spoluautorkou řady dílčích a závěrečných výzkumných zpráv, a to nejenom fakultních, ale také resortních a ministerských výzkumných úkolů. Od roku 1990 byla spoluřešitelkou 4 grantů a dvou vědeckých záměrů, v nichž se věnovala aplikacím matematiky v biomechanice.

### Její nejvýznamnější spoluautorské vědecké práce jsou:

Formulace obecné teorie remodelace kostní tkáně. V této práci byly exaktně formulovány remodelační procesy v kortikalis prostřednictvím originálních stechiometrických rovnic, následně pomocí nelineárních diferenciálních rovnic a získání bifurgačních bodů, jejichž dosažením dochází v kortikální kosti k mnoha variacím metabolických procesů. Tato obecná teorie remodelace byla prvním přiblížením k exaktnímu pohledu na remodelační procesy v kostní tkáni. Významně spolupracovala na prioritní práci o exaktních definicích limitních cyklů funkční stability a zániku kostní tkáně v jejím objemovém elementu. Celosvětovým přínosem byly exaktní popisy procesů houstnutí a řídnutí kostní tkáně a způsoby regulace těchto procesů, jejich zpomalování nebo zrychlování.

Významné jsou také její přínosy, týkající se klinických verifikací vzniku nové (histologicky prokázané) hyalinní chrupavky u lokálních osteochondrálních defektů a dlouholetá její spolupráce na zpřesnění domén nanostruktur (nanofibril, nanoprutů, nanoskořepin) a domén submikrostruktur kortikální kosti femuru u starších pacientů.

Paní doktorka je spoluautorkou a autorkou několika desítek vědeckých prací, odborných článků a zpráv.

Nejvýznamnější její publikace jsou uvedeny in English výše.

Paní RNDr. Jana Danešová je členkou Společnosti pro pojivové tkáně ČLS JEP (SPT) od jejího znovu založení v roce 2004 až do současnosti.

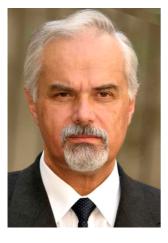
Členové výboru SPT ČLS JEP si velmi váží vědecké práce paní Dr. Danešové v oboru experimentální biomechaniky. Výbor děkuje za aktivní pomoc při organizování každoročních symposií (Kubátovy dny a Praha-Lublin-Sydney-St. Petersburg symposium) a odbornou reprezentaci

10th Durania Carlo and Labelia Co December and

Společnosti pro pojivové tkáně ČLS JEP z.s. na těchto mezioborových akcích. Je nám ctí ocenit zásluhy paní doktorky udělením diplomu Čestného členství ve Společnosti pro pojivové tkáně ČLS JEP.

Jménem výboru Společnosti pro pojivové tkáně České lékařské společnosti J. E. Purkyně **prof. MUDr. Ivo Mařík, CSc.** předseda SPT ČLS JEP z.s.

19th Prague-Sydney-Lublin-St. Petersburg



# VLADIMÍR PALIČKA, MD, PHD, DR.H.C.

(Osteocentre and Institute of Clinical Biochemistry and Diagnostics Charles University, University Hospital Hradec Králové, Sokolská 581, 500 05 Hradec Králové, Czech Republic, palicka@lfhk.cuni.cz)

### **CURRICULUM VITAE**

### **EDUCATION**

1970	MD, Facult	y of Medicine,	Palacký	University	, Olomouc, CZ
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1987 PhD, Charles University in Prague, CZ

1990 Associate Professor of Biochemistry

1999 Associate Professor of Internal Medicine

2001 Full Professor of Internal Medicine

2008 Doctor honoris causa, University of Pecs, Hungary

#### PROFESSIONAL CAREER

1984–2012 Head of the Institute for Clinical Biochemistry and Diagnostics, Charles University and University Hospital Hradec Králové

1995–2016 Head of the Osteocentre, University Hospital Hradec Králové

Since 2016 Director, University Hospital Hradec Králové

### **EDUCATIONAL CAREER**

2003–2010 Charles University, School of Medicine in Hradec Králové, Dean 2010–2017 Charles University, School of Medicine in Hradec Králové, Vice-Dean Since 2009 Association of Medical Schools in Europe, Executive Board Member

# **MEDICAL QUALIFICATIONS (Specializations)**

Clinical Biochemistry Internal Medicine Endocrinology Osteology

### MEMBERSHIP IN MEDICAL SOCIETY

IFCC (International Federation of Clinical Chemistry and Laboratory Medicine), Former Vice-President

EFCC-FESCC (European Federation of Clinical Chemistry and Laboratory Medicine), Former President

Czech Medical Association J.E,.Purkyne, Vice-President

Czech Society of Clinical Biochemistry, Honorary President

Czech Society for Metabolic Bone Diseases, President

American Association of Clinical Chemistry, Member

Scientific Committee of Ministry of Health Czech Republic, Member

Scientific Committee of the Medical Faculty, Charles University, Hradec Králové, Member

Scientific Committee of the Medical Faculty, Palacky University, Olomouc, Member

Scientific Committee of the University of Pecs, Szentagothai Research Center, Hungary, Member

Czech Society of Clinical Biochemistry, Honorary Member

Czech Society for Rheumatology, Honorary Member

Hungarian Society for Clinical Pathology, Honorary Member

Polish Society for Laboratory Diagnostics, Honorary Member

Slovak Society for Clinical Biochemistry, Honorary Member

Slovak Society for Metabolic Bone Diseases, Honorary Member

### FIELDS OF SCIENTIFIC ACTIVITY

Member of many scientific committees of the International Congresses in the field of Clinical Chemistry and Clinical Osteology

# **Editorial Boards and Advisory Boards**

Annals of Clinical Biochemistry (UK)

Biochemia Medica (Croatia)

Biomedical Papers (CZ)

Clinical Chemistry and Laboratory Medicine (Germany)

International Journal of Orthopaedics (Hong Kong) – Honorary Editor-in-Chief

Journal of Pediatric Biochemistry (Turkey)

Journal of Turgut Ozal Medical Center (Turkey)

Revista del Laboratorio Clínico (Spain)

Revista Romana de Medicina de Laborator (Rumania)

Casopis lekaru ceskych (CZ)

Klinicka biochemie a metabolismus (CZ)

Osteologicky bulletin (CZ)

Postgradualni Medicina (CZ)

Up to now published more than 500 articles and presented about 1.400 lectures and posters. Oriented mostly to the metabolic diseases, clinical biochemistry of diabetes mellitus, clinical biochemistry in intensive care and in metabolic bone diseases.

### Actual H-Index = 20, Citation index (WoS) without self-citation 1.427



Professor. George P. Lyritis, MD, PhD (right) and professor Jaroslav Blahoš, MD, DSc.

# PROF. GEORGE P. LYRITIS, MD, PHD

### **CURRICULUM VITAE**

### **EDUCATION**

- Postgradual studies in several university institutions in Great Britain
- 1973 Doctor of Medicine, University of Athens (essay: 'Contribution on the Effect of an Anabolic Steroid on Fracture Healing of Radial Fractures of Rabbits Treated with Cortisone')
- 1988 Associate Profesor in orthopaedics (Thesis: "The Effect of Calcitonin on the Metaphyseal Osteogenesis of Growing Rats")
- Professor in orthopaedics and bone metabolic diseases at the Faculty of Medicine, University
  of Athens, Greece
- 2008 Emeritus Professor in orthopaedics, University of Athéna

#### **OCCUPATIONAL POSTS**

- Head of the Postgraduate Course on Metabolic Bone Diseases (since 2007)
- Director of the Laboratory for the Research of Musculoskeletal System in the Faculty of Medicine, University of Athéna (KAT Hospital) (1991–2008)
- Founder and president of the Hellenic Society for the Study of Bone Metabolism (EEMMO)
- Founder and president of the Hellenic Osteoporosis Foundation (HELIOS)
- Founder (2000) and past president of the International Society of Musculoskeletal and Neuronal Interactions (ISMNI)
- Member of the Board of the International Osteoporosis Foundation (IOF)
- Member of the Committee of Scientific Advisors of IOF
- Co-editor of the Journal of Musculoskeletal and Neuronal Interactions (JMNI) since 2000
- Editor of Ostoun (Greek Journal of EEMMO) since 1990
- Member in several editorial boards of well known medical journals

### **PUBLICATIONS**

- 25 books
- 400 articles (half in international journals)
- Over 4000 citations in literature

#### **AWARDS IN CZECH REPUBLIC**

- Honorary membership of the Czech Medical Society JEP (2010)
- Medal of the Czech Medical Society JEP (2010)
- Honorary membership of the Society for Connective Tissues, Czech Medical Association JEP (2010)



# PROFFESOR DR. MED. HANS ZWIPP

### **CURRICULUM VITAE**

Born 1st March 1949 in Neustadt (near Coburg)

- 1969 A-levels at Martin-Butzer High School in Dierdorf in Westerwald
- Since 1971 married, father of three children.
- 1969–1975 Study of veterinary medicine, theology and human medicine in Vienna, Berlin, Bochum and Essen
- 1975 graduated med. at Medical Faculty in Essen
- 1975–1977 medical assitent in St. Vincenz hospital/ Bethesda in Essen
- 1978–1993 surgery practise at Teaching Hospital in Hannover (MHH) in Lower Saxony (headed by Prof. Dr. med. H. Tscherne)
- 1982 specialist in surgery
- 1984 specialist in orthopaedics and traumatology
- 1984 superintendent doctor at Trauma and Surgery Clinic in Hannover (MHH)
- 1985 expert in trauma surgery problematics
- 1993 specialist in urgent medicine Leitender Oberarzt der (MHH) 7/1992–9/1993.
- 1992 1993 the head of Trauma and Surgery Clinic in Hannover (MHH)

- Since 1994 Department of Trauma and Reconstruction Surgery of University Hospital "Carl Gustav Carus" in Dresden
- 1994 professor of surgery and recostruction surgery
- 1995 specialist in hand surgery
- 2007 the head of Surgery Clinic at University Hospital "Carl Gustav Carus" in Dresden

### Research and publication activity

- Research projects (36)
- Publications (409)
- Lectures (394)
- Leadership of dissertations (30)

### **Honours and awards**

- 1987 Hermann Kümmel's Price from NWD Surgeons
- 1988 Hans Liniger's Price of German Association for Trauma Surgery (DGU)
- 1994 founding member and the president of ESFAS (European Foot and Ankle Society),
   Dresden
- 1994–2006 chairman of the board AOI for surgery of foot and ankle
- 1998/99 president of Surgery Association in Saxony
- 1999–2001 member of the bord of German Association for Trauma Surgery
- 2000–2004 member of consulting board od German AO
- 2002–2008 head of Working Association for Foot of DGU
- 2003 Honorary membership of AO Alumni Association, Chile
- 2005-2007 member of the board of DGU
- 2006 Commemorative Medal of 3rd Medical Faculty, Charles University, Prague
- 2011 Honorary membership of Czech Society for Trauma Surgery



Jiří Vosátka, MD (left) and professor Ivo Marik, MD, PhD

# MUDR. JIŘÍ VOSÁTKA

# Udělení čestného členství v Ortopedicko-protetické společnosti ČLS JEP z.s.

Pan MUDr. Jiří Vosátka je dlouholetým členem Ortopedicko-protetické společnosti ČLS JEP. Svou činnosti se velmi zasloužil o rozvoj této odborné společnosti, kterou rovněž jako její předseda řadu let vedl. Významnou měrou se podílel na přípravě vzdělávání v tomto oboru. Je autorem řady publikací v odborných časopisech a kapitol v monografiích.

Členové výboru OPS ČLS JEP si velmi váží přínosné práce pana MUDr. Jiřího Vosátky Výbor proto navrhuje ocenit zásluhy pana doktora udělením diplomu Čestného členství v Ortopedicko-protetické společnosti ČLS JEP.

#### CURRICUI UM VITAF

Narozen 15.3.1950

Po absolvování Lékařské fakulty UK v Praze atestoval v oboru ortopedie, ve kterém získal atestaci I. a II. stupně. Více jak 30 let své odborné praxe se věnuje oboru Ortopedická protetika jak na poli klinické práce, tak také pedagogické a publikační.

Od roku 1997 řídí Oddělení Ortopedické protetiky v Praze na Roztylech.	
Svůj život zasvětil pomoci těžce tělesně postiženým. Aktivně se zapojoval do organizace po o hendikepované jako krajský i hlavní odborník ČR pro Ortopedickou protetiku. I v součas době je aktivním členem Ortopedicko-protetické společnosti ČLS JEP při diskusi nad návzákonů a vyhlášek.	sne



From right: Karel Čížek, MD, professor Ivo Marik, MD, PhD, assoc. professor Ivan Hadraba, PhD, Jiří Vosátka, MD and Aleš Mareček MD.

# MUDR. KAREL ČÍŽEK

# Udělení čestného členství v Ortopedicko-protetické společnosti ČLS JEP z.s.

Pan MUDr. Karel Čížek je dlouholetým členem Ortopedicko-protetické společnosti ČLS JEP. Svou činnosti se velmi zasloužil o rozvoj naší odborné společnosti, kterou rovněž jako její předseda řadu let řídil. Významnou měrou se podílel na přípravě vzdělávacího programu pro obor Ortopedická protetika. Je autorem řady publikací v odborných časopisech.

Členové výboru OPS ČLS JEP si velmi váží přínosné práce pana MUDr. Karla Čížka Výbor proto navrhuje ocenit zásluhy pana doktora udělením diplomu Čestného členství v Ortopedicko-protetické společnosti ČLS JEP.

#### CURRICUI UM VITAF

Narozen 18. srpna 1948 v Českých Budějovicích.

1. LF Univerzity Karlovy v Praze, absolvoval v roce 1974. V průběhu let atestoval v oborech Ortopedie a Ortopedická protetika. Od roku 1994 působí v Centru ortopedické protetiky v Českých Budějovicích a jako primář na Protetickém oddělení v Nemocnici České Budějovice.



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