

Czech Anatomical Society

Czech Society for Histochemistry and Cytochemistry

Masaryk University, Faculty of Medicine, Department of Anatomy

# MORPHOLOGY 2024

55<sup>th</sup> International Congress of Czech Anatomical Society

60<sup>th</sup> Lojda Symposium on Histochemistry

## PROGRAMME

- SUNDAY
- MONDAY
- TUESDAY

September 8–10, 2024

Telč, Czech Republic

**SUNDAY, SEPTEMBER 8, 2024**

**17:00–19:00 Opening Ceremony**

**Chairs:** Ondřej Naňka, Ingrid Hodorová, Jaroslav Mokrý, Marek Joukal

**Words of Welcome**

- President of CAS: doc. MUDr. Ondřej Naňka, Ph.D.
- President of SAS: prof. MUDr. Ingrid Hodorová, Ph.D.
- President of CSHC: prof. MUDr. Jaroslav Mokrý, Ph.D.

**Winners' Lectures**

**Chairs:** Naňka O., Mokrý J.

**Czech Anatomical Society – Best PhD thesis Award – Winner's Lecture**

**Fojtík Petr**

Syndesmotoc lesion in fracture-dislocations of the ankle - Maisonneuve fracture

**Czech Society for Histo- and Cytochemistry & BARIA Award – Winner's Lecture**

**Bretová Karolína**

Subpial astrocytes reactivity in the medial prefrontal cortex in the experimental neuropathic pain model

**Koubová Kateřina**

PTEN and soluble epoxide hydrolase in intestinal cell differentiation

**Annual Prize of the Czech Anatomical Society (Bochdalek Prize of CAS)**

**Musilová Zuzana**

Use of free radial forearm and pronator quadratus muscle flap: Anatomical study and clinical application

**Khadanovich Anhelina**

The communication patterns between the lateral antebrachial cutaneous nerve and the superficial branch of the radial nerve

**On the 60th Anniversary of the Lojda Symposium on Histochemistry**

**Dubový Petr**

The memory of Professor Zdeněk Lojda, a pioneer of Czechoslovak histochemistry and a prominent person in Czech science

**19:00 Music performance**

**19:00–20:30 Welcome evening**

# MONDAY, SEPTEMBER 9, 2024

## 8:00–8:30 Lecture Hall A – Invited Lecture

**Chair:** Dubový P.

**Kmieć Z., Kiežun J.** (Med. Univ. Gdańsk, Poland)

The galaninergic system in the progression of colorectal cancer: the role of immunohistochemistry

## 8:40–10:00 Lecture Hall A – Molecular and Cell Biology L5

**Chairs:** Adamkov M., Smetana K., Jr.

**Smetana K., Jr., Lacina I., Raška M., Malý P.**

Targeting the IL-6 receptor alpha chain to manipulate the cancer microenvironment

**Cígerová V., Adamkov M., Grendár M.**

SATB2 as a good prognostic marker for colorectal cancer

**Krajňáková B., Mešťanová V., Hurta Csizmár S., Výbohá D., Adamkov M.**

The role of PRMT5 and DSG2 in precancerous lesions of the uterine cervix.

**Mešťanová V., Krajňáková B., Kúdela E., Kalman M., Hurta Csizmár S., Adamkov M.**

Prognostic role of E2 & E4 proteins in progression of the cervical lesions

**Lacková L., Samec M., Mazuráková A., Dvorská D., Braný D., Kajo K., Adamkov M., Kubatka P.**

Epigenetic modulation via *Salvia officinalis* L. in chemopreventive model of breast carcinoma

## 8:40–10:00 Lecture Hall B – Experimental Morphology

**Chairs:** Faghani M., Hampl M.

**Faghani M., Alijani M., Mohammadghasemi F., Esmaeili-bandboni A.**

Beneficial effects of quercetin on mouse epididymal sperm parameters induced by nicotine

**Mohammadghasemi F., Daeihamed M., Fallah Kochakam N., Taghizadeh Valdi A., Faghani M., Farzanegan A.**

Tocopherol alleviates oxidative stress and increases androgen receptors in mice testicular tissues under forced swimming in warm water

**Čimborová K., Pelková V., Kotasová H., Bohačiaková D., Sedláková V., Hampl A.**

From decellularization to proteomics: exploring the lung extracellular matrix across species

**Hampel M., Jandová N., Novaková M., Romanová A., Kavková M., Parobková V., Kompaniková P., Čada Š., Zikmund T., Kohoutek J., Buchtová M.**

CDK13 mouse mutants as useful models of the CHDFIDD disorder

**Pavlíková Z., Zahradníček O., Jelínek Michaelidesová A., Šrámek J., Davidková M., Hovoráková M.**

Potential protective interaction of hyperthermia and hydrocortisone addition on fibroblasts proliferation

## **10:00–10:30 Coffee Break**

## **10:30–11:00 Lecture Hall A – Invited Lecture**

**Chair:** Joukal M.

**Brassett Cecilia** (Univ. Cambridge, UK)

From Pupil to Professional: The role of anatomy in the journey of a medical student in Cambridge

## **11:10–12:25 Lecture Hall A – Clinical Anatomy**

**Chairs:** Hodorová I., Joukal M.

**Vrzgula M., Josayová L., Lovásová K., Hodorová I.**

Ultrasound-guided treatment of upper arm muscle spasticity: an anatomical and radiological study

**Musilová Z., Joukal M.**

Vascular supply of the dorsal portion of the wrist joint capsule and dorsal capsulotomy

**Kohut P., Mezera V., Goals W., Zajíc P., Beneš M., Kachlík D.**

Anatomical relationships and variations of the lateral femoral cutaneous nerve to surrounding structures during minimally invasive total hip arthroplasty via the anterior approach

**Malakhov S., Shmarhalov A., El Falougy H., Lukáčiková P., Polák Š.**

Canals of the zygomatic bone: a morphometric study on dry adult human skulls

**Vecanová J., Hvizdošová N., Hodorová I.**

Case of the persistence of the female processus vaginalis (canal of Nuck) and review of literature

## 11:10–12:25 Lecture Hall B – Neurosciences I

**Chairs:** Dubový P., Kubíčková L.

### **Dubový P., Rokoský Z., Rábová A.**

Priming and signal transduction of delta opioid receptors in dorsal root ganglia neurons in a mouse experimental model of neuropathic pain - utilizing immunohistochemical detection to elucidate intracellular processes

### **Kubíčková L., Bahavan B., Karafiátová E., Leung V., Joukal M.**

The Expression and Cellular Distribution of DOR in Two Different Animal Models During the Orofacial Neuropathic Pain

### **Voleská E., EmamiAref P., Kubíčková L., Joukal M., Zamani A.**

Neuropathic pain and immunoreactive dynamics: Investigating the influence of paclitaxel in brain ventricles

### **EmamiAref P., Kubíčková L., Bakhshinejad B., Dubový P., Joukal M., Zamani A.**

The reaction of choroid plexus to chemotherapy

### **Solár P., Šerý O., Vojtíšek T., Krajsa J., Srník M., Dziedzinská R., Králík P., Kessler M., Dubový P., Joukal A., Balcar V. J., Joukal M.**

The Blood-Cerebrospinal Fluid Barrier as a Potential Entry Site for the SARS-CoV-2 Virus

## 12:15–13:15 Lunch

## 13:15–13:30 Congress Photo

## 13:30–15:00 Lecture Hall A – Developmental Morphology

**Chairs:** Tonar Z., Buchtová M.

### **Zavhorodnia I., Samec M., Hešková G., Straka L., Janík M., Výbohová D.**

Morphological characteristics of developmental anomalies of the thyroid gland: a prospective autopsy-based study

### **Burianová A., Čížková K., Tauber Z., Koubová K.**

In vitro model of trophoblast

### **Olbertová K., Hrčkulák D., Jesionek W., Kříž V., Hrubá E., Ešner M., Kořínek V., Buchtová M.**

Lgr5: an old player with a potentially new role in the mesenchymal cells during development

### **Mihalik J., Čurgali K., Petrášová D., Hodorová I.**

Antioxidant enzymes SOD1 and 2 in rat embryos and female genital organs during preimplantation period of pregnancy

**Tonar Z., Vaňková L., Malečková A., Křížková V.**

Single Best Answer (SBA) questions for formative and summative assessment in histology and embryology classes

**Křížková V., Vaňková L., Bufka J.**

Embryology applied (not only) in Pediatrics

### **13:30–15:30 Lecture Hall B – Symposium on Quality of Teaching Anatomy**

### **15:00–16:00 Coffee Break – Poster Session**

### **16:00–17:00 Lecture Hall A – Oral Morphology**

**Chairs:** Křivánek J., Šedý J.

**Šedý J., Kachlík D., Žižka R.**

Ligaments of the temporomandibular joint: new classification

**Žižka R., Šedý J., Tauber Z.**

A histological observation of human immature permanent tooth after failed regenerative endodontic treatment and subsequent root canal treatment

**Gonzalez Lopez M., Azam M., Kavková M., Lavický J., Henys P., Sadílek V., Buchtová M., Vořechovský M., Křivánek J.**

How is the renewal of ever-growing teeth controlled? Integrating the concepts of regeneration and repair

**Steklíková K., Dalecká L., Kubovciak J., Corneloup C., Pantalacci S., Hovořáková M.**

Novel genes involved in the first lower mouse molar enamel knot establishment and its early maturation

### **16:00–17:15 Lecture Hall B – Clinical Morphology**

**Chairs:** Tauber Z., Mokřý J.

**Mokřý J., Čížková D., Reims H. M., Sullivan G.J., Almaas R.**

Light microscopy structure of liver parenchyma in Aagenaes syndrome patients

**Čížková D., Bezrouk A., Mokřý J., Sullivan G.J., Reims H. M., Almaas R.**

Liver ultrastructure in paediatric patients with Aagenaes syndrome

**Kolesová H., Neffeová K., Zábrodská E., Olejníčková V., Mašek J., Sedmera D.**

Jagged1 disrupted signaling in conditional deletion mouse model and single nucleotide variant of patient-based mouse model causes severe cardiac defects – morphology and physiology.

**Makovický P., Tůmová E., Makovická M., Volek Z.**

The influence of feed restrictions on small bowel parameters on an experimental rabbit model

**Tauber Z., Burianová A., Koubová K., Mrštík M., Jirkovská M., Čížková K.**

The interplay of inflammation and placenta in maternal diabetes: insights into Hofbauer cell expression patterns

**17:15–17:45 Meetings of society committees of the CAS and CSHC**

**17:45–18:15 Plenary meetings of the CAS and CSHC**

**19:30 Social evening**



# TUESDAY, SEPTEMBER 10, 2024

## 9:00–10:30 Lecture Hall A – Neurosciences II.

**Chairs:** Zamani A., Kubíčková L.

**Cesnáriková S., Sedmík J., Fojtík P., Amruz Černá K., Pospíšilová V., Váňová T., Bohačiaková D.**

Unraveling Alzheimer's Disease Mechanisms Using 3D Cerebral Organoids Derived from Induced Pluripotent Stem Cells

**Jeřábková K., Orviská P., Zareravasan A., Dianat M., Joukal A., EmamiAref P., Brázda V., Zamani A.**

Investigate the Role of Choroid Plexus in Alzheimer's Disease

**Orviská P., EmamiAref P., Jeřábková K., Brázda V., Zamani A.**

Tau phosphorylation and neuroinflammatory response to A $\beta$  in choroid plexus cells

**Báľentová S., Kalenská D., Borbélyová V., Filová B., Muriň P., Kecskés I.**

Ionizing radiation-induced histological and functional changes in the brain under experimental conditions

**Zamani A., Kocourková K., Kadlečková M., Mikulka F., Minaříková R., Smolka P., Rábová A., EmamiAref P., Kubíčková L., Hašanová K., Joukal M., Minařík A.**

In vitro study of materials for functional replacements in nerve tissue regeneration

**Báčová T., Dvořáková V., Vilímek M., Kachlík D., Báča V., Horák Z.**

Changes in the loading of anatomical structures of the intact eye and the eye implanted with an artificial intraocular lens during blunt impact in a biomechanical model

## 9:00–10:20 Lecture Hall B – Anatomical Terminology

**Chairs:** Musil V., Naňka O.

**Naňka O., Bartoniček J.**

Terminology of the growing long bone: A historical study

**Musil V., Modrý M., Stingl J., Kachlík D.**

Evolution of the term naming the 8th cranial nerve

**Stingl J., Riedlová J., Mrzilková J., Musil V.**

Finis coronat opus

**Požížková K., Račanská M.**

Anatomical Nomenclature from a Linguistic Perspective: a Data-Driven Approach

**Šimon František**

Slovak and Czech anatomical terms with prefixes pred- / před-, i. e. in front of, and za-, i. e. behind.

## Sponsor Lecture

**Krupa Michal** (Elsevier Health)

Anatomy Academy: Empowering Education for In-depth Understanding

**10:30–11:00 Coffee Break**

**11:00–12:00 Lecture Hall A – Varia**

**Chairs:** Račanská M.

**Korim F., Kuricová M., Ivašková S., Eberlová L.**

Incidence of duplication of the caudal vena cava in companion animals

**Shbat A., Moraes C., Malá-Zedníková P., Beránek M., Kvasilová A., Klepáček I.**

Face approximations of the Czech Countess Sidonia von Schlick

**Čížková Kateřina**

New ImageJ/Fiji script for assessment of nuclear receptor translocation

**12:00–12:15 Closing ceremony**

**12:15 Lunch**