

PHD MEETING PRAHA 2022

November 1st and 2nd, 2022



PROGRAMME

November 1st, 2022

8:30 – 9:00	Registration
9:00 – 9:10	Opening speech and welcoming MUDr. Jan Kopecký, DrSc.
9:10 – 9:15	Introduction to the PhD meeting: Martin Balašík, Ph.D.
9:15 – 9:35	1st year Ph.D. students' presentations
9:40 – 10:45	Session 1 – Students' oral presentations
	Chair: <i>María José Ruiz-Estrada</i>
	1. Marko Mitrović - Effect of a single bout of exercise on PAHSA lipokine levels in the circulation.
	2. Sara Stanić - Fibroblast growth factor 21 and CL 316,243 synergistically ameliorate metabolic abnormalities in dietary obese mouse
	3. Guillermo Puertas-Frias - Metabolic rewiring as an adaptive mechanism in CIV null cells
	4. Zuzana Korandová - Oxygen consumption measurements of cryopreserved PBMCs as a new diagnostic tool for mitochondrial diseases
	5. Felipe Martínez-Ramírez - Screening and identifying FAHFAs in edible mushrooms by Liquid chromatography – Tandem Mass Spectrometry (LC-MS/MS)
	6. Andrea Beňová - Novel TDZ analog MSDC-0602K manifests a different impact on bone and mesenchymal stem cell properties compared to classical TZDs
10:45 – 11:15	Coffee break
11:15 – 12:30	Session 2 - Students' oral presentations
	Chair: <i>Milica Drapšin</i>
	1. Karolína Hrůzová - Early disruption of social memory in a TgF344-AD rat model of Alzheimer's disease
	2. Daniela Černotová - Anxiety and social-like deficits in Alzheimer's disease in the TgF344-AD rat
	3. Sofiia Moraesku - Timing of allocentric and egocentric spatial coding in human intracranial EEG
	4. Daniela Kunčická - Poly(I:C) molecular weight causes sex-dependent deficits in neurodevelopment and adult behavior in offspring in the maternal immune activation model
	5. Anna Gunia - Visuospatial perspective-taking brain dynamics captured by iEEG
	6. Michaela Rusková - Effect of microtubule detyrosination and tyrosination on CRMP2 and neuronal development
12:30 – 14:00	Lunch break
14:00 – 14:15	"Influence of pipette technical specification to your pipetting results" by Sipoč Gilson Moderator: <i>Pavla Průchová</i>
14:15 – 16:00	Scientific Talk + Workshop: "Stress Management" by Mgr. Anna-Marie Pospíšilová Moderators: <i>Rimjhim Tomar & Šárka Danačíková</i>
16:00 – 18:00	Coffee break & Poster session 1
18:00 – 20:00	Networking + Snacks

November 2nd, 2022

8:30 – 9:00	Registration
9:00 – 10:00	Session 3 – Students' oral presentations
	Chair: <i>Felipe Martínez-Ramírez</i>
	1. Antonín Sedlář - Galectin-3 as a potential target for reversing vascular remodeling in hypoxic pulmonary hypertension
	2. Rohit Ashok Joshi - Nedd4-2 binding to 14-3-3 modulates the accessibility of its catalytic site and WW domains
	3. Marine Morvan – Chiral and aging proteomics applied to bovine and rat collagen
	4. Milica Drapšin - Circadian clocks in choroid plexus and its sensitivity to chronodisruption
	5. Rimjhim Tomar - Odor background increases the pheromone coding efficiency in moth olfactory neurons
	6. Bazila Bazila - Mitochondrial morphology and metabolism in pancreatic β -cell from IF1 KO mice
10:00 – 10:30	Coffee break
10:30 – 12:00	Discussion panel: "Women in Science" Moderators: <i>Alice Abbondanza & Klevinda Fili</i>
12:00 – 13:30	Lunch break
13:30 – 14:45	Session 4 – Students' oral presentations
	Chair: <i>Michaela Rusková</i>
	1. Jana Cimická - Role of extracellular ATP and P2X receptors in hypothalamic paraventricular nucleus
	2. Jakub Slepíčka - Modulation of synaptic transmission in chemotherapeutics induced neuropathic pain
	3. Monica Ponteraso - The role of macrophage migration inhibitory factor (MIF) in neuropathic pain
	4. Nikolai Chetverikov - Molecular mechanisms of steroid effects on function of muscarinic receptors
	5. Vera Abramová - Creation and primary behavioural characterization of <i>Danio rerio</i> <i>Grin2ab</i> NMDA receptor subunit knockout by CRISPR/Cas genome editing
	6. Yeva Prysiashniuk - Clinical translation of arterial spin labeling MRI in diagnostics of epilepsy, brain tumors, and cerebrovascular disease
	7. Šárka Danačíková - Development of <i>in vitro</i> methods for personalized diagnostics and treatment of Epilepsy
14:45 – 15:15	Coffee break
15:15 – 16:45	Poster session 2
16:45 – 17:00	IPHYS Popularization by Ing. Olga Zimmermannová, Ph.D.
17:00 – 17:30	Awards announcement and Students questionnaire results
17:30 – 18:00	Closing speech
18:00 – 20:00	Dinner
20:00 – 22:00	Live music

Poster Session 1 - November 1st, 2022

No.	Main author	Poster title
1	Dobrovolskii, M.	<i>De novo</i> mutations and rare variants occurring in NMDA receptors: structure-function characterization and pharmacological screen of novel therapeutically relevant NMDA receptor modulators
2	Kysilov, B.	Role of C-terminal domains of the NMDAR receptor in the control of sensitivity to potentiating neurosteroids
3	Kuchtiak, Viktor	Functional analysis of genetic variations in the cytosolic domain of NMDA receptors
4	Fili, K.	Functional assessment of mice carrying a <i>de novo</i> missense <i>Grin2b</i> mutation associated with Autism Spectrum Disorder (ASD)
5	Boroš, A.	Effects of Acetylcholinesterase inhibition with Pyridostigmine on cardiovascular system in spontaneously hypertensive rats
6	Opletalová, B.	HIF-1 α : an essential element for cardioprotection and proper mitochondrial function during adaptation to chronic hypoxia
7	Doubková, M.	Towards an <i>in vitro</i> model of clubfoot fibrosis: Enhancing extracellular matrix production with macromolecular crowding
8	Pohl, P.	14-3-3-protein regulates Nedd4-2 by modulating interactions between HECT and WW domains
9	Marković, A.	Searching for function of TMEM70, TMEM242 and c15orf61 – Recently identified interactors of subunit C from mammalian F ₀ F ₁ ATP synthase
10	Heleš, M.	Mu-opioid receptor desensitization in the spinal cord dorsal horn is reduced by the endogenous TRPV1 agonist N-oleoyldopamine
11	Vasconcelos, D.	Role of the KCTD16 protein in modulation of GABA _B receptors under pathological neuropathic pain condition
12	Shekhar, N.	The role of RF-amide peptide receptors GPR10 and NPFFR2 in energy homeostasis and diet-induced obesity
13	Kalendová, V.	Metabolic effects of n-3 Fatty acids as Calanus oil in transgenic mice with modified PPAR α expression
14	Haasová, E.	Effect of ambient temperature on skeletal muscles non-shivering thermogenesis in mice differing in propensity to obesity

Poster Session 2 - November 2nd, 2022

No.	Main author	Poster title
1	Búran, P.	Maternal auto-antibodies and their role in autism spectrum disorder
2	Ruiz-Estrada, M. J.	TRAK1 modulation of mitochondrial dynamics in neurons
3	Weissová, R.	Prolyl isomerase FKBP12 binds to CRMP2A and regulates microtubule dynamics
4	Gotvaldová, K.	Role of BCAA in oxidative metabolism and lipid droplet biogenesis in pancreatic cancer cells
5	Průchová, P.	Antioxidant role and cardiolipin remodeling by redox-activated mitochondrial Ca_2^+ -independent phospholipase A2 γ in the brain
6	Nelic, D.	Biased agonists of muscarinic receptors
7	Abbondanza, A.	Deletion of beta2* nicotinic acetylcholine receptors in striatal interneurons inhibit striatal activity and control striatal-dependent behaviors.
8	Masaryk, J.	The main potassium importer in yeast responds to decrease in intracellular potassium concentration by increasing affinity and maximum velocity
9	Domanská, V.	The role of peroxiredoxin 6 in biosynthesis of anti-diabetic and anti-inflammatory FAHFA
10	Rakušanová, S.	LC-MS workflow (LIMeX) for untargeted metabolomics and lipidomics analysis of mouse plasma, feces, and cecum-content
11	Dočkal, T.	Deciphering the impact of the reversed restricted feeding on the circadian clock in choroid plexus
12	Krajčovič, B.	Modulation of immediate-early gene expression in the hippocampal CA1 by long-term and short-term behavioral experience
13	Malenínská, K.	Chemogenetically induced brain-wide reduction of Parvalbumin interneurons activity: Electrophysiological preliminary study
14	Radostová, D	A novel one-trial association task relevant to episodic-like memory in rats

1st year Ph.D. students – Short informal presentation

Name	Department
Pražák Šimon	Laboratory of Biomaterials and Tissue Engineering
Yu-Chieh Wu	Laboratory of Biomaterials and Tissue Engineering
Havelková Jarmila	Laboratory of Biomaterials and Tissue Engineering
Janošev Maša	Laboratory of Structural Biology of Signaling Proteins
Saba Selvi	Laboratory of Biological Rhythms
Alexandra Ptakova	Laboratory of Cellular Neurophysiology
Zavbi Jus	Laboratory of Molecular Neurobiology
Monika Křivonosková	Laboratory of Mitochondrial Physiology