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of experimental biology

INSTITUTE
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THE 1st BILATERAL MEETING OF THE NENCKI INSTITUTE PAN WARSAW AND INSTITUTE OF PHYSIOLOGY CAS PRAGUE

23 October 2017, Institute of Physiology CAS, Prague

9:00-9:15 Introduction by directors **Dr. Jan Kopecký / Prof. Adam Szewczyk**

THE BEGINNINGS

9:15-9:30 **Prof. Lech Wojtczak** – Collaboration between IPHYS and the Department of Biochemistry of the Nencki Institute – how did it start?

9:30-9:45 **Dr. Zdeněk Drahoš** – History of Nencki – IPHYS collaborations

9:45-10:15 Coffee

MAIN THEMES AND PERSPECTIVES FOR COLLABORATION I **Neurophysiology (15 min talk + 5 min discussion)**

10:15-10:35 **Prof. Ewelina Knapska** (Laboratory of Emotions Neurobiology)
Central amygdala mediates social emotions of different valence

10:35-10:55 **Prof. Aleš Stuchlík** (Dept. of Neurophysiology of Memory)
Cognitive coordination and flexibility: The past and future outlooks for collaboration with the Nencki laboratories

10:55-11:15 **Dr. Rafał Czajkowski** (Laboratory of Spatial Memory)
Strategy – specific involvement of retrosplenial cortex in spatial navigation

11:15-11:35 **Dr. Hana Zemková** (Dept. of Cellular and Molecular Neuroendocrinology)
Excitatory and inhibitory neuronal modulation in hypothalamus by extracellular ATP

11:35-11:55 **MSc. Zuzana Novosadová** (Dept. of Neurohumoral Regulations)
Circadian clock in pancreas

11:55-13:00 Lunch (for speakers only)

13:00-14:00 Visits of laboratories

MAIN THEMES AND PERSPECTIVES FOR COLLABORATION II

Cardiovascular physiology (15 min talk + 5 min discussion)

- 14:00-14:20 **Prof. Adam Szewczyk** (Laboratory of Intracellular Ion Channels)
Mitochondrial potassium channels
- 14:20-14:40 **MSc. Michal Bencze** (Dept. of Experimental Hypertension)
Contribution of calcium entry and calcium sensitization to blood pressure maintenance in hypertension development of spontaneously hypertensive rats
- 14:40-15:00 **Prof. Paweł Dobrzyń** (Laboratory of Molecular Medical Biochemistry)
Metabolic reprogramming of the heart: the role of stearyl-CoA desaturase

15:00-15:30 *Coffee*

Metabolism and mitochondria (15 min talk + 5 min discussion)

- 15:30-15:50 **Dr. Katarína Smolková** (Dept. of Mitochondrial Physiology)
Mitochondrial 2HG production as a function of IDH2 in breast cancer cells
- 15:50-16:10 **Prof. Agnieszka Dobrzyń** (Laboratory of Cell Signaling and Metabolic Disorders) Lipid Mediators in Regulation of Pancreatic Islet Function
- 16:10-16:30 **Dr. Martin Rossmeisl** (Dept. of Adipose Tissue Biology)
Dietary n-3 fatty acids as phospholipids improve insulin sensitivity of the liver and skeletal muscle in dietary obese mice

16:30-16:50 *Coffee*

- 16:50-17:10 **Prof. Mariusz Więckowski** (Laboratory of Bioenergetics and Biomembranes)
Mitochondrial diseases-related oxidative stress
- 17:10-17:30 **Dr. Petr Pecina** (Dept. of Bioenergetics)
Animal and cellular models of OXPHOS complexes deficiencies

Short talks about big themes

- 17:30-17:40 **Ing. Josef Prchal** (Dept. of Biological Controls)
Preclinical testing of potential pharmaceuticals at IPHYS
- 17:40-18:00 **Dr. Ondřej Kuda** (Dept. of Adipose Tissue Biology) /**Dr. Marek Vrbacký** (Dept. of Bioenergetics) OMICS approaches at the IPHYS

18:00-19:00 *Meeting of the boards of directors – strategic planning*

19:00 *Reception*