





### 15th International Conference of the Lithuanian Neuroscience Association "Neurodiversity: from Theory through Artificial Intelligence to Clinical Practice"

Date: 24 November 2023

Venue: Hall A-203, Centre for the Advanced Pharmaceutical and Health Technologies

Lithuanian University of Health Sciences, Kaunas, Lithuania

#### **Organising and Scientific Committee:**

Prof. Osvaldas Rukšėnas (Vilnius University, Lithuania)

Dr. Rima Naginienė (Lithuanian University of Health Sciences, Kaunas, Lithuania)

Prof. Vilmantė Borutaitė (Lithuanian University of Health Sciences, Kaunas, Lithuania)

Prof. Aušra Saudargienė (Lithuanian University of Health Sciences, and Vytautas Magnus University,

Kaunas, Lithuania)

Assoc. Prof. Ramunė Grikšienė (Vilnius University, Lithuania)

Dr. Urtė Neniškytė, Vilnius University, Lithuania Dr. Sigita Mėlynytė (Vilnius University, Lithuania)

### **Sponsors:**































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# Centre for the Advanced Pharmaceutical and Health Technologies Lithuanian University of Health Sciences Hall A-203. Sukileliu av. 13. Kaunas. Lithuania

Hall A-203, Sukilellu av. 13, Kaunas, Lithuania	
9.00-10.00	Registration. Coffee/Tea
10.00-10.10	Opening and welcome
	Prof. Osvaldas Rukšėnas, President of the Lithuanian Neuroscience Association
	Prof. Vaiva Lesauskaitė, Vice-rector for Research, Lithuanian University of Health Sciences
	Prof. Arimantas Tamašauskas, Director, Neuroscience Institute, Lithuanian University of Health Sciences
	Dr. Rima Naginienė, Neuroscience Institute, Lithuanian University of Health Sciences
	I session. Artificial Intelligence and Theoretical Neuroscience in Precision Medicine
	Chair Prof. Aušra Saudargienė, Neuroscience Institute, Lithuanian University of Health Sciences / Vytautas
	Magnus University, Lithuania
10.10-10.50	The Virtual Brain Models: Linking Theory and Data Towards Understanding Pathophysiological
	Processes
	Prof. Pierpaolo Sorrentino, Institute of System Neuroscience, Aix-Marseille University, France
10.50-11.30	Precision Neurostimulation of Spinal Cord in Spinal Injury: a Computational Approach
	Dr. Andreas Rowald, Friedrich-Alexander University Erlangen-Nuremberg, Germany
11.30-11.45	Photoplethysmography, Wearable Devices, and Selected Applications
	Prof. Vaidotas Marozas, Biomedical Engineering Institute, Kaunas University of Technology, Lithuania
11.45-12.00	Meeting of the members of Lithuanian Neuroscience Association
12.00-13.00	Lunch
13.00-14.00	Poster session Poster session
	II session. Neurodegenerative Disorders
	Chair – prof. Ramunė Morkūnienė, Neuroscience Institute, Lithuanian University of Health Sciences,
	Lithuania
14.00-14.40	DCLK3, Neuronal Kinase with Likely Many Roles: From Huntington's Disease to Psychiatric Disorders
	Dr. Emmanuel Brouillet, Institute of Biology (INSB) CNRS, France
14.40-15.00	Biomarkers in Amyotrophic Lateral Sclerosis
	Evelina Grušauskienė, Faculty of Medicine, Lithuanian University of Health Sciences, Lithuania
15.00-15.20	How Viral Inflammation Contributes to Neurodegeneration
	Dr. Silvija Jankevičiūtė, Neuroscience Institute, Lithuanian University of Health Sciences, Lithuania
15.20-15.50	Coffee/Tea. Poster session
	III session. Genetic Aspects of the Nervous System Diseases
	Chair – dr. Paulina Vaitkienė, Neuroscience Institute, Lithuanian University of Health Sciences, Lithuania
15.50-16.10	RNA Modifications in Tumors – the New Black in Gene Regulation
	Dr. Giedrius Steponaitis, Neuroscience Institute, Lithuanian University of Health Sciences, Lithuania
16.10-16.30	Interplay between Metabolic and Epigenetic Factors in Transmission of Neuropsychiatric Disease Risk
	Dr. Ali Jawaid, Nencki-EMBL BRAINCITY Center of Excellence for Neural Plasticity and Brain Disorders,
	Nencki Institute of Experimental Biology, Warsaw, Poland
16.30-16.45	Visual Information Processing in Cortex and a Potential Link to Brain Disorders
	Dr. Gytis Baranauskas, Neuroscience Institute, Lithuanian University of Health Sciences, Lithuania
16.45-17.00	Concluding remarks, discussions, awards.
17.00-19.00	Closing party