

Brain Extracellular Matrix and Glia in Health and Disease PROGRAMME

Tuesday, 19 September

All lectures are compulsory for the Glia in Health and Disease School participants

8:20 - 8:30	Opening remarks COST Action Alexander Dityatev, Deutsches Zentrum für Neurodegenerative Erkrankungen (Germany), UNN Institute of Neuroscience (Russia) Alexey Semyanov UNN Institute of Neuroscience (Russia) Dmitry Rusakov UCL Institute of Neurology (UK), UNN Institute of Neuroscience (Russia)
Chairman: Alexey Semyanov (Алексей Васильевич Семьянов)	
8:30 – 9:00	Microstructure of synapses and perineuronal nets Mikhail Paveliev Kazan Federal University (Russia)
9:00 – 9:30	Extracellular matrix - dependent neural networks activity of the brain Irina Mukhina UNN Institute of Neuroscience (Russia)
9:30 – 10:00	Extracellular matrix and neuroplasticity Alexander Dityatev Deutsches Zentrum für Neurodegenerative Erkrankungen (Germany), UNN Institute of Neuroscience (Russia)
10:00 – 10:30	Coffee break
10:30 – 11:00	Modeling calcium dynamics in astrocyte networks with realistic morphology Alexey Brazhe Lomonosov Moscow State University (Russia)
11:00 – 11:30	Regulation of neurotransmitter release by synaptotagmin Ca^{2+}-sensitive ring-like oligomers Kirill Volynski UCL Institute of Neurology (UK)
12:00 -13:00	Plenary lecture
12:00 – 16:00	Poster session
13:00 -15:00	Lunch
15:00 – 16:00	Plenary lecture
Chairman: Alexander Dityatev (Александр Эдуардович Дитятев)	
16:30 -17:00	K^+ mediated signaling within tripartite synapse Alexey Semyanov UNN Institute of Neuroscience (Russia)
17:00 – 17:30	Modeling of neural networks with tetrapartite synapses Sergei Stasenko UNN Institute of Neuroscience (Russia)
17:30 – 18:00	Cellular Sodium Loading in Metabolically Compromised Cortex in situ and in vivo Christine Rose Heinrich Heine University Düsseldorf (Germany)

18:00 – 18:30	The impact of astrocytes morphology on their Ca²⁺ characteristics Andre Zeug Hannover Medical School (Germany)
19:00	Welcome party

Wednesday, 20 September

Chairman: Dmitry Rusakov (Дмитрий Русаков)	
8:30 – 9:00	Aberrant activity of glia in the neurovascular unit in neurodegenerative and neurodevelopmental disorders Alla Salmina Krasnoyarsk State Medical University (Russia)
9:00 – 9:30	Role of extracellular signaling in the neocortical development Victor Tarabykin Charité – Universitätsmedizin Berlin (Germany), UNN Institute of Neuroscience (Russia)
9:30 – 10:00	Rapid astrocyte morphology changes support epileptiform activity Christian Henneberger University of Bonn Medical School (Germany)
10:00 – 10:30	Coffee break
10:30 – 11:00	Epilepsy and gliogenesis Margarita Glazova IFEB RAS (Russia)
11:00 – 11:30	New trends in the analysis of function and modulation of the cells of nervous system Peter Bregestovsky Aix Marseille Université (France)
12:00 -13:00	Plenary lecture
12:00 – 16:00	Poster session
13:00 -15:00	Lunch
15:00 – 16:00	Plenary lecture
Chairman: Christian Henneberger (Кристиан Хеннебергер)	
16:30 -17:00	Activity-dependent plasticity of synaptic microenvironment Dmitry Rusakov UCL Institute of Neurology (UK), UNN Institute of Neuroscience (Russia)
17:00 – 17:30	Interactive realistic model of protoplasmic astrocyte Leonid Savtchenko UCL Institute of Neurology (UK), UNN Institute of Neuroscience (Russia)
17:30 – 18:00	Recent trends in multichannel electrophysiology Siegfried Leidig EIMEA Channel Manager, Harvard Bioscience (UK)
18:00 – 18:30	Extracellular GABA modulates excitatory neurotransmission via glial transporters Ivan Pavlov UCL Institute of Neurology (UK)
18:30 -19:00	Excitatory amino acid transporters (EAATs) as potential targets for the treatment of neurological disorders Alexey Zaitsev Sechenov Institute of Evolutionary Physiology and Biochemistry RAS (Russia)

Thursday, 21 September

Chairman: <i>Mikhail Paveliev (Михаил Павельев)</i>	
8:30 – 9:00	<i>Leaky Brain: In Vivo Imaging of Blood-Brain Barrier Integrity and Glial Cells in Neurological Disorder Models</i> <i>Leonard Khiroug</i> <i>University of Helsinki (Finland) and CSO at Neurotar Ltd.</i>
9:00 – 9:30	<i>Soft multimodal neuronal interface to restore motor function after spinal cord injury</i> <i>Pavel Musienko</i> <i>Saint-Petersburg State University (Russia)</i>
9:30 – 10:00	<i>Astroglial vesicular network: Evolution and Function in Health and Disease</i> <i>Robert Zorec</i> <i>University of Ljubljana (Slovenia)</i>
10:00 – 10:30	<i>Coffee break</i>
10:30 – 11:00	<i>Vesicular Glutamate Release from Astrocytes at the Interface of Signaling and Metabolism</i> <i>Vladimir Parpura</i> <i>University of Alabama at Birmingham (USA)</i>
11:00 – 11:30	<i>Window into the injured brain: Neurons and astrocytes in early stroke and traumatic brain injury</i> <i>Sergei Kirov</i> <i>Augusta University (USA)</i>
12:00 -13:00	<i>How small secretory vesicles fuse with the cell membrane</i> <i>Oleg Shupliakov</i> <i>Saint-Petersburg State University (Russia)</i>
12:00 -13:00	<i>Plenary lecture</i>
12:00 – 16:00	<i>Poster session</i>
13:00 -15:00	<i>Lunch</i>
15:00 – 16:00	<i>Plenary lecture</i>