

**PROGRAMME 29 May (Wednesday) 2013**

**Neuroinformatics and Computational Neuroscience**

Vytautas Magnus University  
Conference Hall 2nd floor, Daukanto 28, Kaunas, Lithuania



8.00 – 9.00	<b>Registration</b>	
9.00 – 9.30	<b>Welcome addresses</b>	
9.30 – 10.00	<b>Introduction to Neuroinformatics</b>	<b>Marja-Leena Linne</b> Tampere University of Technology, Finland
10.00 – 10.30	Coffee Vero Café, Daukanto 28, Kaunas	
10.30 – 11.40	<b>Introduction to computational modeling of brain functions: Cells, synapses, networks and beyond</b>	<b>Bruce Graham</b> University of Stirling, UK
11.40 – 12.00	<b>Modeling synaptic plasticity</b>	<b>Aušra Saudargienė</b> Vytautas Magnus University, Lithuania
12.00 – 13.00	Lunch Vero Café, Daukanto 28, Kaunas	
13.00 – 14.00	<b>Multi-scale modeling of the basal ganglia</b>	<b>Jeanette Hellgren Kotaleski</b> Royal Institute of Technology, Sweden
14.00 – 14.45	<b>Introduction to the NEURON simulator and public databases of neural models</b>	<b>Arnd Roth</b> University College London, UK
14.45 – 15.00	<b>Background information for computer exercises</b>	<b>Bruce Graham</b> University of Stirling, UK
15.00 – 15.30	Coffee Vero Café, Daukanto 28, Kaunas	
15.30 – 17.00	<b>Practicals:</b> Computer exercise Room 306, Daukanto 28, Kaunas	
17.00 – 18.00	<b>Student posters and presentations</b>	
18.00	<b>Sightseeing in Kaunas and Get-together Dinner</b> Bernelių užėiga, M. Valančiaus 9, Kaunas	

**PROGRAMME 30 May (Thursday) 2013**

**Computations in the brain: Learning and memory**

9.00 – 10.30	<b>Cortical dynamics of memory-guided behavior: Experimental and modeling perspectives</b>	<b>Michael Hasselmo</b> Boston University, USA
10.30 – 11.00	Coffee Vero Café, Daukanto 28, Kaunas	
11.00 – 11.45	<b>Computational model-based analysis of neurobehavioral data</b>	<b>Gediminas Lukšys</b> Basel University, Switzerland
11.45 – 12.30	<b>Functional connectivity of resting state fMRI and application in epilepsy, ADHD and depression</b>	<b>Roma Šiugždaitė</b> Ghent University, Belgium
12.30 – 13.30	Lunch Vero Café, Daukanto 28, Kaunas	
13.30 – 15.00	<b>Practicals:</b> Computer exercise Room 306, Daukanto 28, Kaunas	
15.00 – 15.30	Coffee Vero Café, Daukanto 28, Kaunas	
15.30 – 17.00	<b>Practicals:</b> Computer exercise Room 306, Daukanto 28, Kaunas	
17.00 – 18.00	<b>Discussion: Questions on computational modeling of the brain</b>	<b>Bruce Graham</b> University of Stirling, UK
19.30	<b>Gala dinner</b> Senieji Rūsiai, Vilniaus 34, Kaunas	

Kaunas, Lithuania



**PROGRAMME 31 May (Friday) 2013**

**Translational Neuroscience**

9.00 – 9.20	<b>Translational Neuroscience - bringing fundamental research into clinical practice</b>	<b>Rima Naginienė</b> Neuroscience Institute, Lithuanian University of Health Sciences (LUHS), Lithuania
9.20 – 9.40	<b>The role of membrane properties in neuronal function</b>	<b>Gytis Svirskis</b> Neuroscience Institute, LUHS, Lithuania
9.40 – 10.00	<b>Mechanisms of synaptic plasticity regulation by micro RNA</b>	<b>Tatiana Tkatch</b> Neuroscience Institute, LUHS, Lithuania
10.00 – 10.30	Coffee Vero Café, Daukanto 28, Kaunas	
10.30 – 11.00	<b>Dense coding in spinal cord</b>	<b>Aidas Alaburda</b> Vilnius University, Lithuania
11.00 – 11.30	<b>Microdynamics of visual receptive fields</b>	<b>Osvaldas Rukšėnas</b> Vilnius University, Lithuania
11.30 – 12.00	<b>State-modulation of EEG gamma responses: towards clinical application</b>	<b>Inga Griškova – Bulanova</b> Vilnius University, Lithuania
12.00 – 13.00	Lunch Vero Café, Daukanto 28, Kaunas	
13.00 – 13.30	<b>Multivariate analysis of biomedical signals and images: the key strategy in modern biomedical data processing</b>	<b>Algimantas Kriščiukaitis</b> Neuroscience Institute, LUHS, Lithuania
13.30 – 14.00	<b>Gene expression and function-based identification of biomarkers for diagnosis of glioma malignancies</b>	<b>Arūnas Kazlauskas</b> Neuroscience Institute, LUHS, Lithuania
14.00 – 14.30	<b>Beta amyloid and Alzheimer's disease</b>	<b>Vilmantė Borutaitė</b> Neuroscience Institute, LUHS, Lithuania

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### **Translational Neuroscience**

14.30 – 15.00	<b>Effect of transcranial magnetic stimulation therapy in treating neuropsychiatric disorders</b>	<b>Vladas Valiulis</b> Republic Vilnius Psychiatric Hospital, Vilnius University, Lithuania
15.00 – 15.30	Coffee Vero Café, Daukanto 28, Kaunas	
15.30 – 16.00	<b>Intraoperative visualization of brain tumors: current challenges and future trends</b>	<b>Kęstutis Skauminas</b> Neuroscience Institute, LUHS, Lithuania
16.00 – 16.15	<b>Closing remarks</b>	<b>Aušra Saudargienė</b> Vytautas Magnus University, Lithuania
16.15	Visit to the Open Air Museum of Lithuania and Farewell Dinner in the authentic Lithuanian Tavern, Rumšiškės	

Open Air Museum of Lithuania, Rumšiškės, Lithuania

