

## Neurobiophysics Bachelor Studies Programme, 2023

Institution		Department/Laboratory	Themes
<b>VU Life Sciences Center</b>	<b>Institute of Biosciences</b>	Department of Neurobiology and Biophysics	<p>A study on the recognition of images of objects from the same and different categories by recording eye movements</p> <p>Relationship of EEG spectral characteristics to subjective experiences at resting-state</p> <p>Stability and dynamics analysis of Clostridium difficile and Escherichia coli co-culture model</p> <p>The effect of ketamine on spontaneous and induced brain activity in awake mice</p> <p>The effect of Inositol trisphosphate (IP3) on alga Nitellopsis obtusa cell electrical signal parameters</p> <p>Socio-emotional function of men evaluation using psychophysiological methods</p> <p>Effect of functional food ingredients on the development of Alzheimer's disease</p> <p>Modelling of migraine- and arthritis-like pain in rats</p> <p>Evaluation of brain electrical responses in the gamma range using amplitude modulated chirps of different length</p> <p>Searching for relationships between EEG global field synchronisation and subjective experience during resting-state</p> <p>Distribution of double cones in the highest spatial resolution area of avian retina</p> <p>Assessment of Sympathetic Nervous System Reactivity to Psychosocial Stress in a Group of Perimenopausal Women</p>

	<b>Institute of Biotechnology</b>	Department of Bioinformatics	Prediction of the protein-ligand binding affinity using Voronoi diagrams
		Sector of Amyloid Research	Effect of different agitation conditions on the aggregation of the mouse prion protein MoPrP 89-230
		Department of Biothermodynamics and Drug Design	Single molecule DNA force measurements with custom-built magnetic tweezers microscope
	<b>Institute of Biochemistry</b>	Department of Bioanalysis	<p>The role of the microbiome-gut-brain axis in the pathogenesis of Alzheimer's disease and type II diabetes mellitus</p> <p>Bienzymatic electrochemical biosensors for detection of neuromediators</p> <p>Electrochemical biosensor for glutamate analysis in biofluids and living cells</p>
<b>National Cancer Institute</b>	<b>Research Departments</b>	Biomedical Physics Laboratory	<p>Bovine serum albumin stabilised gold nanoclusters accumulation in excretory systems' cells</p> <p>Liposomal Encapsulation of Curcumin: Accumulation and Effects on MCF-7 Cancer Cells</p>
<b>Vilnius Psychiatric Hospital</b>			<p>The influence of virtual reality session on healthy individuals' EEG and the loudness dependence of auditory evoked potentials</p> <p>Effect of transcranial magnetic stimulation on loudness dependence of auditory evoked potentials in depression treatment</p>