

Neurobiophysics Bachelor Studies Programme, 2024

Institution		Department/Laboratory	Themes
VU Life Sciences Center	Institute of Biosciences	Department of Neurobiology and Biophysics	<p>Research on the electrophysiological properties of <i>Nitellopsis obtusa</i> rhizoids</p> <p>Retinal Ganglion Cell Topography in Domestic Canary (<i>Serinus canaria domestica</i>)</p> <p>Dynamics of emotion recognition in faces during the menstrual cycle</p> <p>The dynamics of axon boutons of mouse visual cortex neurons, microglia, and C1q opsonin during a critical period of development</p> <p>Low frequency (theta) and high frequency (gamma) phase-amplitude coupling during auditory steady-state responses</p> <p>Research on the impact of excessive use of online games and social media on event-related potential components</p>
	Institute of Biotechnology	Department of Bioinformatics	Prediction of protein interaction hotspots using protein language models
	Institute of Biochemistry	Department of Biological Models	Effect of children with autism spectrum disorder gut microbiota on the behavior of mice and mice offspring
		Department of Bioanalysis	Functionalized glucose oxidase for optical glucose biosensors
	EMBL Partnership Institute	Group of Genome Informatics and Sequencing (Laboratory of Dr. Giancarlo Russo)	Temporal dynamics of methylation and Crispr-Cas activity in phage-infected bacteria
		Research and Development of Novel Genome Editing Tools (Laboratory of Dr. Stephen Knox Jones)	The biophysical properties of CRISPR Cas12 and Cas9 nucleolytic mechanism
Center for Physical Sciences and Technology	Department of Functional Materials and Electronics	Bioelectrics Laboratory	<p>Studies of mammalian cells electroporation and adhesion in the microfluidic chips</p> <p>Muscle fiber formation on polyacrylamide surfaces with fibronectin patterns</p>

			Effects of pulsed electric field on the chlorophyll fluorescence of microalgae <i>Chlorella vulgaris</i>
Julius-Maximilian Universität Würzburg			Quantitative analysis of the aminergic neurohormonal response to abiotic stressors in honeybees (<i>Apis mellifera</i>)
Vilnius University Hospital Santaros Klinikos, Children's Hospital			Exploring the interaction between autism, allergies and behavioural patterns in children Influence of mother's health and child's nutrition on child's sensitization to food allergens
Vilnius Psychiatric Hospital			The effect of transcranial magnetic stimulation therapy on frontal alpha asymmetry in subjects with depression disorder Loudness Dependence of Auditory Evoked Potential in people with depressive disorder and its relationship with clinical symptoms