

Genetics, Bachelor Studies Programme, 2022

Institution		Departments, Laboratories	Themes
VU Life Science Center (LSC)	Institute of Biosciences	Department of Botany and Genetics // <i>Plant Genetics Research Group</i>	<p>Investigation of the Association of Barley tweaky spike Mutation with Auxin Biosynthesis Pathways Using Comparative Genome Analysis</p> <p>Investigation of Drought Stress Resistance of Lithuanian Barley Spring Cultivars Using Biochemical and Genetic Marker</p> <p>Research for Mutations in Candidate Genes Leading to Abnormal Stem Branching of <i>Lolium perenne</i></p> <p>Genetic diversity of Lithuanian and Italian Elodea</p> <p>Evaluation of Species Diversity in the Genus Sparganium Using Molecular Markers</p> <p>Evaluation of Vilnius City Kazokiškės Landfill Leachates Toxicity Using Model Plants</p> <p>(Geno)Toxicity Evaluation of Water Bodies in the Territory of Vilnius City Kazokiškės Landfill Using Model Plants</p>
	Institute of Biosciences	Department of Botany and Genetics // <i>Genotoxicological Research Group</i>	<p>Evaluation of Anti-genotoxic Potency of <i>Astragalus glycyphyllos</i> Extract by Cytogenetic Methods</p> <p><i>In vitro</i> Genotoxicity Studies of Silver Nanoparticles in Human Peripheral Blood Lymphocytes</p> <p>The Study of α-Lipoic Acid's Influence on Patients with Diabetes Mellitus Using Cytogenetic Methods</p> <p>Study of Mutagen Sensitivity in lymphocytes of Diabetic Patients Using Cytokinesis-block Micronucleus Test</p>

			<p>Selection of the Optimal Research Methodology for Noncoding Circular RNAs and Evaluation in the Samples of Diabetes Mellitus</p> <p>Optimization of Cultivation, DNA Purification and RAPD Conditions for <i>Puccinia sp.</i></p> <p>Analysis of <i>in vitro</i> Genotoxicity of Silicon Dioxide (SiO₂) Nanoparticles in Human Peripheral Blood Lymphocytes</p> <p>Study of Mutagen Sensivity in Lymphocytes of Diabetic Patients Using Sister Chromatid Exchange Analysis Method</p> <p>Investigation of Chromosome Aberrations in Chernobyl NPP Accident Clean-up Workers</p> <p>Research of the Effect of Silicon Dioxide Nanoparticles in <i>Allium cepa</i> Root Cells by Cytogenetic and Molecular Methods</p>
		Department of Botany and Genetics// <i>Human Genome Research Group</i>	<p>Urinary miRNA Analysis in Castration Resistant Prostate Cancer Patients</p> <p>Quantitative MicroRNA Analysis in Blood Plasma of Patients with Advanced Diabetes Mellitus</p>
		Department of Microbiology and Biotechnology	Creation of Yeast Protein Sup35 Mutant Variant K102R
		Department of Biochemistry and Molecular Biology	Synthesis of <i>Saccharomyces cerevisiae</i> Totivirus L-BC Virus-like Particles
	Institute of Biochemistry	Department of Molecular Microbiology and Biotechnology	Characterisation of Pararheinheimera Bacteriophages KLER1-1 and KLER1-2
	Institute of Biotechnology	Sector of Applied Biocatalysis	Investigation of Genomic Library Construction of Polyurethane Degrading Bacterium
		Department of Protein - DNA Interactions	Impact of BREX System Proteins on Cell Viability

		Department of Eukaryote Gene Engineering	Construction of a <i>Komagataella phaffii</i> Yeast Strain with Modified Protein N- and O-linked Glycosylation Investigation of the Influence of PMR1 and MNN10 Gene Deletion on Recombinant Protein Secretion in Yeast <i>Kluyveromyces lactis</i>
		Department of Immunology and Cell Biology	Influence of Chemotherapeutic Compound FR901464 on mRNA Formation in Hypoxic HCT116 Cells
		Department of Biothermodynamics and Drug Design	CA IX Expression Features in Different Preclinical Solid Tumor Models
Nature Research Centre (NRC)	Institute of Ecology	Laboratory of Ecotoxicology	Cytogenetic Effects of Exposure to Microplastics of Different Polymer Types on Various Ontogenesis Stages of Salmonid Fish
		Laboratory of Genetics	Microbiological Contamination Study of Black Soldier Fly Larvae
National Cancer Institute (NCI)		Biobank	Differential Gene Expression Analysis in Ovarian Carcinoma In Silico and the Response of Ovarian Tumor Cells to <i>Baicalein In Vitro</i>
		Laboratory of Genetic Diagnostic	Evaluation of the Abundance of MicroRNA in Urine in Triple Negative Breast Cancer Patients' Treatment Prognosis
			Quantitative VHL, PBRM1, SETD2 and BAP1 Gene Expression Analysis in the Plasma of Kidney Cancer Patients
UAB Thermo Fisher Scientific Baltics			Stability Studies of Reagent Mixtures Used in DNA Genotyping Products
			A Study of the Efficiency of The Template Switching Reaction Performed by Reverse Transcriptases