## **Genetics, Master Studies Programme, 2023**

Institution		Departments, Laboratories	Themes
VU Life Science Center (LSC)	Institute of Biosciences	Department of Botany and Genetics // Plant Genetics Research Group	Evaluation of Genetic Factors Determining Aluminum Resistance in New Lithuanian Barley (Hordeum vulgare L.) Varieties
			Genetic Structure Analysis of Sosnowsky hogweed ( <i>Heracleum</i> sosnowskyi) Populations using DNA Molecular Markers
		Department of Botany and Genetics// Human Genome Research Group	MiRNA Expression Analysis in Leukocytes of Advanced Diabetes Mellitus Patients
			Quantitative Analysis of Histone Modifying Genes and Their Potential Regulatory MicroRNAs in Prostate Tumors
			Study of Epigenetic Biomarkers for Early Non-Invasive Renal Cancer Detection and Surveillance
		Department of Microbiology and Biotechnology	Microbiome Analysis of Simnas Fishery Farm Ponds
	Institute of Biochemistry	Proteomics Centre	Development and Applications of a Transcription Factor P53 Responsive Fluorescent Reporter
	Institute of Biotechnology	Department of Eukaryote Gene Engineering	Effects of the Tbx5a gene on Danio rerio heart regeneration
			Detection and Characterization of Age-Dependent Cytosine Modifications in Schizophrenia Patients' Neutrophils and T cells
		Sector of Applied Biocatalysi	Expression of Lipoxygenase from Pseudomonas aeruginosa in Yeast
	LSC-EMBL PI European Molecular Biology Laboratory Partnership Institute	The Laboratory of Dr. Stephen Knox Jones	Profiling the Specificity of the TnpB - Transposon Associated Nuclease
		The Laboratory of Dr. Jonathan Arias	Establishment of Methods for HDR-based Polyengineering of Human Cells
Nature Research Centre		Laboratory of Molecular Ecology	Detection of new genetic markers for <i>Sarcocystis spp.</i> Identification

National Cancer Institute	Research Departments	Biobank	Differential Gene Expression Changes in Breast Tumor Cell Lines of Varied Malignancy Grades Following Exposure to si-KRAS or Anti-EGFR
Thermo Fisher Scientific Baltics			Development of the Assay for Biomolecules Quantification on Magnetic Beads