Molecular Biotechnology, Master Studies Programme, 2023

Institution		Department/Laboratory	Themes
VU Life Sciences Center	**Institute of Biochemistry**	Department of Biological Models	Development of an Antidiabetic Functional Product from Beet Root by lactofermentation Diet and Aging Induced Neuroinflammation and its Modulation by Prebiotics
		Department of Bioanalysis	Functionalization of Ethanol Converting Enzymes: Towards a Direct Electrical Communication in Ethanol-Detecting Biosensors
	Institute of Biosciences	Department of Microbiology and Biotechnology	Bacteriocins Active Against Plant Pathogenic Bacteria Influence of AgNPs on ROS Generation in Yeast Cells A *Saccharomyces cerevisiae* Model System For Prion [PSI+] and Sup35 Biomolecular Condensates Research
	Institute of Biotechnology	Sector of Amyloid Research	The Study of Cross-interactions in Aggregation of S100A9 and Tau Proteins
		Department of Protein - DNA Interactions	Characterization of Class 2 CRISPR-Cas Effector Complexes
		Department of Immunology	Development of Monoclonal Antibodies against Antibiotic Resistance Proteins OXA-48, OXA-134, SHV-42, SME 3, and ADC-144
		Sector of Applied Biocatalysis	Development of Biocatalysis Based Technology for the Hydrolysis of Plant-derived Proteins
		Department of Biothermodynamics and Drug Design	Design of anti-Alzheimer's Drug Candidates that Inhibit BACE1 Protease Enzymatic Activity

	LSC-EMBL European Molecular Biology Laboratory Partnership Institute	Laboratory of Dr. Stephen Knox Jones	Determinants of CRISPR nuclease gRNA function The Role of DNA Topology in CRISPR-Cas9 Nuclease Specificity
		Laboratory of Dr. Patrick Pausch	Establishment of Type IV CRISPR for Genome Editing in Human Cells
Thermo Fisher Scientific Baltics			Novel Applications of Double-Stranded RNA Binding Proteins
Droplet Genomics			Ultra-High-Throughput Microbial Single-Cell Genomics Using Semi-Permeable Capsules