

Molecular Biotechnology, Bachelor Studies Programme, 2024

Institution		Departments, Laboratories	Themes
VU Life Sciences Center	Institute of Biochemistry	Department of Bioelectrochemistry and Biospectroscopy	Analysis of the Interaction Between Protein S100A9 and Tethered Bilayer Lipid Membranes
		Department of Bioanalysis	Development of Biosensors for Oxidase Substrates Based on Toluidine Blue Modified Electrodes
			The Impact of Graphene Modifications on the Performance of an Amperometric Urea Biosensor
			Synthesis and Characterization of Functionalized Enzymes Electrochemical Biosensors Using D-Amino Acid Oxidase
	Department of Biological Models	Modulation of Microglia Functionality Using Synthetic Cannabinoids during Aging	
	Department of Molecular Microbiology and Biotechnology	Study of 2-Aminopyrimidine Biodegradation	
		Application of Regio-selective Esterases to Nucleoside Modification	
Investigation of Pyrazine Compound Biosynthesis in the Recombinant <i>Pseudomonas putida</i> KT2440 Strain Investigation of Tail-Associated gp45 from Aeromonas-Infecting Bacteriophage KLEA5			
Institute of Biotechnology	Sector of Amyloid Research	Purification and Liquid-Liquid Phase Separation of β 2-Microglobulin Influence of Environmental Conditions on Liquid-Liquid Phase Separation of Superoxide Dismutase 1 Study of Curli Protein Aggregation	
	Department of Immunology	Optimization of Semi-Solid Media for Hybridoma Cloning and Selection Identification of Variable Regions of B-lactamase Specific Monoclonal Antibody and Development of Recombinant Antibodies	

			Characterization and Application of Monoclonal Antibodies to hBiP Production of Chimeric Antibodies Against House Dust Mite Allergen Der p 2
		Department of Eukaryote Gene Engineering	Synthesis of Recombinant <i>Artemisia vulgaris</i> Allergen Art v 3 in Yeast Investigating the Synthesis and Function of Novel Proteins Encoded by Rodent Polyomaviruses in Bacterial and Yeast Cells
		Sector of Applied Biocatalysis	Unlocking Industrial Symbiosis: Cultivation of <i>Streptomyces mobaraensis</i> on Potato Hydrolyzate Waste for The Production of Transglutaminase Investigation of Tailor-Made Modifications for Enzyme Immobilisation Using the CLEA Method
	EMBL Partnership Institute	Advancing Gene Editing Tools (Laboratory of Dr. Patrick Pausch)	Protospacer Adjacent Motif Determination of a Novel Type I-F CRISPR-Cas System
BOKU University	Institute of Food Technology	Biocatalysis and Biosensing Laboratory	Production of <i>Neurospora Crassa</i> Lytic Polysaccharide Monooxygenases in <i>Pichia Pastoris</i> and Characterization by A Photometric Assay
Deep Scientific, UAB			Electrochemical Sensing for Assessing Nutrient Content in Carrots for the Advancement of Agricultural Biotechnologies