## **Biochemistry, Master Studies Programme, 2025**

Institution		Department/Laboratory	Themes
VU Life Sciences Center	Institute of Biochemistry	Department of Molecular Microbiology and Biotechnology	Research on the Mechanism of Antiproliferative Activity of Water-Soluble Carboxyindirubins  Directed Modification of the Specific Activity of dCTP Deaminase and Cytidine Deaminases  Investigation of the DUS3B and 62Fuc Fucosidase Mutants
		Proteomics Centre	Application of Cell Co-cultures for the Investigation of CAR Protein Mechanisms
	Institute of Biotechnology	Department of Protein – DNA Interactions	Adaptation of Cas12m Proteins for the Development of Next- generation Genome Editing Tools CRISPR-Cas-Based Fluorescent DNA Labelling and Imaging in Living Cells
		Department of Biological DNA Modification	In vitro Evolution of DNA Methyltransferase eM.SssI for Covalent DNA Labeling Technology Investigation of DNA Methyltransferase DNMT1-Specific Activity in Cancer Cells
		Department of Bioinformatics	Prediction of Protein-Ligand Binding Affinity
	EMBL Partnership Institute	Laboratory of Dr. Stephen Knox Jones	Directed Evolution Studies of a Methylation-Sensitive Cas9 for Human Genome Editing
National Cancer Institute	Research Departments	Laboratory of Molecular Oncology	The Link Between Hypoxia and PARP Expression in Colorectal Cancer Cells Following Ionizing Radiation Exposure
Thermo Fisher Scientific Baltics			Studies on Next-generation Protein Stabilizers