

LIST OF PHD RESEARCH TOPICS AND SUPERVISORS FOR THE FIELD OF **BIOLOGY** IN THE AREA  
OF NATURAL SCIENCES FOR 2025

No.	Department	Research topic	Supervisor	Consultant
1	Institute of Cardiology Preclinical research laboratory for medicinal products	The role of mitochondrial and sarcoplasmic reticulum contacts in pathological cardiac remodeling	Prof. Dr. E. Stankevičius	
2	Faculty of Medicine Department of Biochemistry	Study of the effects of inflammation and oxidative stress on fallopian tube cells	Prof. Dr. R. Baniienė	Prof. Dr. N. Bernabo (University of Teramo)
3	Faculty of Medicine Department of Histology and Embryology	Morphogenesis of ascending aortic dilatation pathology: role of non-coding RNAs in smooth muscle cell phenotype change	Prof. Habil. Dr. V. Lesauskaitė	Prof. Dr. I. Balnytė
4	Faculty of Medicine Institute of Oncology	Analysis of genetic factors in breast and cervical cancer and investigation of associations with tumor phenotypes, disease course, and radiation therapy-induced side effects	Prof. Dr. A. Inčiūra	Prof. Dr. R. Ugenskienė
5	Faculty of Medicine Institute for Digestive Research Surgical Gastroenterology Laboratory	Interaction between AHR and MYG1 and their significance in the pathogenesis of rectal cancer using different neoadjuvant treatment methods	Prof. Dr. Ž. Dambrauskas	Prof. Dr. R. Baniienė
6	Faculty of Medicine Institute for Digestive Research Surgical Gastroenterology Laboratory	The role of tryptophan metabolites in the AHR molecular pathway and pancreatic cancer pathogenesis	Assoc. Prof. Dr. P. Ignatavičius	Dr. A. Jasukatienė
7	Faculty of Medicine Institute for Digestive Research Clinical and Molecular Gastroenterology Laboratory	Metabolome-microbiome connection and the role of microbiota metabolites in intestinal inflammatory processes	Prof. Dr. J. Skiecevičienė	Assoc. Prof. Dr. D. Petrauskas Prof. Dr. K. Aden (Kiel University)
8	Neuroscience Institute Laboratory of Molecular Neurooncology	Molecular response of neural stem cells to extracellular vesicles generated by different brain pathologies	Dr. G. Steponaitis	Dr. P. Vaitkienė
9	Neuroscience Institute Laboratory of Toxicology	The role of metals/metalloids and molecular markers in the etiopathogenesis of Alzheimer's disease	Dr. L. Strumylaitė	Dr. P. Vaitkienė