

**LIST OF PHD RESEARCH TOPICS AND SUPERVISORS FOR THE FIELD OF  
BIOPHYSICS IN THE AREA OF NATURAL SCIENCES FOR YEAR 2024**

<b>No.</b>	<b>Department</b>	<b>Research topic</b>	<b>Supervisor</b>	<b>Consultant</b>
1	Institute of Cardiology Cell Culture Laboratory	Effects of phosphorylation of cardiac and nervous system connexins on the potency of various modulators of intercellular communication	Dr. I. Sarapiniene	
2	Institute of Cardiology Cell Culture Laboratory	Allele-specific silencing of oncogenes using self-replicating artificial microRNAs	Dr. S. Bordel-Velasco	
3	Institute of Cardiology Laboratory of Cell Communication	Regulation of connexin-formed gap junctions and channels in the cardiovascular system by blood pressure-modulating pharmaceutical agents	Dr. L. Kraujalienė	Dr. M. Šnipas
4	Faculty of Medicine Department of Physics, Mathematics and Biophysics	Methods of biophysical image analysis for clinical decisions based on biophysical models and artificial intelligence technologies	Assoc. Prof. R. Paukštaitienė	
5	Faculty of Medicine Institute of Oncology	Dosimetry and radiomics-based stereotactic ablative radiotherapy guided by magnetic resonance imaging for personalized treatment of throat cancer	Assoc. Prof. V. Rudžianskas	Assoc. Prof. E. Padervinskis