

Laboratory: Biomaterials and Tissue Engineering

Speaker: Lucie Bačáková

Topic: Cell interaction with biomaterials developed for tissue replacements and tissue engineering

Annotation:

We offer elaboration of Bc, MSc or PhD theses in vascular, bone and skin tissue engineering. Molecular mechanisms of the adhesion, growth and phenotypic maturation of cells will be studied on synthetic and natural polymers, metals, ceramics, carbon-based materials and composites, mostly obtained in collaboration with various material engineering institutions. We will use differentiated and stem cells, static and dynamic cell cultivation, immunocytochemistry, microscopy, flow cytometry, real-time PCR, and also 3D bioprinting.