

## Department of Biochemistry

### Topic list (2022 /2023):

Supervisor	Topic
Dr. Anikó Keller-Pintér PhD	<p>Signal transduction during cell proliferation and differentiation</p> <p>Investigation of cell migration in vitro, the role of extracellular vesicles</p> <p>Investigation of the molecular background of insulin resistance and glucose uptake of tissues</p> <p>Molecular basis of skeletal muscle regeneration</p> <p>Investigation of stem cells (satellite cells) of the skeletal muscle</p> <p>Therapeutic possibilities for local increase of atrophied skeletal muscle</p>
Dr habil. Csaba Csonka PhD  Dr habil. Tamás Csont PhD  Dr. Renáta Gáspár PhD  Dr. Márton Pipicz PhD  Dr. Márta Sárközy PhD  Dr. Gergő Szűcs PhD  Dr. Virág Demján PhD  Márton Szabó	<p>Cardiovascular effects of metabolic diseases (hyperlipidemia, diabetes, uremia) in experimental models.</p> <p>Epigenetic alterations in hypercholesterolemia</p> <p>Molecular mechanisms of cellular damage in stress conditions.</p> <p>Conditioning against myocardial injury.</p> <p>Cellular effects of proteoglycans.</p> <p>MicroRNAs in the cardiovascular system.</p> <p>The role of extracellular matrix components in cardioprotection.</p> <p>Echocardiographic characterization of cardiac function and morphology in uremic, hypercholesterolemic, or irradiated rats.</p> <p>The effects of compounds of natural origin on cardiomyocytes.</p> <p>The effects of natural compounds and/or pharmaceuticals on cardiomyocytes in models of prediabetes/diabetes.</p> <p>Cardiac side effects of oncotherapy</p>
Dr.habil. Ernő Zádor DSc	<p>The development of transgenic skeletal muscle</p>