

BENCE PÓSA



National Academy of Scientist Education, 6th year

University of Szeged,
Albert Szent-Györgyi Medical School, 5th year

YEAR OF BIRTH

2000

FORMER SZENT-GYÖRGYI PUPIL

yes

RESEARCH UNIT

University of Szeged

SZENT-GYÖRGYI MENTOR

Péter Bencsik

JUNIOR MENTOR

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SPECIALIZATION

pharmacology of the
cardiovascular system

SECONDARY SCHOOL

Radnóti Miklós
Experimental Grammar
School, Szeged

NAME OF TEACHER

Viktória Gál

LANGUAGES

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Cardiovascular diseases are the leading cause of death in industrialised societies. The function of the heart is diverse, but the most prominent is the pump function, which is circulating blood through the vascular system. To perform this pumping function, the heart also requires oxygenated blood, which it receives from its own private, 'coronary' circulation. Impairment of this coronary circulation results in ischaemia and death of the heart muscle, and thus impairment of pump function. MicroRNAs are RNA sequences that account for only 1% of the genome, but significantly affect the expression of other genes. In our study, we investigate the effects of myocardial ischemia, abnormal enlargement (hypertrophy) and other diseases affecting other organs (e.g. colitis) on the microRNA profile of the heart. Our aim is to identify pharmacological compounds that mimic (miRNA mimic) or inhibit (antagomiR) microRNAs, which influence the expression of microRNAs that mitigate myocardial damage and the genes/proteins they regulate, and thus have cardioprotective potential by influencing a number of processes.

AMBITIONS AND CAREER GOALS

After graduating from medical school, I would like to continue my work primarily as a clinician, but also do research. My goals are to obtain a PhD and to be actively involved in teaching and educational organisation. I believe that even as a student, we should not only treat our present patients, but also help and support our fellow doctors and students, so that we can move closer to a viable and humane professional future.

HONORS AND PRIZES

2021 SZTE SZAOK-FOK-GYTK-ETSK TDK conference, Pathology, Morphology, Image Diagnostics 3. section, „Variability of Diffusion parameters in Multiple Sclerosis”, III. place

PUBLICATIONS

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