

## BÁLINT KENDE SZEREDÁS



National Academy of Scientist Education, 4<sup>th</sup> year

Semmelweis University  
Faculty of Medicine, 4<sup>th</sup> year

#### YEAR OF BIRTH

2002

#### FORMER SZENT-GYÖRGYI PUPIL

no

#### RESEARCH UNIT

Semmelweis University

#### SZENT-GYÖRGYI MENTOR

Péter Igaz

#### JUNIOR MENTOR

Gábor Nyirő

#### SPECIALIZATION

(pancreatic)  
neuroendocrine tumors

#### SECONDARY SCHOOL

Eötvös József High School

#### NAME OF TEACHER

Berczelédi Réka,  
Solymoss Miklós

#### LANGUAGES

English/advanced  
Italian/intermediate  
German/basic

#### IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

A) 2 micro-RNA. We select two of the micro-RNAs used in the literature (hsa-mir-130b-3p and hsa-mir-96-5p), which have been shown to be differentially expressed in different stages of PAN-NETs. The expression of these two miRNAs is rising in a trend between the stages and they show significant expression change. The expression of the hsa-mir-96-5p is rising according to grade, while its target, the FoxO1 shows decreasing staining in the tumors. Expected scientific results: We can validate that the expression of these two miRNAs follows well the development of the tumor, and their expression is clearly equivalent to the grade rank. And does it have diagnostic value? B) We have the opportunity to examine and probably narrow (by type and grade) a panel of 8 miRNAs, which express in every GEP-NET grade based on previous studies. This has diagnostic value. We could examine the FoxO1 expression with qRT-PCR to confirm the microscopic image. Also, we could confirm the connection of miRNA-mRNA with a functional luciferase assay.

#### AMBITIONS AND CAREER GOALS

Ever since I was committed to biology and medicine, research has always seemed interesting to me. I loved to find out things and understand the background of processes. However, medicine has another part, which is at least as important, where we heal people. I would like to find a combination of these, where I can do both fairly and usefully. This program gives me the opportunity to get a taste of the world of research, even this early in my studies at the university. Due to this, til my graduation I will know, which area I would like to research, and I will have a knowledge base for my PhD work. In addition, probably I will see what proportion should I share my energy and time between medical practice and research.

#### HONORS AND PRIZES

2024 Semmelweis University Students' Scientific Conference, 1<sup>st</sup> place  
2023 Semmelweis University Students' Scientific Conference, 3<sup>rd</sup> place

#### PUBLICATIONS

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