# RÉKA ZSÓFIA SEBESTÉNY



National Academy of Scientist Education, 2<sup>nd</sup> year Semmelweis University Faculty of Medicine, 4<sup>th</sup> year

# YEAR OF BIRTH:

2001

FORMER SZENT-GYÖRGYI PUPIL:

no

SZENT-GYÖRGYI MENTOR:

Gábor Nyiri

**JUNIOR MENTOR:** 

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**SPECIALIZATION:** 

neuroscience

**SECONDARY SCHOOL:** 

Frankfurt International School

NAME OF TEACHER:

Christopher Neumann

**LANGUAGES:** 

English/advanced German/advanced

## IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

As a student researcher I am investigating the cortical pathways and their role in memory formation. In the brain, spatial and episodic memory cues are encoded by different small subpopulations of principal hippocampal neurons called engram cells. My goal is to gain a deeper understanding of the formation of these cell assemblies and thus understand the precise function of memory formation and recall itself. Our results are expected to contribute to a better understanding of memory processes and could help the development of treatment for memory problems.

### **AMBITIONS AND CAREER GOALS**

My primary goal in my research career is my own professional development. I would like to become as independent of a researcher as possible and be able to realise my own ideas to the fullest. I would like to further develop my skills in stereotaxic and optical fibre surgery as well as further my knowledge in the design of behavioural experiments. My long term goal would be to write and publish my own research results.

#### **HONORS AND PRIZES**

2022 - Semmelweis University Students' Scientific Conference, 1st place

#### **PUBLICATIONS**