

ZSÓFIA HAVASI



National Academy of Scientist Education, 2nd year

University of Pécs
Faculty of Medicine, 2nd year

YEAR OF BIRTH:

1998

FORMER SZENT-GYÖRGYI PUPIL:

no

SZENT-GYÖRGYI MENTOR:

Balázs Gaszner

JUNIOR MENTOR:

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SPECIALIZATION:

Neuroscience

SECONDARY SCHOOL:

Bibó István High School

NAME OF TEACHER:

Károlyné Horváth

LANGUAGES:

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

The importance of individual susceptibility in the pathogenesis of mood disorders and Parkinson's disease (PD) is increasingly acknowledged. Our group has demonstrated the role of the centrally projecting Edinger-Westphal nucleus (EWcp) in non-motor mood symptoms of PD. In this project, we may provide evidence for the individually variable sensitivity of EWcp and its importance in mood regulation, particularly in prenatal stress. We also aim to investigate the origin of peptidergic cells, that is an important gap in the literature. The disruption of development in response to intrauterine stress may provide further evidence for the background of individual sensitivity. Non-motor symptoms of PD impair patients' quality of life to a greater extent than the motor disability. Our work may shed light on the central underpinnings of complex disturbances in mood and energy balance, which may help to improve patients' quality of life. Given the large individual differences, personalized treatments may be the way forward in this field too. Our results may have therapeutic relevance for non-motor symptoms, but may also help in early diagnosis, which is important for secondary prevention.

AMBITIONS AND CAREER GOALS

In 2021 to express my scientific interests, I joined to the Undergraduate Research Society (URS), and I was actively participating in a running research project at the Department of Anatomy in the Research Group for Mood Disorders under the supervision of Dr. Balázs Gaszner. Within the program of National Academy of Scientist Education I would like to gain extensive knowledge in research techniques such as in vivo tests, behavioural tests, histology, basic histological stainings, microscopy, confocal microscopy, RNAscope in situ hybridization, immunostaining. I will have chance to get experiences in identifying and understanding relevant and reliable scientific literature in English, and practice the scientific way of thinking. Later on I would like to continue with my own scientific topic and research, and apply for a PhD program.

HONORS AND PRIZES

2022 URS conference 3rd place

PUBLICATIONS

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