ANDOR VIZI



National Academy of Scientist Education, 1st year Semmelweis University Faculty of Medicine, 2nd year

YEAR OF BIRTH

2002

FORMER SZENT-GYÖRGYI PUPIL

no

SZENT-GYÖRGYI MENTOR

Balázs Hangya

JUNIOR MENTOR

-

SPECIALIZATION

neurophysiology

SECONDARY SCHOOL

Székely Mikó College

NAME OF TEACHER

Kinga Csia

LANGUAGES

English/C1 Romanian/B2

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

The role of the brain in learning is addressed by a wide range of disciplines, including neurobiology, psychology, neurology, and others. In the past, the learning process was considered to be a linear progression, often linked to different life stages. Today, learning is seen as a much more dynamic system. Over the past decades, a number of brain regions have been associated with different aspects and stages of learning (encoding, consolidation, retrieval), demonstrating that many brain areas are involved in this complex process. In our research, we investigate the role of the lateral septum (LS) neurons in the healthy and pathological brain. To do this, we measure neuronal activity in animal experiments using fibre photometry, often in combination with optogenetic manipulations. Our main goal is to understand the role of the neurons in the LS and their associated areas in learning, the underlying neural networks and molecular background, and how their damage can lead to learning disabilities.

AMBITIONS AND CAREER GOALS

From the very first moment, I was fascinated by nature, by the complexity of the living world (with the human body in the foreground), by the inexhaustibility of its knowledge. The longer we study and research living, natural systems, the more complex they become in contrast to man-made systems, which become simpler and more easily understandable. I also realised quite early on that even the most profound learning of science is only partly an end in itself. One of my main objectives is to translate my knowledge into practical use, so that as many people as possible can benefit from the opportunities offered by modern science.

HONORS AND PRIZES

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PUBLICATIONS

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