

LAJOS KARAKAI



National Academy of Scientist Education, 4th year

University of Pécs,
Medical School, 4th year

YEAR OF BIRTH

2000

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

University of Pécs

SZENT-GYÖRGYI MENTOR

Éva Szőke

JUNIOR MENTOR

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SPECIALIZATION

neuropharmacology

SECONDARY SCHOOL

Budapest-Fasori Lutheran
High School

NAME OF TEACHER

János Bátovszky

LANGUAGES

English/intermediate

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Investigation of modification of lipid rafts for analgesic and antitumor effects. We investigate the functional relationship between Transient Receptor Potential (TRP) ion channels and lipid rafts in different mouse models of acute pain and in a complex mouse osteosarcoma tumor model. Lipid rafts are specific microdomain of the cell membrane that can be disrupted through their cholesterol or sphingolipid content, thereby affecting the function of different receptors. In the acute pain model we investigate the effect of lipid raft disruption on the TRP Melastatin 3 (TRPM3) and TRP Melastatin 8 (TRPM8) ion channel, and in the chronic tumor pain model on the TRP Vanilloid 1 (TRPV1) and TRP Ankyrin 1 (TRPA1) ion channel activity, respectively.

AMBITIONS AND CAREER GOALS

Self-development in many areas of life is a close goal of mine. Of these, with a particular focus on science, where I can delve deeper into the background and learn new and exciting methods. My long-term goals are still vague, but I can see that whatever I do, I will dive into it with great enthusiasm.

HONORS AND PRIZES

2023 University of Pécs, Student's Research Conference, 2nd place

PUBLICATIONS

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