

SIMON TUSNÁDY



National Academy of Scientist Education, 2nd year

Semmelweis University
Faculty of Medicine, 3rd year

YEAR OF BIRTH:

2001

FORMER SZENT-GYÖRGYI PUPIL:

no

SZENT-GYÖRGYI MENTOR:

Attila Mócsai

JUNIOR MENTOR:

Krisztina Némethné Futosi

SPECIALIZATION:

immunology

SECONDARY SCHOOL:

Bornemisza Péter High School, Primary School, Elementary Art School, Kindergarten and Sports School

NAME OF TEACHER:

Dr. Zsolt Erős-Honti,
Dr. Katalin Csókay

LANGUAGES:

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Gout is a common arthritis characterized by recurrent severe inflammatory attacks of the joints, caused by monosodium urate (MSU) crystals deposition. Myeloid cells (neutrophils and macrophages) play an important role in the development of the disease, however, the molecular pathomechanism is not fully understood. In recent years, our research group has investigated the role of tyrosine kinase signaling pathways in autoantibody-induced inflammatory processes and has identified a number of essential signaling molecules. However, the role of tyrosine kinase pathways and PLC γ 2 in the pathogenesis of gout, which is thought to be mediated by a different mechanism from the previously studied diseases, is unknown. Our aim is to investigate the role of PLC γ 2 in MSU crystal-induced neutrophil activation and in an experimental model of gout. Better understanding the pathomechanism of gouty arthritis may contribute to the identification of novel therapeutic targets.

AMBITIONS AND CAREER GOALS

Both in my studies and research project, my main purpose is to gain as much knowledge as possible, to learn many practical techniques, and to obtain a complex and multidisciplinary perspective of science. In my opinion, these skills and experiences will have a great impact on my later scientific career.

HONORS AND PRIZES

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PUBLICATIONS

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