

KOTHALAWALA ROSEMARY CHANDRAKANTHI



National Academy of Scientist Education, 3rd year

University of Debrecen
Faculty of Medicine, 4th year

YEAR OF BIRTH

2002

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

University of Debrecen

SZENT-GYÖRGYI MENTOR

Tamás Kovács

JUNIOR MENTOR

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SPECIALIZATION

Investigation of the role of membrane organization and lipids in the functional modulation of transmembrane proteins.

SECONDARY SCHOOL

University of Debrecen,
Kossuth Lajos Lajos
Practical High School
and Primary School

NAME OF TEACHER

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LANGUAGES

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Previously, cellular membranes were considered a simple barrier, however today we know that they actively regulate and modulate various proteins and, through this, many cellular pathways. Accordingly, changes in the composition and organization of the membranes can also modify these processes. This may be particularly important in the pathogenesis of diseases that are associated with changes in the lipid composition of membranes, such as metabolic diseases (hypercholesterolemia); storage diseases (Gaucher's disease, Niemann-Pick C disease); neurodegenerative diseases (Alzheimer's, Parkinson's); tumors. Although there are already indications of this, the role played by lipid and membrane abnormalities in these conditions is still largely unexplored. By examining the membrane organization, our research group tries to learn more about the pathomechanism of these diseases, as modification of lipid levels and membrane organization can be an alternative therapeutic method or complementary therapy.

AMBITIONS AND CAREER GOALS

As a medical student my primary goal is to get a comprehensive picture of the various biomedical divisions, which I can apply in my research and later in my clinical work. During my studies I would like to put as much work in my research topic as possible, from which I can also obtain a PhD degree after receiving my diploma. I hope that the knowledge and experience acquired in the laboratory will also help me get a head start in my clinical career.

HONORS AND PRIZES

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PUBLICATIONS

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