

CSONGOR ATTILA VÁRÓCZY



National Academy of Scientist Education, 3rd year

University of Debrecen
Faculty of Medicine, 4th year

YEAR OF BIRTH

2003

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

University of Debrecen

SZENT-GYÖRGYI MENTOR

Attila Bácsi

JUNIOR MENTOR

Endre Kókai

SPECIALIZATION

The role of PARP enzymes in the interactions of malignant tumor cells and macrophages

SECONDARY SCHOOL

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

NAME OF TEACHER

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LANGUAGES

English/proficiency
German/proficiency

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

In the modern era of medicine, cancer research is one of the most versatile and most challenging fields that provides a vast array of opportunities for innovative experiments in molecular medicine. Furthermore, recent discoveries in connection with malignant tumors have shed light on the interaction between the immune system and tumor cells. Our research project is based on the fact, that malignant cancer cells are able to polarize macrophages that play an essential role in immune response, therefore, these macrophages will support tumor progression and metastasis formation instead of triggering anti-tumor responses. In our experiments, we simulate the tumor microenvironment using a three-dimensional spheroid model and we take cutting edge molecular biological technologies into advantage to understand the mechanisms behind macrophage polarization and to examine the role of PARP enzymes in the process.

AMBITIONS AND CAREER GOALS

As a researcher, I primarily focus on discovering molecular medicine and expanding my knowledge in connection with scientific lifestyle. From my point of view, the research project with the National Scientists Academy will help me acquire valuable knowledge about molecular biology and various essential communication skills. I really hope that my early research experience will be an ideal tool as a medical doctor to start research projects from multiple perspectives and to combine the creativity of preclinical research with the practicality of clinical research.

HONORS AND PRIZES

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PUBLICATIONS

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