

# ISTVÁN RÉVÉSZ



National Academy of Scientist Education, 1<sup>st</sup> year

University of Debrecen  
Faculty of Medicine, 2<sup>nd</sup> year

## YEAR OF BIRTH:

2003

## FORMER SZENT-GYÖRGYI PUPIL:

no

## SZENT-GYÖRGYI MENTOR:

Péter Bay

## JUNIOR MENTOR:

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## SPECIALIZATION:

Genetically modified macrophages for tumor therapy

## SECONDARY SCHOOL:

Kisvárdai Bessenyei György High School and College

## NAME OF TEACHER:

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## LANGUAGES:

English/proficiency

## IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

One in six deaths worldwide is still caused by malignancy. Today's medicine is pinning its hopes on immunotherapy, alongside targeted molecular therapy, to fight cancer. Research in our laboratory is focused on developing genetically modified macrophage-based immunotherapies against solid tumors (mainly breast cancer). Adoptive T and NK cell-based attempts have shown less positive results against solid tumors due to the fact that the microenvironment of solid tumors protects the tumor from immune destruction. We intend to combine the potential of currently investigated therapeutic approaches for tumor-associated macrophages (TAM), such as TAM-reduction, adoptive macrophage therapy, and chimeric antigen receptor-expressing macrophage (CAR-M) generation. In doing so, we want to reduce the suppressive effects of the tumor microenvironment and hope to improve the cooperation of the innate and adaptive anti-tumor immune response in tumor killing. The results of our in vitro and animal experiments will hopefully contribute to developing immunotherapeutic procedures for clinical use.

## AMBITIONS AND CAREER GOALS

Alongside my medical work, I also aspire to engage in research, which offers a much more intricate perspective and involves a multi-faceted battle for the benefit of patients against diseases. These research endeavors not only help deepen my professional knowledge but also open my eyes to the possibilities of innovation and problem-solving in the field of healthcare. My passion and commitment to healthcare inspire me to further deepen my knowledge and contribute to the advancement of medical science.

## HONORS AND PRIZES

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## PUBLICATIONS

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