

ÁKOS MÁTÉ BEDE



National Academy of Scientist Education, 4th 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

László Virág

JUNIOR MENTOR

Katalin Kovács

SPECIALIZATION

Immunopharmacology

SECONDARY SCHOOL

Ady Endre Secondary
School, Oradea

NAME OF TEACHER

Annamária Hanesz

LANGUAGES

English/advanced
Romanian/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Antibody-Dependent Cell-Mediated Cytotoxicity (ADCC) involves bridging target cells (e.g. virus-infected or cancer cells) and effector cells [e.g. natural killer (NK) cells or macrophages] with an antibody. The latter binds specifically to a cell surface antigen on the target cell while the constant region (Fc fragment) binds to the Fc receptor on the effector cells. ADCC is one of the key mechanisms by which cell-based cancer therapies fight the tumor. However, these mechanisms easily burn out and boosting ADCC activity would provide therapeutic benefit in oncology. We plan to set up assays for the quantification of cancer cell killing by NK cells and to perform high-content screening to identify ADCC enhancing drug candidates from drug libraries.

AMBITIONS AND CAREER GOALS

Throughout my university education I strive to acquire deep theoretical and practical medical knowledge. My goal after graduating medical school is getting a Phd degree. I wish to become a scientist-physician, working to improve people's lives in a clinical setting as well as by conducting biomedical research.

HONORS AND PRIZES

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PUBLICATIONS

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