

DÓRA ALEXANDRA GYÉMÁNT



National Academy of Scientist Education, 3rd year

University of Szeged
Szent-Györgyi Albert Medical School, 3rd year

YEAR OF BIRTH

2003

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

HUN-REN Biological
Research Centre

SZENT-GYÖRGYI MENTOR

Máté Manczinger

JUNIOR MENTOR

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SPECIALIZATION

immunology,
bioinformatics

SECONDARY SCHOOL

Radnóti Miklós
Experimental High School

NAME OF TEACHER

Viktória Gál,
Sándor Bán

LANGUAGES

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

One of the greatest healthcare challenges of the present time is the treatment of cancer. Our bodies contain immune cells that could potentially destroy tumors; however, certain inhibitory molecules prevent their function. During the oncology revolutionizing immunotherapy using checkpoint inhibitors, these inhibitory molecules are blocked, allowing T cells to become active and trigger an anti-tumor immune response. Indeed, while the effectiveness of immunotherapy is significantly higher than chemotherapy in many tumor types, several clinical studies have also shown that half of the patients do not respond effectively to the treatment. Since the treatment comes with high costs and, in some cases, severe side effects, there is a need to explore biomarkers that indicate the success of immunotherapy. Our goal is to utilize various databases and machine learning methods to identify factors (e.g., age, tumor stage, gender, etc.) that characterize the extent of immune selection, which can indirectly predict the success of immunotherapy.

AMBITIONS AND CAREER GOALS

During my university years, my main goal is to acquire as much knowledge and experience as possible in both research work and clinical practice. I believe that a good physician or researcher can truly excel in their own field by closely collaborating with professionals from the other discipline. During my research work, I aim to thoroughly explore a specialized field, learn efficient processing of academic literature, and also acquire relevant practical knowledge in the field of bioinformatics which will be inevitable regarding the medical and scientific field in the future.

HONORS AND PRIZES

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PUBLICATIONS

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