

ZORKA SZOLLÁR



National Academy of Scientist Education, 1st year

University of Szeged
Szent-Györgyi Albert Medical School, 1st year

YEAR OF BIRTH:

2003

FORMER SZENT-GYÖRGYI PUPIL:

no

SZENT-GYÖRGYI MENTOR:

Tibor Pankotai

JUNIOR MENTOR:

-

SPECIALIZATION:

molecular biology,
bioinformatics

SECONDARY SCHOOL:

Dobó Katalin Secondary
School of Esztergom

NAME OF TEACHER:

Zoltán Lampert,
András Smiger,
Zsuzsanna Szarvas

LANGUAGES:

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

The number of diagnosed cancer cases is increasing year by year. The emerging advanced techniques in molecular pathology provide opportunities for early diagnosis of tumors and targeted treatment of identified tumors, with the combination of these approaches ensuring the highest chances of survival. From tissue samples obtained during routine clinical procedures, as well as from non-invasive samples obtained through serum diagnostics, DNA and RNA can be isolated, which are suitable for next-generation sequencing studies. By analyzing their alterations, we can diagnose the nature of the tumor and make personalized therapeutic recommendations, determining the most effective anti-cancer drug for the patient.

The technological basis of liquid biopsy is that the DNA of deceased tumor cells enters the bloodstream. Therefore, through a simple blood draw, tumor DNA and the alterations within it can be detected from the obtained plasma. This technology allows us to detect early-stage tumors and is more cost-effective than procedures such as CT scans or MRIs. The aim of our research is to gain a better understanding of certain types of tumors through next-generation sequencing studies, thus facilitating their diagnosis and treatment.

AMBITIONS AND CAREER GOALS

In the Szent-Györgyi program, I would like to develop and acquire skills that can be useful in my future research work. I want to work towards helping people suffering from cancer and contribute to the advancement of diagnostic technologies and personalized therapies.

HONORS AND PRIZES

-

PUBLICATIONS

-