ÁKOS HARANGOZÓ



National Academy of Scientist Education, 5th year University of Szeged, Albert Szent-Györgyi Medical School, 5th year

YEAR OF BIRTH:

2000

FORMER SZENT-GYÖRGYI PUPIL:

yes

SZENT-GYÖRGYI MENTOR:

Zsolt Endre Boldogkői

JUNIOR MENTOR:

Dóra Tombácz

SPECIALIZATION:

genomics and gene technology

SECONDARY SCHOOL:

Radnóti Miklós Experimental Grammar School, Szeged

NAME OF TEACHER:

Sándor Bán

LANGUAGES:

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

With modern sequencing technologies we are able to make structural and functional examination of living organisms and viruses, thus we can understand better the role of the present genes and non-coding sequences and their effect on each other. The main focus of our research group includes the genomic analysis of various human and non-human pathogenic viruses by using state of the art genome- and transcriptome sequencing methods (long- and short-read sequencing approaches). The gained genomic data is processed with the help of bioinformatical programs. Also we generate genetically modified viruses by using the CrispR-cas9/dCas9 - which is a state of the art genome editing technology capable of making very precise changes - methods for the evaluation of the effect of the gene modification on the global transcriptome.

Our major goal is to describe the static and dynamic transcriptome profiles of these viruses, and to apply them as model organisms for the study of the Transcriptional Interference Network (TIN) hypothesis proposed by our group.

AMBITIONS AND CAREER GOALS

As a medical doctor I want perform medical practice and research side by side, for which this program gives the best bases. My goal with my research is to gain theoretical knowledge and practical experience which will help me in my career which hopefully will lead me to be able to help others. During my career besides finishing medical university, I also want to reach academic degree in which the Szent-Györgyi program provides help.

HONORS AND PRIZES

2016 - EUSO Tartu, silver medal 2017 - EUSO Copenhagen, golden medal 2017/2018 - Biology OKTV II. category, 30th place 2016/2017 - Biology OKTV II. category, 18th place

PUBLICATIONS