BÁLINT ENDRE FEKETE

National Academy of Scientist Education, 4th year

University of Szeged,
Albert Szent-Györgyi Medical School, 4th year

YEAR OF BIRTH

2003

FORMER SZENT-GYÖRGYI PUPIL

yes

RESEARCH UNIT

HUN-REN Biological Research Centre

SZENT-GYÖRGYI MENTOR

Bálint Kintses

JUNIOR MENTOR

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SPECIALIZATION

synthetic biology, genome engineering

SECONDARY SCHOOL

Bolyai János High School, Kecskemét

NAME OF TEACHER

István Németh, Éva Kothenczné Kemény, József Laczkó

LANGUAGES

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

The emergence of antibiotic resistant pathogens is a growing threat in the global healthcare. The conventional treatments based on antibiotics are losing their efficacy. An alternative solution could be the use of bacteriophages (also phages). The host range (which bacteria can a phage infect) is determined by the proteins located on the tail end of the phage. The goal of the research is designing phages with specific tail proteins by the means of synthetic biology, so that the phage will only recognize the disease causing bacteria exclusively. To prevent the prevalence of resistance against the bacteriophage we can change these proteins while keeping the desirable properties.

AMBITIONS AND CAREER GOALS

During the Szent-Györgyi Program I got my chance to start my scientific work during my university studies. I find this instance of encounter of synthetic and microbiology rather fascinating. My goal is to be able to continue my scientific work after finishing my studies, even alongside of practising medicine.

HONORS AND PRIZES

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PUBLICATIONS

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