DORINA KOVÁCS

National Academy of Scientist Education, 5th year

University of Szeged,
Faculty of Dentistry, 5th year

YEAR OF BIRTH

2002

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

HUN-REN Biological Research Centre

SZENT-GYÖRGYI MENTOR

Bálint Kintses

JUNIOR MENTOR

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SPECIALIZATION

antibiotic resistance

SECONDARY SCHOOL

Grammar School Senta

NAME OF TEACHER

Mónika Rózsa Sípos

LANGUAGES

German/intermediate

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Testing resistance evolution with predictive screens is an imperative step of antibiotic development. These screens help to choose the lead molecules for further drug development which are less prone to resistance evolution, and thus may remain effective for years. In the laboratory of my mentor, Bálint Kintses, I'm able to join the development of a platform that accurately predicts which resistance genes will be acquired by disease-causing bacteria via horizontal gene transfer to eradicate the efficacy of a future antibiotic. We would achieve this strategic aim by testing resistance evolution in an experimental system resembling the real-life clinical environment, unlike the current technologies that use oversimplified experimental conditions. The goal is to provide a unique toolset that supports the development of promising antibiotic candidates which may remain effective for years once on the market.

AMBITIONS AND CAREER GOALS

I want to develop my theoretical and practical knowledge by taking advantage of the opportunities offered by the Szent-Györgyi program, and by learning the most possible from my Mentor. My goal is to arrange this acquired competence in the scientific research, thereby being able to cooperate in solving major scientific questions.

HONORS AND PRIZES

2020   Student of the generation, Grammar School Senta
2023   Annual Scientific Students' Associations Conference (TDK), University of Szeged, Faculty of Dentistry, 1st prize
2023/24   ÚNKP

PUBLICATIONS

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