# DOROTTYA DELI

National Academy of Scientist Education, 5th year

Budapest University of Technology and Economics,
Master of Science - Biomedical Engineering, 2nd year

## YEAR OF BIRTH

1996

## FORMER SZENT-GYÖRGYI PUPIL

no

## SZENT-GYÖRGYI MENTOR

Attila Mócsai

## JUNIOR MENTOR

Krisztina Futosi

## SPECIALIZATION

tyrosine-kinase signaling pathways

## SECONDARY SCHOOL

Apostole Paul Catholic Kindergarten, Primary School and High School

## NAME OF TEACHER

Gabriella dr. Sarkadiné Keszi

## LANGUAGES

English / B2

## IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Tyrosine kinases are crucial signaling components in nearly all biological processes including various aspects of signal transduction, and are major therapeutic targets in immune-mediated disorders. To facilitate the development of novel tyrosine kinase inhibitors acting on leukocytes, we have developed a rapid in vivo assay for the quantitative analysis of the effect of oral tyrosine kinase inhibitors on basal tyrosine phosphorylation in circulating mouse leukocytes. Our assay allows highly efficient analysis of the in vivo effect of orally administered tyrosine kinase inhibitors acting on leukocytes, and may be used as a suitable approach for the in vivo analysis of tyrosine kinase drug candidates.

## AMBITIONS AND CAREER GOALS

We have previously shown that tyrosine kinase signaling in neutrophils play a major role in various inflammatory disease models. To facilitate the development of novel tyrosine kinase inhibitors acting on leukocytes, monocytes, eosinophils and basophil cells, we want to develope a rapid in vivo assay for the quantitative analysis of the effect of oral tyrosine kinase inhibitors on basal tyrosine phosphorylation in circulating mouse neutrophils.

## HONORS AND PRIZES

2023 Student's Scientific Association Conference – SE Pharmacology Section I. place
2023 36th National Student's Scientific Association Conference – Pharmacology Section, Award
2023 52nd Hungarian Society For Immunology Conferece – Posterpresentation prize, II. place
2024 SE Students' Scientific Conference, 3rd place

## PUBLICATIONS

Futosi, K., Bajza, B., **Deli, D.**, Erdélyi, A., Tusnády, S., Mócsai, A. (2023) Analysis of intracellular tyrosine phosphorylation in circulating neutrophils as a rapid assay for the in vivo effect of oral tyrosine kinase inhibitors. **Front Pharmacol 14:** 1056154.