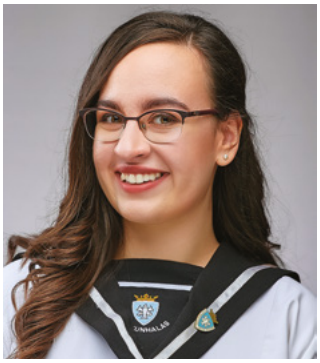
ZSÓFIA ILONA PISZMAN



National Academy of Scientist Education, 4th year

University of Szeged
Faculty of Pharmacy, 5th year

YEAR OF BIRTH

2003

FORMER SZENT-GYÖRGYI PUPIL

no

RESEARCH UNIT

University of Szeged

SZENT-GYÖRGYI MENTOR

Rita Ambrus

JUNIOR MENTOR

Petra Party

SPECIALIZATION

pharmaceutical technology

SECONDARY SCHOOL

Szilady Aron Secondary School

NAME OF TEACHER

Anita Kis Gavlikné,
Andrea Paska Nagy-Kálóziné

LANGUAGES

English/advanced

IMPORTANCE, AIMS AND POSSIBLE OUTCOME OF RESEARCH

Today, one of the leading causes of death worldwide are chronic lung diseases, including COPD (chronic obstructive pulmonary disease) and pneumonia, both taking millions of lives every year. Other lung diseases, such as cystic fibrosis and asthma can significantly worsen the quality of life of people suffering from the disease and shorten their life expectancy. It is key to develop effective and modern therapies for the treatment of the diseases. Nanotechnology and nanomedicines are a promising sector of innovative drug development. The goal of our research is to find new and effective therapies for the treatment of lung diseases, using nano- and micro particles and targeting pulmonal delivery. The advantages of inhalations compared to traditional oral administration are for example targeted drug delivery and lowered drug doses, therefore moderate systemic side effects.

AMBITIONS AND CAREER GOALS

As a pharmacy student, it is important to me to get to know the world of scientific research during my university studies and to acquire competences and experiences that can be beneficial later in my carrier as researcher. My goal is to contribute to the development of new and innovative formulations with my future work and research as a pharmacist, that can later be used as medicine to effectively improve patients' conditions, thus ensuring a better life for them.

HONORS AND PRIZES

2025 Scientific Students' Associations Conference, University of Szeged, Faculty of Pharmacy, 1st prize
2025 National Scientific Students' Associations Conference, 1st prize
2025 University Research Scholarship Program
2024 New National Excellence Programme scholarship
2024 Scientific Students' Associations Conference, University of Szeged, Faculty of Pharmacy, 1st prize
2024 University Research Scholarship Program
2023 Scientific Students' Associations Conference, University of Szeged, Faculty of Pharmacy, 1st prize

PUBLICATIONS

Party, P., **Piszman, Z. I.**, Farkas, Á., Ambrus, R. (2024) Comprehensive In Vitro and In Silico Aerodynamic Analysis of High-Dose Ibuprofen- and Mannitol-Containing Dry Powder Inhalers for the Treatment of Cystic Fibrosis. **Pharmaceutics 16:** 1465.

Party, P., **Piszman, Z. I.**, Ambrus, R. (2025). Development of Mannitol-Based Microparticles for Dry Powder Inhalers: Enhancing Pulmonary Delivery of NSAIDs. **Pharmaceuticals 18:** 923.