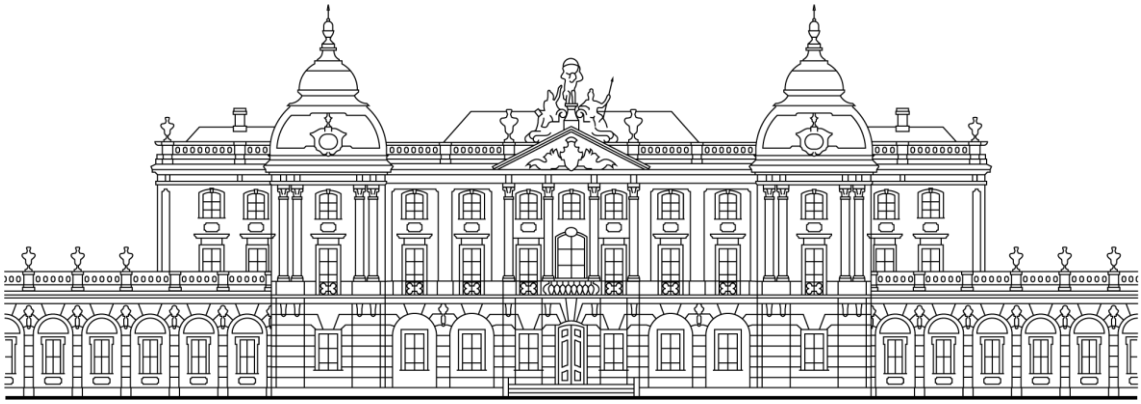
Medical University of Bialystok



In the heart of Bialystok, within the modern halls, laboratories, and creative spaces of the Medical University of Bialystok (an Associated Partner od EUNICE European University), we are opening the doors to a project that brings together students, doctoral candidates, and academic staff from universities across Europe. Here, in an atmosphere of openness and collaboration, we create a space for developing the skills that shape the future of science, innovation, and education.

Our specialized courses are designed for those who want to broaden their horizons, strengthen practical competencies, and build international connections. Each session is an opportunity to learn from our experts, work with state-of-the-art infrastructure, and exchange experiences with participants representing diverse fields and academic cultures.

We invite you to join a project that not only enhances competencies but also inspires bold thinking and the creation of new pathways for growth. Białystok is ready to become your place of discovery.

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Metabolomics (11–13 August 2026)

This training course covers both the theoretical and practical aspects of metabolomic analysis of clinical samples using gas chromatography-mass spectrometry (GC–MS).

- The programme is designed to provide participants with an overview of the complete analytical workflow, from biological sample preparation through to data processing and result interpretation.
- Participants will become familiar with the requirements for sample preparation for GC–MS analysis, analytical strategies used in metabolomics studies, and derivatisation procedures that enable metabolite detection and quantification.
- The practical component of the course will include preparation of clinical samples for GC–MS measurements, hands-on laboratory work, and an introduction to the operation and application of GC–MS instrumentation.
- The course will also address instrumental data evaluation, including approaches to quantitative analysis, signal deconvolution, and metabolite identification and annotation using both commercially available and in-house spectral libraries. In addition, participants will be introduced to the preparation of metabolomics datasets for statistical analysis, with particular emphasis on integrating and merging datasets generated at different stages of the analytical.