



Eunice webinar, 3 Dec 2024

Precision Medicine and Genomics

Capacity Building Activities of the
Medical University of Białystok



The background features a stylized world map in a light blue, hand-drawn style. Above the map are several overlapping, thin black circles. The left side of the image has a light green abstract shape, and the bottom left has a blue abstract shape with a small dark blue circle. The right side has a large blue abstract shape and a black leaf-like graphic at the bottom right.

Erasmus+

Enhancing healthcare education and collaboration through innovative, international projects focused on precision medicine and bridging competency gaps.



Erasmus+ Activities



What?

a network
of academics from
partner institutions,
and SMEs from
Europe



Why?

exchange of
expertise and best
practices in applied
bioinformatics,
genetics, and ethics



How?

modular courses
and e-learning
platform, Teacher's
Guides



Who?

healthcare
professionals,
researchers,
students of
medicine, law, and
business



BECOMING

Hasselt University, University of Pecs, 2018 to 2022.

The project prepares healthcare professionals to meet modern challenges and deliver patient-centered, efficient care.

PRECISEMED

University College Cork, iBioscience Ltd, 2024, lead by UMB.

The project bridges research and practice by equipping future healthcare professionals with the skills needed for personalized medicine, fostering interdisciplinary training, and improving patient outcomes.



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Erasmus+ Programme
of the European Union



Precision Medicine & Genomics



We offer hands-on training in advanced genomics, clinical bioinformatics, and the ethical dimensions of precision medicine, designed for both current practitioners and future leaders in healthcare. These initiatives prepare participants to translate genomic insights into real-world clinical applications, improving patient care and fostering international collaboration.



We are at the forefront of precision medicine and genomics, integrating bioinformatics, genomics, and multi-omics approaches to deliver personalized treatments. We also emphasize ethical considerations and legal frameworks in genomic research, ensuring responsible innovation



Research & Training Offer

01

Precision medicine

The roles of genetics, environment, and lifestyle factors included!

02

Applied

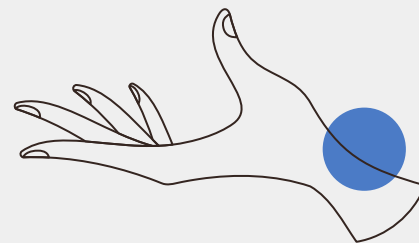
bioinformatics

Application of NGS in genomics

03

Ethics in genetics

Respecting patient autonomy in decision-making



04

Infrastructure

A sturdy foundation for powerful genomic analysis



05

Data analysis

Essential Techniques for NGS Data Analysis



06

Decoding Cancer Genomics

Tools, Techniques, and Resources for Advanced Research

07

Exploring the Transcriptome

Advanced Tools and Techniques for Unlocking Cancer Research Insights



08

Genomics Meets Machine Learning

Applying Machine Learning to Clinical Bioinformatics



09

Cancer's Genetic Secrets

Oncogenicity in Theory and Practice





10

Unlocking Genetic Risks

Integrating Risk Assessment
and Counselling
in Clinical Practice



11

Making Sense of the Evidence

Mastering Systematic
Reviews and Meta-
Analysis in Clinical
Trials



Ongoing & Future activities

BEACON network



- 22 countries
- COST networking activities
- One Health education

EU4Health

a new opportunity in the EU4Health Calls to explore AI applications in One Health education, building on our BEACON goals



Step by step

01	One health, Literature Review
02	ReEU4H Action Grants 2024 (EU4H-2024-PJ-03-1)
03	EU4H Action Grants 2024 (EU4H-2024-PJ-03-6)
04	EU4H Action Grants 2024 (EU4H-2024-PJ-03-7)



BEACON COST Action

- Redefines One Health education by integrating advanced technologies like AI, augmented reality (AR), and virtual reality (VR) into middle school curricula.
- Focused on global health challenges, BEACON equips students with critical skills.
- By ensuring inclusivity and bridging the digital divide, this initiative empowers young learners to tackle interconnected health, environmental, and social issues, shaping them into proactive global citizens.



Our team



Laboratory of Genomics and Epigenetic Analyses

Clinical Research Centre of MUB





Thanks!

Do you have any questions?

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