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European Biotechnology Congress 2025 Successfully Held in Tirana

For the first time, the European Biotechnology Congress was held in Tirana, Albania, from 11 to 13 September 2025. The event gathered more than 200 researchers, lecturers, industry representatives, and students from Europe, North America, Asia, the Middle East, Australia, China and other regions. It was organized by the European Biotechnology Thematic Network Association (EBTNA), with the strong support of the Academy of Sciences of Albania and the University of Tirana, and with COST Action RECROP and MAGI Balkans Srl also contributing to the scientific programme and workshops.

A key moment of the opening ceremony was the signing of an institutional cooperation agreement between the Academy of Sciences of Albania and EBTNA by Acad. Skënder Gjinushi, President of the Academy, and Prof. Dr. Oscar Vicente Mana, Vice-President of EBTNA. This agreement officially integrates Albanian scientific institutions into the European biotechnology network. Acad. Gjinushi underlined the expanding role of biotechnology in the Academy's research centers

and Albania's commitment to regional and international collaboration. Prof. Vicente shared the 15-year development of the European Biotechnology Congress and expressed gratitude for the excellent local organization.

Further greetings were delivered by Prof. Dr. Xheladin Draçini, Rector of the University of Medicine, and Prof. Dr. Eglantina Kalluçi, Dean of the Faculty of Natural Sciences at the University of Tirana. International speakers such as Prof. Dr. Matteo Bertelli (MAGI Balkans) and Prof. Dr. Robert Marks (Ben-Gurion University, Israel) emphasized the importance of biotechnology in health, genetics, pharmaceuticals, agriculture, and nanotechnology. They acknowledged Albania for successfully hosting an event of such scientific relevance.

Prof. Dr. Ariola Bacu, the Chair for Local Organizing Committee and the National Coordinator of EBTNA in Albania, explained the content of the scientific programme featuring 14 thematic sessions covering a wide range of biotechnological fields, including animal, medical and environmental biotechnology, genomics, bioinformatics, nanobiotechnology, bioprocess and metabolic engineering, tissue engineering and bioethics. The congress also included several satellite events and specialized workshops, such as Workshop on Biosensors-based Cytotoxicity Testing (supported by the Academy of Sciences of Albania), Workshop on Medical Genetics-3rd Course (supported by MAGI Balkans), and a dedicated workshop by COST Action RECROP. Also, a Training School in Bio-entrepreneurship in Biotechnology was supported by the Academy of Sciences of Albania within the framework of the project BioSensToxicWater, which provided young scientists with practical skills for innovation and technology transfer (see pictures attached).

A strong emphasis was placed on the participation of early-career researchers and students. Hands-on sessions, poster presentations, and the 3rd Biotechnology Course of MAGI Balkans offered valuable learning and networking opportunities, particularly for students of the University of Tirana.

International and Albanian research teams presented advanced studies in genomics, medical and pharmaceutical biotechnology, plant biotechnology, biosensors and nanobiotechnology, animal biotechnology and aquaculture, industrial and environmental biotechnology, demonstrating the growing scientific capacity of local institutions. Researchers from North Macedonia, Kosovo, Bulgaria, Romania, Greece, and other countries highlighted the importance of cross-border collaboration and the emergence of a strong Balkan biotechnology network aligned with European scientific priorities.

Outstanding contributions were recognized through awards for best oral presentations, given to Laurine Lagache, Tristan Cardon, Elsa Morina, and Sara

Feizyab, and for best posters, awarded to Piemonti Debora, Chiara Coppola, Suzanna Fekner, and Christian Gratz. At the end of the congress, EBTNA President Prof. Munis Dunder sent an official letter of appreciation to the Academy of Sciences of Albania, acknowledging the excellent organization, warm hospitality and international impact of the event.



Gallery of pictures from the EBTNA Congress-2025 & Satellite Events: Training School on Bioentrepreneurship in Biotechnology, RECROP Workshop on Plant Biotechnology, Workshop on Cytotoxicity Testing

With Tirana designated as the Mediterranean Capital of Culture and Dialogue 2025, the congress reaffirmed Albania's role as a regional hub for scientific innovation and cooperation. The European Biotechnology Congress 2025 demonstrated the strategic relevance of the Balkans in biotechnology, the growing capacity of regional universities and research centers, and the importance of connecting international innovation with local development.

Ariola Bacu, professor and Head of Group for Molecular Biotechnology at the Faculty of Natural Sciences of the University of Tirana, Albania

Technology, Tradition, and Trust: Harmonising Consumer Needs and Agricultural Technologies for Sustainable Food Production

On 9-10 October 2025, the 5th International Scientific Conference ‘Livestock Production: *Recent Trends and Future Prospects*’ was organised by the Faculty of Animal Sciences of the Lithuanian University of Health Sciences, in collaboration with the Animal Science Institute of the LUHS and the Division of Agricultural and Forestry Sciences of the Lithuanian Academy of Sciences. The conference brought together researchers, industry representatives, and policymakers to discuss the latest developments in animal nutrition, breeding, genetics, and production quality. The thematic discussions crystallised the central focus of the conference: how to balance consumer expectations with agricultural production technologies. This challenge calls for the integration of sustainability, innovation, and ethics into modern livestock production and food systems. As consumer awareness and expectations continue to evolve, the agricultural sector must adapt to ensure high food quality, environmental responsibility, and long-term system resilience.



Photo 1. Prof. Vidmantas Stanys, Chairman of the Department of Agriculture and Forestry Sciences of the Lithuanian Academy of Sciences, opens the conference

When discussing consumer expectations, it is important to emphasise that modern consumers increasingly seek food that is safe, nutritious, and sustainably produced. Transparency, traceability, and clear labelling – such as organic, local, or fair-trade certifications – play a crucial role in fostering consumer trust and confidence. At the same time, the value of traditional agricultural technologies should be better communicated to the public to prevent misconceptions or unrealistic expectations regarding ‘absolute’ ecological practices. Ultimately, the primary goal of the agricultural sector remains to ensure the availability of sufficient quantities of high-quality food for the population, while maintaining a balance between sustainability and productivity. To achieve this, innovation and traditional knowledge must coexist. Advances in precision agriculture, smart farming, and biotechnology are revolutionising food production by reducing environmental footprints and improving efficiency in the use of natural resources such as water, fertilisers, and energy. Meanwhile, local and traditional farming methods continue to play a vital role in maintaining biodiversity, preserving cultural heritage, and ensuring food identity. The integration of these approaches helps to build resilient agrifood systems capable of withstanding climate change and global market fluctuations.



Photo 2. Academician Henrikas Žilinskas reads a report.



Photo 3. Academician Elena Bartkienė (first row, first from the left), author of the newsletter, with speakers from Poland.

Furthermore, agricultural research and innovation increasingly target nutritional and functional quality improvement. The development of plant and animal products enriched with essential nutrients, bioactive compounds, or improved digestibility offers a way to meet specific dietary needs and enhance public health

outcomes. In parallel, efforts to reduce anti-nutritional factors and improve feed efficiency contribute to animal welfare and overall production sustainability.

In the context of sustainability, circular economy principles are becoming increasingly important. Repurposing agricultural by-products such as using crop residues, processing waste or alternative raw materials for feed, compost, or renewable energy can significantly reduce waste and enhance system efficiency. These strategies not only minimise environmental impact but also create additional economic value for farmers and processors.

Effective progress in this field requires strong collaboration among stakeholders, including producers, researchers, policymakers, educators, and consumers. Education and outreach initiatives play a vital role in bridging the knowledge gap and promoting a more accurate understanding of agricultural technologies, from biotechnology and genomics to sustainable livestock management.

Sustainability extends beyond environmental protection: it also includes economic and social equity. Ensuring fair market conditions, supporting small-scale farmers, and maintaining affordable access to food are fundamental to achieving a balanced and inclusive food system.

In summary, balancing consumer needs with agricultural technologies requires harmonisation of innovation, transparency, and sustainability. The ultimate goal is to produce food that meets modern consumer expectations without compromising environmental integrity, economic viability, or social fairness. The discussions at the conference reaffirmed that collaboration, education, and responsible innovation are essential for shaping sustainable livestock production and the food systems of the future.

Academician of Lithuanian Academy of Sciences Prof. Elena Bartkienė, Dean of the Faculty of Animal Sciences, Lithuanian University of Health Sciences

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