EU-LI-PHE
EUROPEAN NETWORK ON LIVESTOCK PHENOMICS

EU-LI-PHE in Leuven 2025

Stakeholder Conference & 2nd Training School

By combining strategic stakeholder dialogue with advanced technical training, EU-LI-PHE reinforced its mission to strengthen collaboration, innovation, and capacity building across the livestock sector.

In July 2025, the EU-LI-PHE COST Action brought together researchers, industry representatives, breeding organizations, and policy actors in Leuven, Belgium, for two key events shaping the future of livestock phenomics in Europe.

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

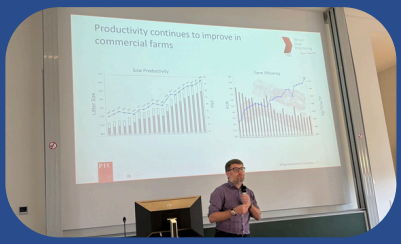
Funded by the European Union

euliphe.costaction@gmail.com
https://eu-li-phe.eu

EU-LIPHE
EUROPEAN NETWORK ON LIVESTOCK PHENOMICS

11 July 2025 | KU Leuven

Stakeholder meeting



More than 60 experts from academia, industry, breeding organizations, and regulatory bodies gathered to discuss the digital transformation of livestock phenotyping.

The Conference focused on the integration of advanced phenotyping technologies into livestock production systems, alongside the application of artificial intelligence to enhance data-driven decision-making in animal farming. We also discussed data-sharing frameworks, interoperability, and the development of secure and standardized digital infrastructures capable of supporting cross-border collaboration.

EUROPEAN NETWORK ON LIVESTOCK PHENOMICS

2nd EU-LI-PHE Training School

14–18 July 2025
Leuven, Belgium

From data to discovery: Measuring & analyzing livestock phenotypes

Hosted at Hogenheuvelcollege, KU Leuven, the Training School equipped young researchers with cutting-edge knowledge and hands-on skills in livestock phenotyping.

The Training School covered a comprehensive range of advanced topics in livestock phenotyping, beginning with sensor technologies for livestock monitoring and progressing to time-series and frequency-domain signal analysis for interpreting complex biological data.

Participants were introduced to fundamental machine learning concepts and explored modeling approaches for the quantification of animal resilience in response to environmental and production-related stressors.

The program also included hands-on experience with mid-infrared spectral analysis of milk data for predictive modeling in dairy systems, as well as sound analysis and bioacoustics techniques for interpreting animal vocalizations. In addition, attendees developed practical skills in computer vision for monitoring animal behavior and examined imaging and computational strategies for phenotyping insects, expanding the scope of digital phenotyping beyond traditional livestock species.

Building a Collaborative Future for Livestock Phenomics

Actively listening to the livestock sector ensures that research priorities and innovations are aligned with real-world challenges and industry needs.

Stakeholder engagement

Supporting early-career researchers strengthens technical expertise, fosters collaboration, and secures the long-term sustainability of the field.

Capacity building

Advancing digital phenotyping technologies drives more precise, data-driven decision-making in animal health, welfare, and production systems.

Technological advancements

Promoting secure and interoperable data ecosystems enables trustworthy information exchange and scalable innovation across regions and sectors.

Data interoperability

This flyer is based upon work from COST Action CA22112 EU-LI-PHE, supported by COST (European Cooperation in Science and Technology).