

PRESS RELEASE

Bridging the Gap Between Genotype and Phenotype: EAAP 2025 Session Puts Spotlight on Research Infrastructures for Livestock

August 27, 2025 – Innsbruck, Austria – A landmark session at the **76th EAAP Annual Meeting** brought Research Infrastructures (RIs) into the spotlight, drawing attention to their critical role in the future of livestock and aquaculture research across Europe. The session, officially included in the EAAP Genetics Commission programme, aimed to raise awareness of the need for a **dedicated, long-term European RI for livestock science**—a gap not yet addressed by the ESFRI roadmap, despite substantial investment in temporary initiatives.

Featuring cutting-edge projects like **PIGWEB, AQUAEXCEL, ISIDORE, EuroFAANG, AGROSERV**, and established RIs such as **ELIXIR** and **INFRAFRONTIER**, the session demonstrated how RIs support innovation by providing access to advanced facilities, harmonised methodologies, and expertise. They offer training, enable international collaboration, and ensure long-term value from research investments. At the heart of the session was the introduction of **GenoPHEnix**, a proposed RI that would integrate high-throughput phenotyping with functional genome annotation, aiming to close the gap between genotype and phenotype in both terrestrial and aquatic species.

Lively discussion followed, with scientists, policymakers, and industry representatives tackling key questions:

- **What if GenoPHEnix is not selected for the ESFRI roadmap?**
Participants stressed the importance of continued dialogue with the European Commission and efforts to expand national support, building the case for an alternative path if needed.
- **How can industry benefit—and contribute?**
Breeding and feed companies expressed strong interest in using RI services to develop and test innovations. Clear data sharing frameworks, real business value, and long-term infrastructure availability were seen as crucial to industry buy-in and potential co-funding.
- **Can data be shared securely?**
Innovative encryption methods were presented that enable secure, multi-party data use without compromising confidentiality—a key enabler for private sector collaboration.
- **What is the role of EAAP and Horizon Europe?**
Researchers were encouraged to reference RIs in funding proposals, while EAAP was recognised as a strategic platform to foster dialogue and visibility across disciplines.
- **How should RIs be governed?**
Examples like BBMRI highlighted the need for inclusive, co-created governance models involving national nodes and research communities.
- **What's next for Europe's animal facilities?**
Many farmed animal facilities need upgrading. GenoPHEnix could provide the coordination mechanism to future-proof phenotyping capacity across Europe.

The session closed with consensus on the urgent need for a **pan-European livestock RI**, and strong support for continuing these discussions at future EAAP conferences. As one participant put it:

“If we want to make real progress in linking genetics to real-world performance, we need infrastructures that bring researchers, industry, and data together—and keep them working together long-term.”

Contact: For further information, please contact: Geena Cartick (geena.cartick@effab.info)



The EuroFAANG project has received funding from European Union's Horizon 2020 research and innovation program under Grant Agreement No 101094718. This publication reflects the views only of the author, and not the European Commission (EC). The EC is not liable for any use that may be made of the information contained herein.

