

EuroFAANG Research Infrastructure Project is on track

Press Release June 2023

Accelerating genome-to-phenome research for farmed animals in Europe is the goal we are working towards.

Initially, a EuroFAANG cluster was established as an initiative informally created by six Horizon 2020 projects (Fig. 1). These projects are associated with the international initiative [FAANG \(Functional Annotation of Animal Genomes\)](#), which is working toward the discovery of basic functional knowledge of genome function to interpret the link between the genetic makeup of animals and the observable physical and physiological traits (*genotype-to-phenotype (G2P) relationships*) in farmed animals.



Figure 1 The EuroFAANG initiative

The EuroFAANG cluster addresses challenges in farmed animal production, namely the better use of resources, animal health and welfare, the environment and the climate impact of breeding but also feeding the world with fewer resources. This is only possible with collaboration with the six partner projects, which tackle a wide range of livestock species, such as farmed fish, ruminants, pigs, and chickens. Set up and led with the joint effort of the six EuroFAANG cluster projects in 2022, a new Horizon Europe project proposal was submitted under the call “*Research Infrastructure Concept Development*”. Successfully approved by the EU, the new **EuroFAANG Research Infrastructure (RI)** project now thrives on developing a concept for a formalised infrastructure for farmed animal G2P research in Europe (EuroFAANG).

In Berlin on the 27th of February, we kicked off the EuroFAANG RI project. This meeting focused on exploring collaboration and synergies across the work packages and the objectives of the milestones and deliverables due in the project's first year. One of this year's big topics is developing and implementing **the concept of a unique web portal** to collect and centralise access to resources and plan for how Trans-National Access (TNA) to the infrastructure, including data, would work in practice. The objective of building this concept, in collaboration with different partners in the EuroFAANG RI project, is to provide a framework for an accessible and interactive portal to share samples, data, and results. Furthermore, we will soon launch a series of surveys to help build a network of experts from biobanks, laboratories, and research centres to understand genotype to phenotype prediction better. This will include the setting up of an ***in vitro* cell systems think-tank** and a **gene editing think-tank** with genome editing, ethics, and animal breeding experts across Europe to build a web portal that connects ethics committees, projects, and infrastructures. A later survey will address the advancement in other technologies for genotype to phenotype prediction.

This first part of the EuroFAANG RI project aims to create the concept for a common infrastructure, data structure and service access policy in interaction with other research infrastructures such as ELIXIR, and establish the research frameworks and associated services to emphasise G2P research in European farmed animals. It will occur through consultation with breeding companies and scientific experts, e.g., from the FABRE technology platform members within the [FAANG to Fork](#) strategy framework.

Don't hesitate to contact us if you have any questions about the project, the research, or the partners behind it.

EuroFAANG RI Project Coordination: EuroFAANG-RI@fbn-dummerstorf.de

EuroFAANG Communication Strategy: Çağla Kaya(cagla.kaya@effab.info)