



EuGena updates and recent activities

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Ex situ WG Meeting, Athens, 6-7 th May 2025



ERFP



EUGENA

New Gene Banks in EuGena

April 2024



April 2025



+ 1 country (Bulgaria)

13 gene banks (12 Spain, **1 Bulgaria**)

+ 2808608 samples

2024-2025 new Gene banks –



| Name | Country | EUGENA member since | Samples | Species | Breeds |
|------------------------|---------|---------------------|---------|---------|--------|
| BIOMEJAN AGR 218 | Spain | 2024 | 31982 | 7 | 21 |
| YEGUADA CARTUJA | Spain | 2024 | 7893 | 1 | 4 |
| CENSYRA Badajoz | Spain | 2024 | 419095 | 6 | 37 |
| CENSYRA-Cantabria | Spain | 2024 | 153452 | 1 | 3 |
| CENSYRA-Colmenar Viejo | Spain | 2024 | 153072 | 5 | 32 |
| CENSYRA - LEON | Spain | 2024 | 1075677 | 3 | 24 |
| CERSYRA-IRIAF | Spain | 2024 | 43892 | 2 | 7 |
| INSAVET | Spain | 2024 | 5911 | 1 | 2 |
| IRFAP | Spain | 2024 | 78225 | 5 | 10 |
| SERIDA | Spain | 2024 | 184770 | 6 | 6 |
| UHU | Spain | 2024 | 2294 | 1 | 1 |
| C.T.A. | Spain | 2025 | 629227 | 2 | 20 |
| CAPRIGEN | Spain | 2025 | 14838 | 1 | 1 |

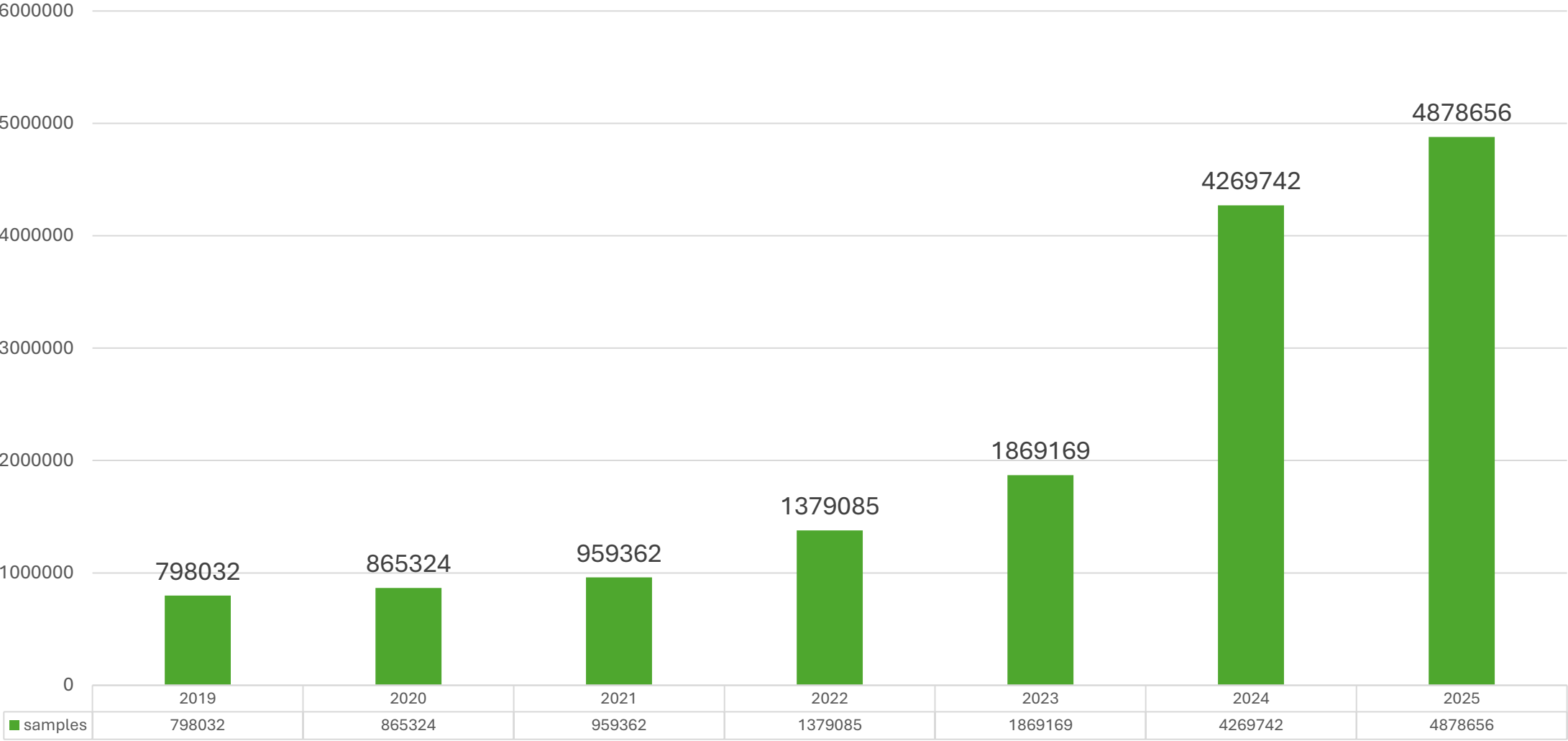
2024 – 11

2025 – 2

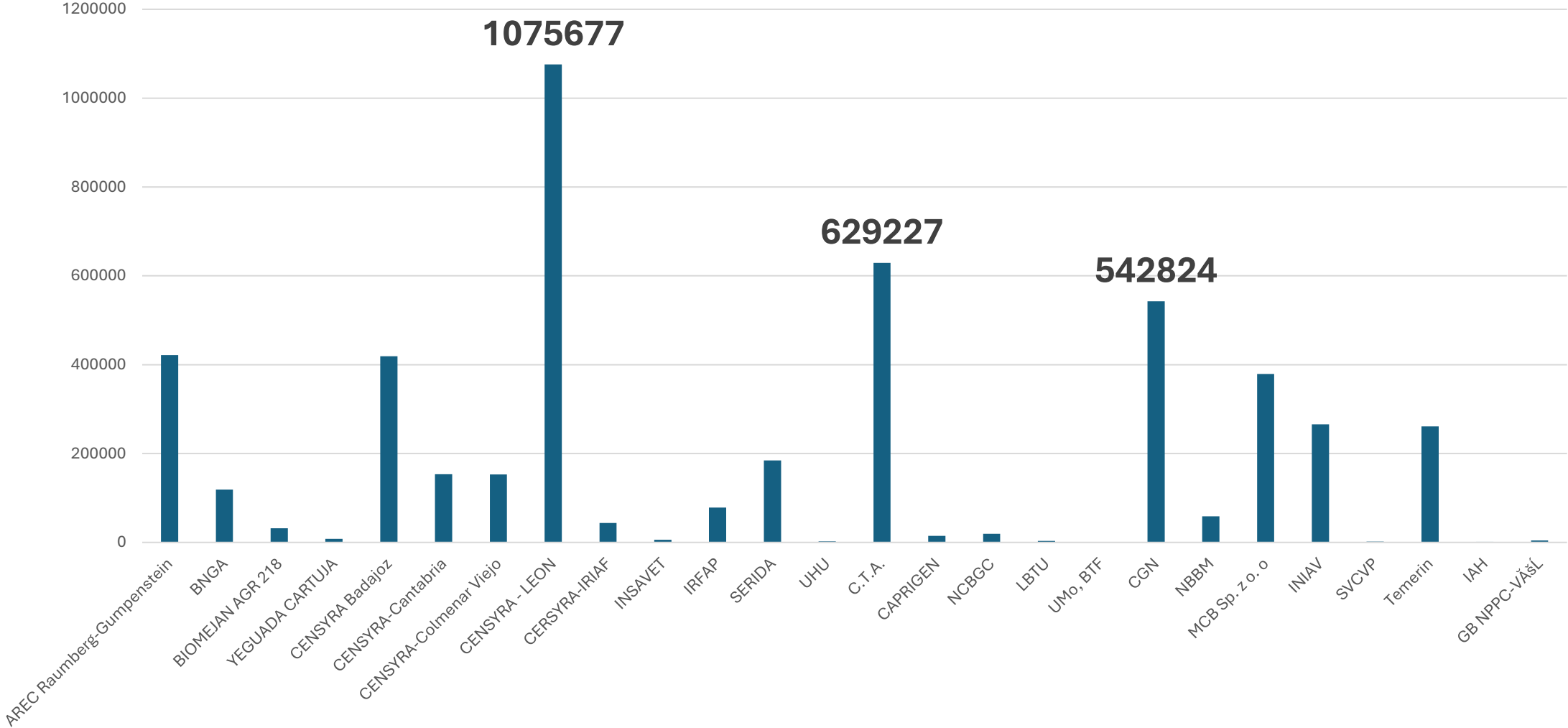
+ 1 National Bulgarian Gene bank

Executive Agency for Selection and Reproduction in Animal Breeding - E

samples in EUGENA per year



samples in EUGENA gene banks 2025



Collaboration

- EuroFAANG (<https://eurofaang.eu/>) is a collaborative initiative that brings together several Horizon 2020 projects: GEroNIMO, AQUA-FAANG, BovReg, GENE-SWitCH, Rumigen, and HoloRuminant.
- These projects have established a closer relationship to coordinate their objectives within Europe.
- Michele Tixier-Boichard, from INRAE, partner of EuroFAANG, presented the initiative in the WG meeting and invite EUGENA and EUGENA members to collaborate in it.
- The EUGENA Steering Board members, discussed and approved the participation in the project and the ERFP Steering Committee authorised the collaboration of EUGENA with EuroFAANG.

Two forms of collaborations were proposed:

- Collaboration through the exchange of the information collected in the network and mutually supporting the development of both initiatives.
- Collaboration by integrating individual gene bank of the EUGENA network into the EuroFAANG biobank network based on activities of mutual interest.

GenoPhenix - a European research infrastructure to deliver consolidated services for research on genome and phenome interactions for terrestrial and aquatic farming systems

five aims:

- To sustainably produce and manage healthier farmed animals, with the highest welfare standards;
- To more accurately exploit animal variability through enhanced phenotyping and genotyping capacity;
- To contribute to the 3Rs (reduction, refinement, replacement) in animal research by providing suitable models for deep phenotyping in vitro as well as in vivo;
- To advance the analysis of genome function, combined with the collection of deep phenotypes and multiomics information at cell, tissue, animal and on-farm/population level resolution;
- To provide tools and knowledge from the above four aims for optimal and more precise breeding and animal health considering sustainable management practices, and conservation of genetic diversity.

EUGENA ↔ GenoPhenix

March, 2025 – Letter of support to GenoPhenix which now includes the whole EuroFAANG consortium and its objectives.

- Biobanking services: EUGENA gene banks could act as mirror sites for EuroFAANG biobanks
- Sharing protocols, particularly to improve cell viability of cryoconserved germplasm or in relation with the legal status of the material in the collections
- Training activities for data and metadata standards
- Phenotyping local breeds
- Communicating on each other: one improves the notoriety of the other
- Joining different users' communities across a large number of countries
- Sharing expertise in the development and operation of databases for genebanks.

AHA SB EUGENA 28-29 May 2024 , Balice

- The main goal of the Ad Hoc Action was funding the annual meeting of the EUGENA Steering Board 28-29 of May at National Research Institute of Animal Production, in Balice near Kraków, Poland.



2. People:

- **Coordination:** Ewa Sosin (Poland) and Fernando Tejerina (Spain)
- **Members of the team developing the AHA:** Peter Chrenek (Slovakia), Annemieke Rattink (Netherlands), Dainis Rungis (Latvia), Krisztina Liptoi (Hungary), Nikola Marinković (Serbia), Zhivko Duchevev (Bulgaria), Beate Berger (Austria, on line participation), Nuno Carolino (Portugal, on line participation).
- **Observers of AHA meeting:** Jaroslav Vasicek (Slovakia), Barbara Vega (Hungary), Agnieszka Chełmińska, Piotr Gogol, Sylwester Świątkiewicz, Sylwia Judycka, Agnieszka Wierzchoś-Hilczer, Jarosław Jędraszczyk, Marta Nykiel, Julia Warchoń (Poland)

3. Agenda of the meeting

| | | |
|----------------------|--|-----------------------------------|
| 28 TH May | EUGENA STEERING BOARD MEETING. | |
| 9:00-9:10 | Welcome and Introduction Objectives of the meeting – Round of introductions. | Chairs |
| 9:10-9:40 | Updating of the EUGENA status. | Chairs |
| 9:40-10:10 | New EUGENA webpage tools. | Zhivko Ducheve |
| 10:10-10:30 | Outcomes from the TF Software Database | Annemieke Rattink. |
| 10:30-11:00 | Coffee Break | |
| 11:00-11:30 | Report on the outputs from the AHA Animal Health Legislation and Genebanks | Chairs. |
| 11:30-12:15 | Standardization of the fish semen cryopreservation procedure and solutions for fish semen banks in Poland. | Sylwia Judycka, Andrzej Ciereszko |
| 12:15-12:30 | News from genebanks. | All together |
| 12:30-13:00 | Poland genebanks in EUGENA | Ewa Sosin |
| 13:00-14:00 | Lunch | |
| 14:00-15:30 | Visit to Department of Reproductive Biotechnology and Cryoconservation & National Bank of Biological Material. | All together |
| 15:30-19:30 | Kraków Sightseeing –Guided Tour | All together |
| 19:30- 21:00 | Dinner – Kazimierz District | All together |
| 29 TH May | EUGENA STEERING BOARD MEETING. | |
| 7:30-14:30 | Visit to MCB Krasne. | All together. |

4. Outcomes from AHA

- The main result was better coordination between the EUGENA genebanks, the promotion of EUGENA and the sharing of experiences in the field of ex situ conservation.
- Exchange of useful information (like new tools needed for EUGENA webpage, call for EuroFAANG project) for network expansion between genebanks involved in the EUGENA network, in circumstances that promoted building mutual friendly relationships and integration.
- The EUGENA Steering Board members, discussed and approved the participation in the EuroFAANG project and the ERFP Steering Committee authorised the collaboration of EUGENA with EuroFAANG.



3rd EuGena Steering Board Meeting – Olsztyn 2025, Poland

61st Meeting of the Society for Low Temperature Biology

Institute of Animal Reproduction and Food Research
of the Polish Academy of Sciences



EUGENA



2025 Olsztyn



Thank you for your attention!