

## Genotype-to-phenotype research across Europe & beyond



Thursday 31 August



14h (CEST)



Lyon, France

**Welcome and "EuroFAANG** – An infrastructure for farmed animal genotype to phenotype research in Europe and beyond"

– **Emily Clark** (UEDIN) / **Christa Kühn** (FBN)

### The GENE-SWiTCH project

- GENE-SWiTCH: improving the functional annotation of pig and chicken genomes for precision breeding – **Elisabetta Giuffra** (INRAE)
- Genome-wide association studies for body weight in broilers using sequencing and SNP chip data **Andreas Kranis** (Aviagen Ltd.) / **Eirini Tarsani** (UEDIN)
- Using methylation annotation to improve genomic prediction of gene expression in pigs – **Bruno Perez** (Hendrix Genetics)

### The BovReg project

- The path from functional annotation towards improved genomic prediction in cattle – **Christa Kühn** (FBN)
- Biology-driven genomic predictions for dry matter intake within and across breeds using WGS data by **Birgit Grendler Grandl** (WUR)
- Newly annotated genomic features for biology-driven genome selection: the BovReg contribution – **Gabriel Costa Moreira** (ULiège)

### Coffee break

### The AQUA-FAANG project

- AQUA-FAANG: decoding genome function to enhance genotype-to-phenotype prediction in farmed finfish – **Daniel Macqueen** (UEDIN)
- Integrating functional annotation data in genomic prediction of VNN resistance in European sea bass – **Sara Faggion** (UNIPD)

### The GEroNIMO project

- Genome and Epigenome eNabled breeding in MOnogastrics – **Sandrine Lagarrigue** (INRAE)

### The RUMIGEN project

- New breeding tools in a context of climate change – **Sophie Mattalia** (IDELE)

### The HoloRuminant project

The genetic basis of ruminant microbiomes – **Yulixais Ramayo-Caldas** (IRTA)

**Panel discussion "How European animal breeding sector can use EuroFAANG Research Infrastructure and knowledge developed so far" Opportunities and barriers for uptaking the results** chaired by Emily Clark & Christa Kühn

### Invited panelists:

- Abe Huisman, Hypor
- Romain Morzezen, SYSAAF
- Olivier Demeure, Groupe Grimaud
- Clotilde Patry, Valogene

**Wrap-up** Emily Clark & Christa Kühn