

18 November 2021, Brussels

ATF-FEFAC - H2020 Projects Stakeholder Workshop



The role of animal genetics & breeding research on feed vs food competition



A presentation by Ana Granados Chapatte
Director of EFFAB



EU Funded projects



Disclaimer

All projects have received funding from European Union's Horizon 2020 research and innovation program.

This presentation 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.

Grant Agreement Details



No. 727213



No. 772787



No. 817998



No. 815668



No. 101000226



No. 101000236



No. 101000213

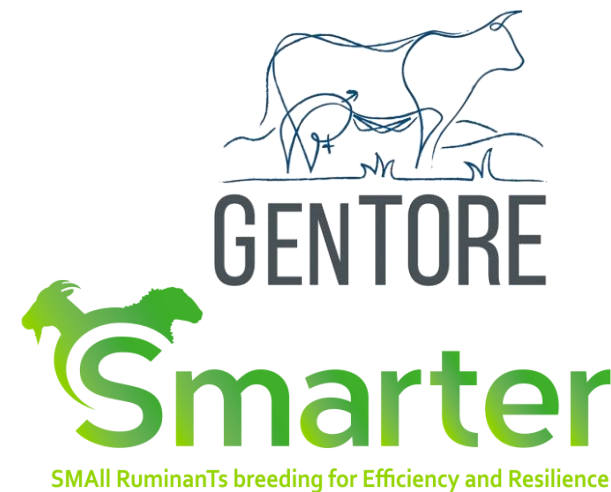
Overview of projects



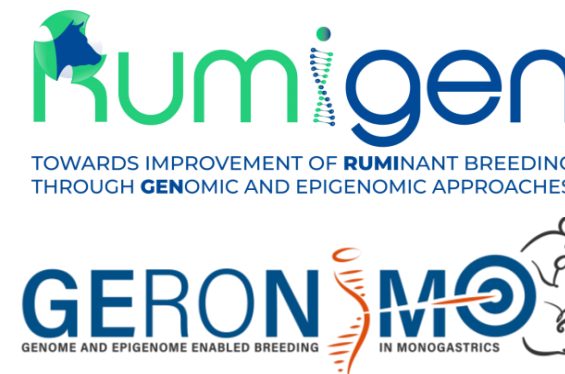
SFS-30 Understanding of genome of farmed animals (2019-2023)



SFS-02 Healthy livestock microbial ecosystems (2021-2026)

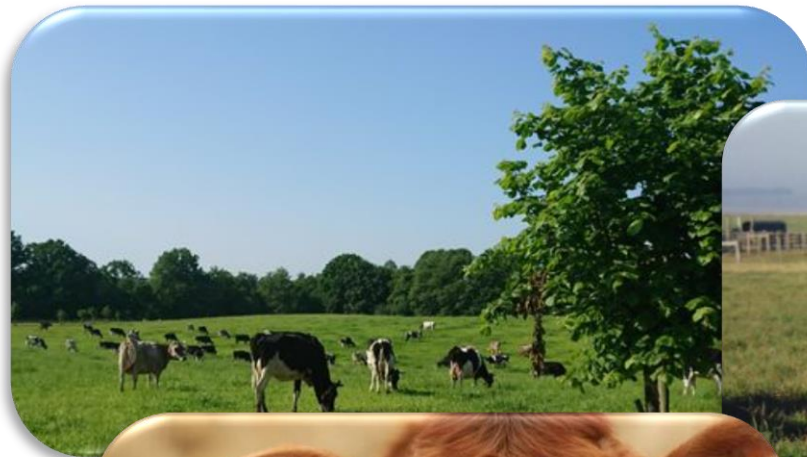


SFS-15 Breeding livestock for resilience & efficiency (2017-2022)



SFS-13 Genome & epigenome enabled livestock breeding (2021-2026)

Breeding livestock for resilience & efficiency



How does the project create impact?



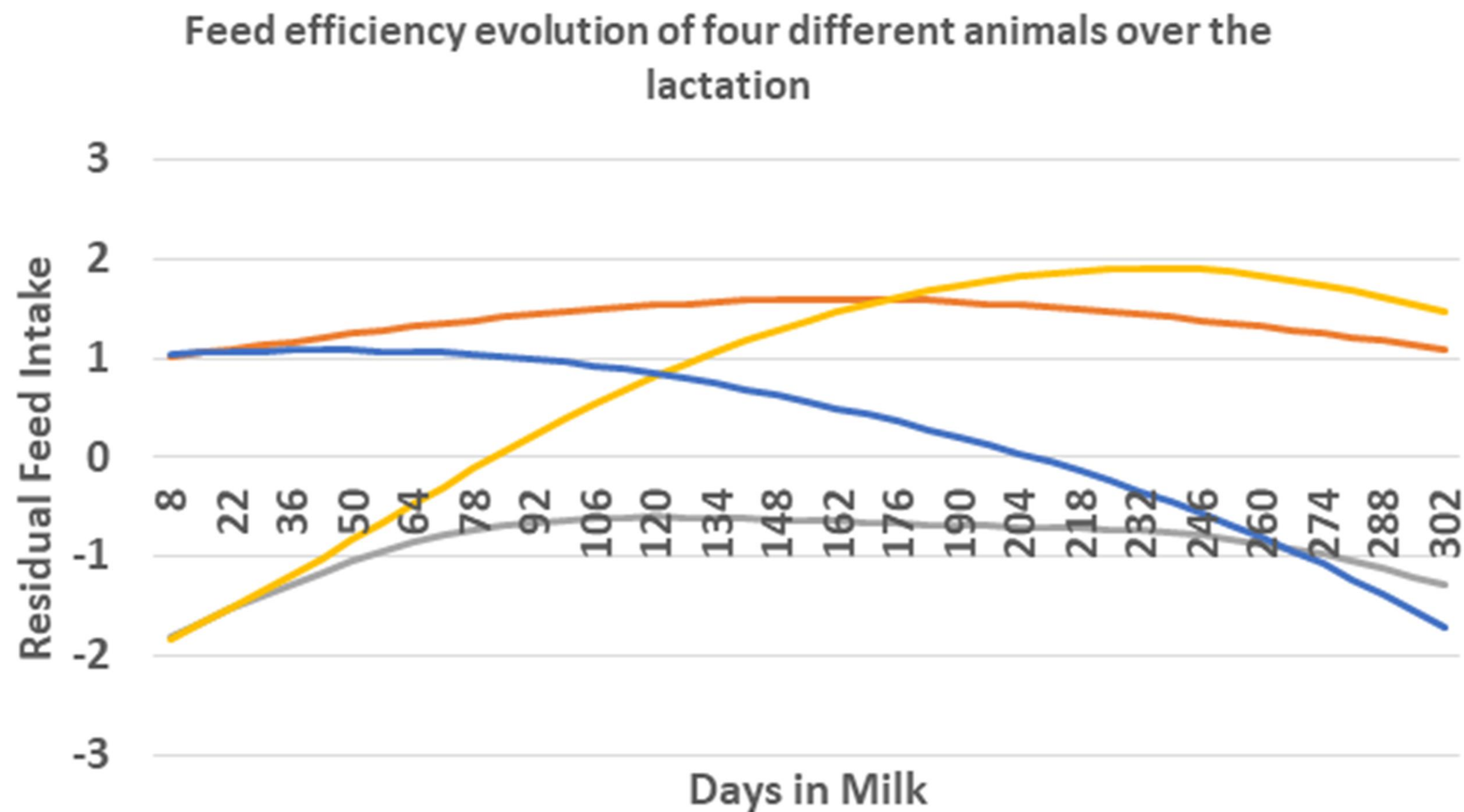
New proxies
and methods
for resilience &
efficiency

Decision
support tools

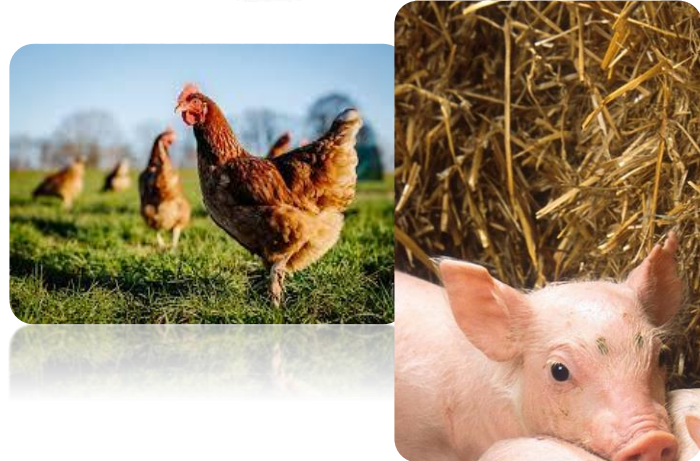
Enhanced
possibilities
for genetic
selection

- Optimise R&E
- Genetic diversity
- Match feed availability
- Meet societal expectation

Breeding livestock for resilience & efficiency



Understanding of genome of farmed animals



**Genome
=
Genetic
Code**

How does the project impact?

- Knowledge database
- Improved safety & quality
- Reduced environmental impact
- New tools

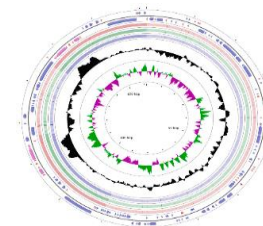


**Functional
Annotation**



1

**High quality annotation maps
for the livestock community**

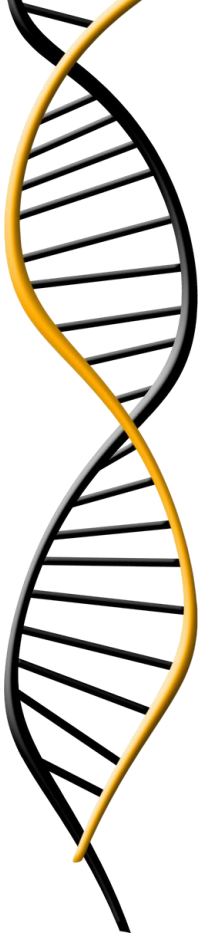


2

**Implementation of new
Genomic Selection Models**



Genome & epigenome enabled livestock breeding



New strategies:

- Nutrition
- Management
- Breeding
- Gene editing



Health



Welfare



Efficiency



Environmental pressure



Improve quantitative genetic tools:



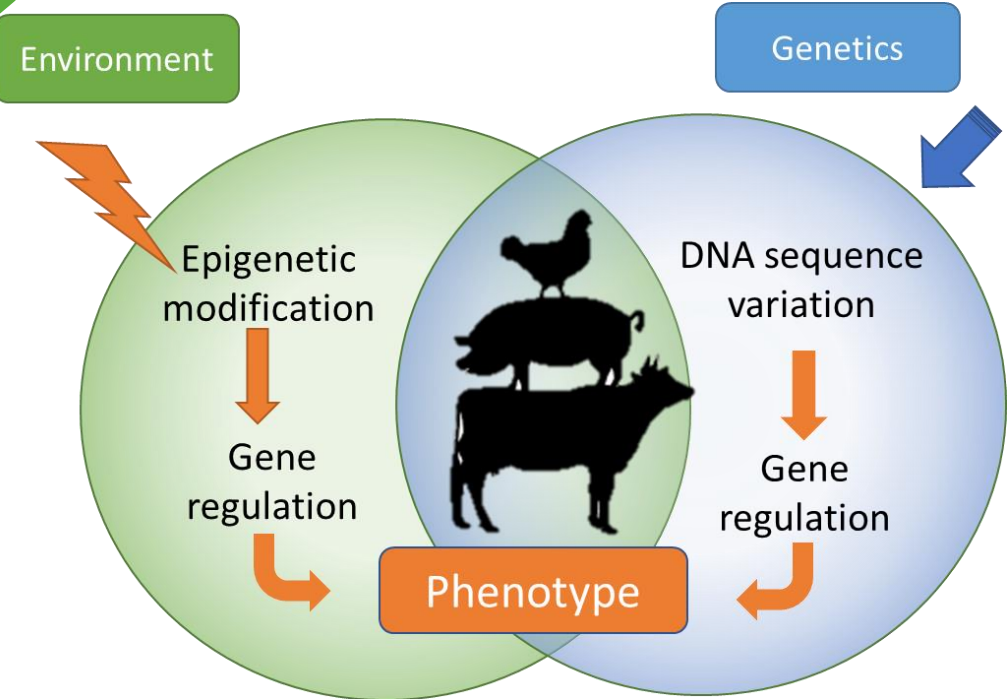
New traits



Epigenetic data



New breeding techniques → evaluation of societal acceptability

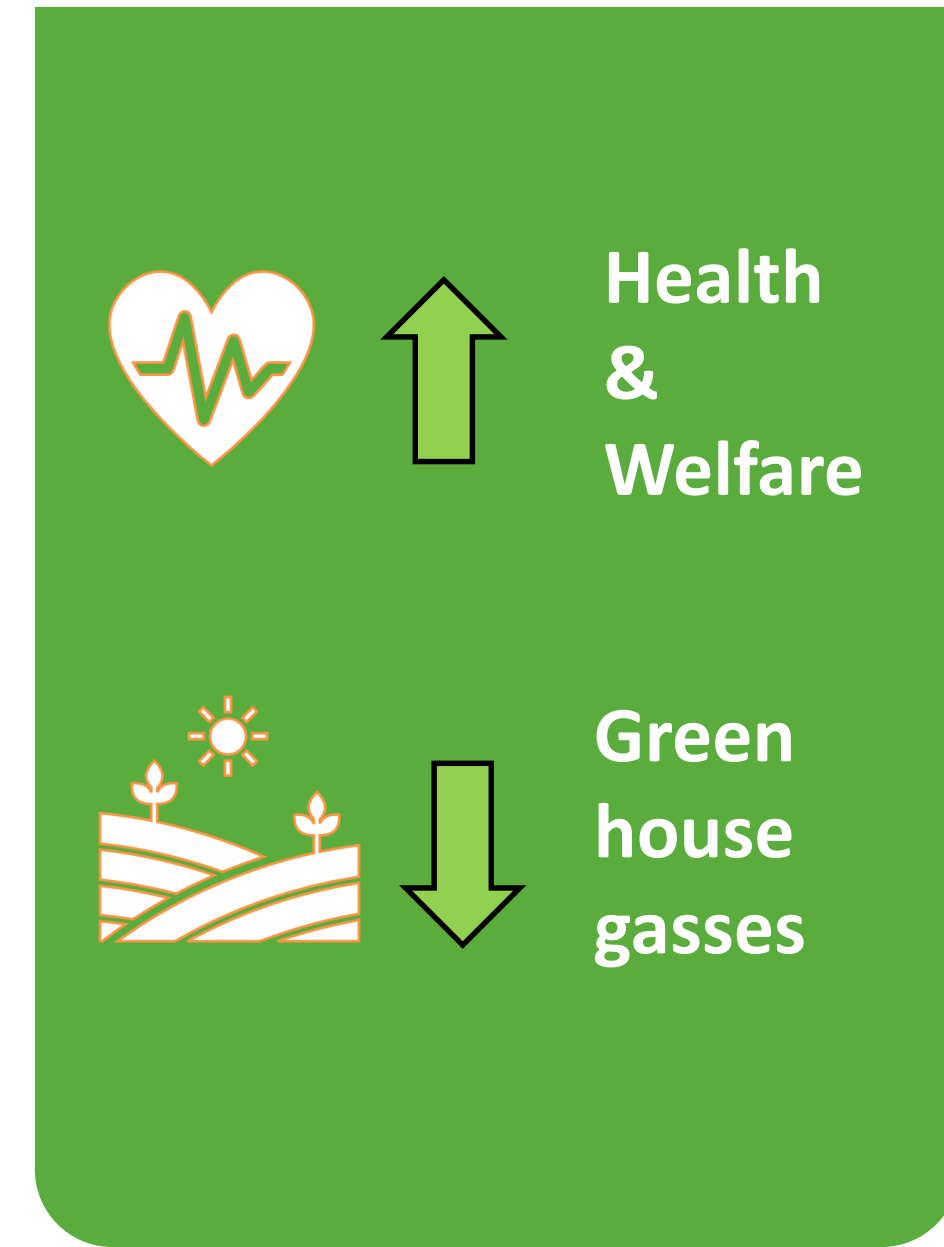


Understanding microbiomes of the ruminant holobiont

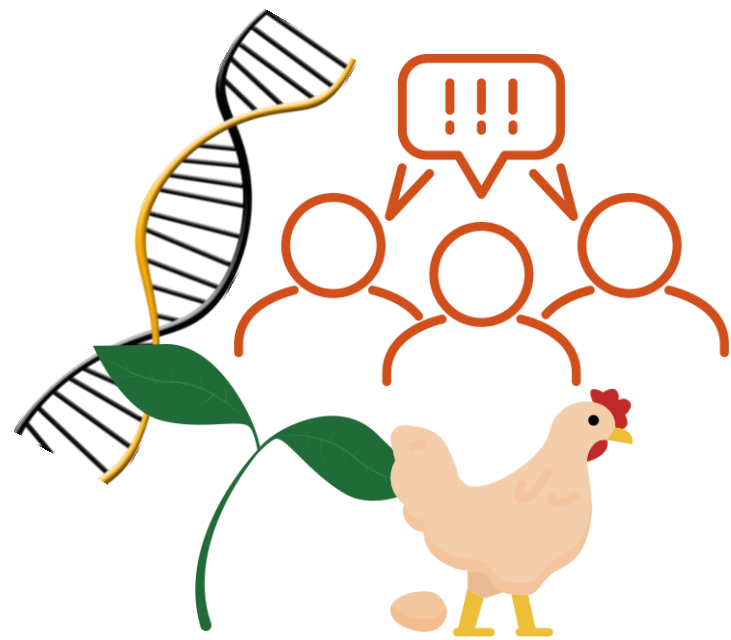


Healthy livestock microbial ecosystems

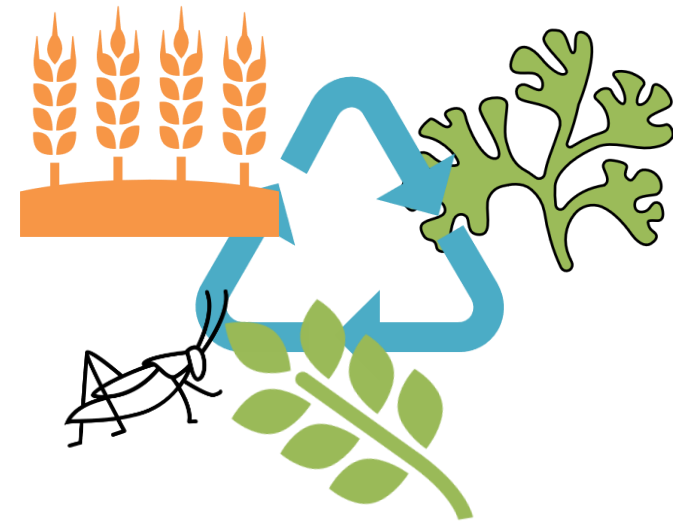
- ➡ **Characterise establishment and dynamics of microbiomes**
- ➡ **Determine connectivity between microbiomes**
- ➡ **Heritability**
- ➡ **Influence on the host key performance indices**



Research and Innovation: needs for further research (R&I)



**Collaboration
of plant and
animal scientists**



**Alternative
feed products**



**Joint
Dissemination
Network**



Contact details for projects



Nic Friggens / INRAE
nicolas.friggens@agroparistech.fr
www.gentore.eu



Elisabetta Giuffra/ INRAE
elisabetta.giuffra@inra.fr
www.gene-switch.eu



Eric Pailhoux/ INRAE
eric.pailhoux@inrae.fr
www.rumigen.eu



Diego Morgavi/ INRAE
Diego.morgavi@inrae.fr
Under construction



Carole Moreno & Rachel Rupp
INRAE
Rachel.rupp@inrae.fr
www.smarterproject.eu



Christa Kühn / FBN
kuehn@fbn-dummerstorf.de
www.bovreg.eu



Frédérique Pitel & Tatiana Zerjal
INRAE
frederique.pitel@inrae.fr
tatiana.zerjal@inrae.fr
www.geronimo-h2020.eu

Thank you

Let's stay in touch



ana.granados@effab.info

www.effab.info



Ana Granados Chapatte
Director EFFAB

