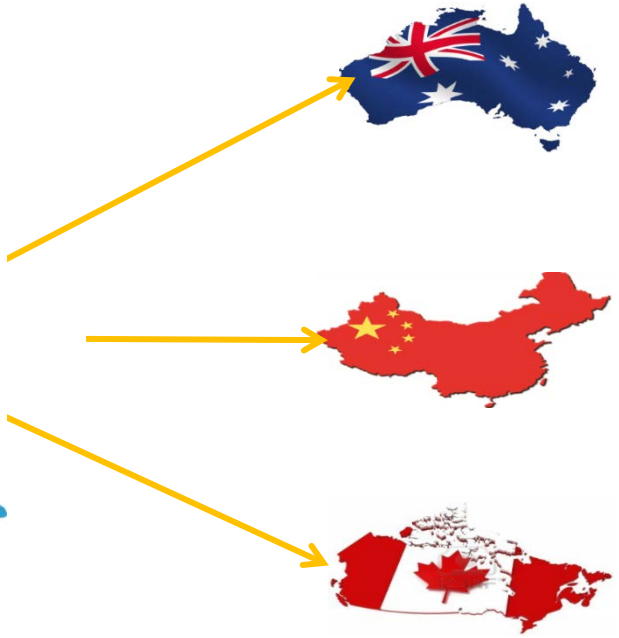
COST Action FA1401

European network on the factors affecting the gastro-intestinal microbial balance and the impact on the health status of pigs (PiGutNet)

COST is supported by the EU Framework Programme Horizon 2020

The PiGutNet network

22 EU countries



- ✓ 49 Research Institutions
- ✓ 10 companies
- ✓ 5 breeders associations
- ✓ (EAAP)

+

- ✓ 3 extra-EU countries
- \- 3 Research institutions

The main objective of the Action

Increase the knowledge about the effect/interaction of environmental and genetic factors on the composition of the microbiota in the gastrointestinal tract of pigs and to improve the risk management associated with antibiotic resistance in pig production

Factors to be considered

Environmental factors

Microbiota profile

Genetic profile

Data managing

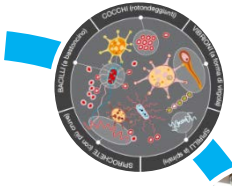
SCIENTIFIC FOCUS

Factors affecting the gastro-intestinal microbial balance

4 GAPS TO CONSIDER:

- **Gap 1** • **Molecular microbiology**
- **Gap 2** • **Environment and host genetic**
- **Gap 3** • **Feeding strategies**
- **Gap 4** • **Antibiotic resistance**

SCIENTIFIC WORK PLAN



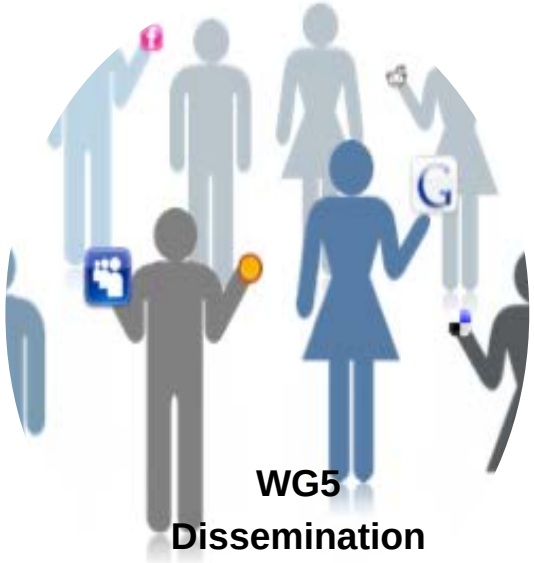
WG1
Microbial characterization

WG2
Genetic / Environment

PiGutNet

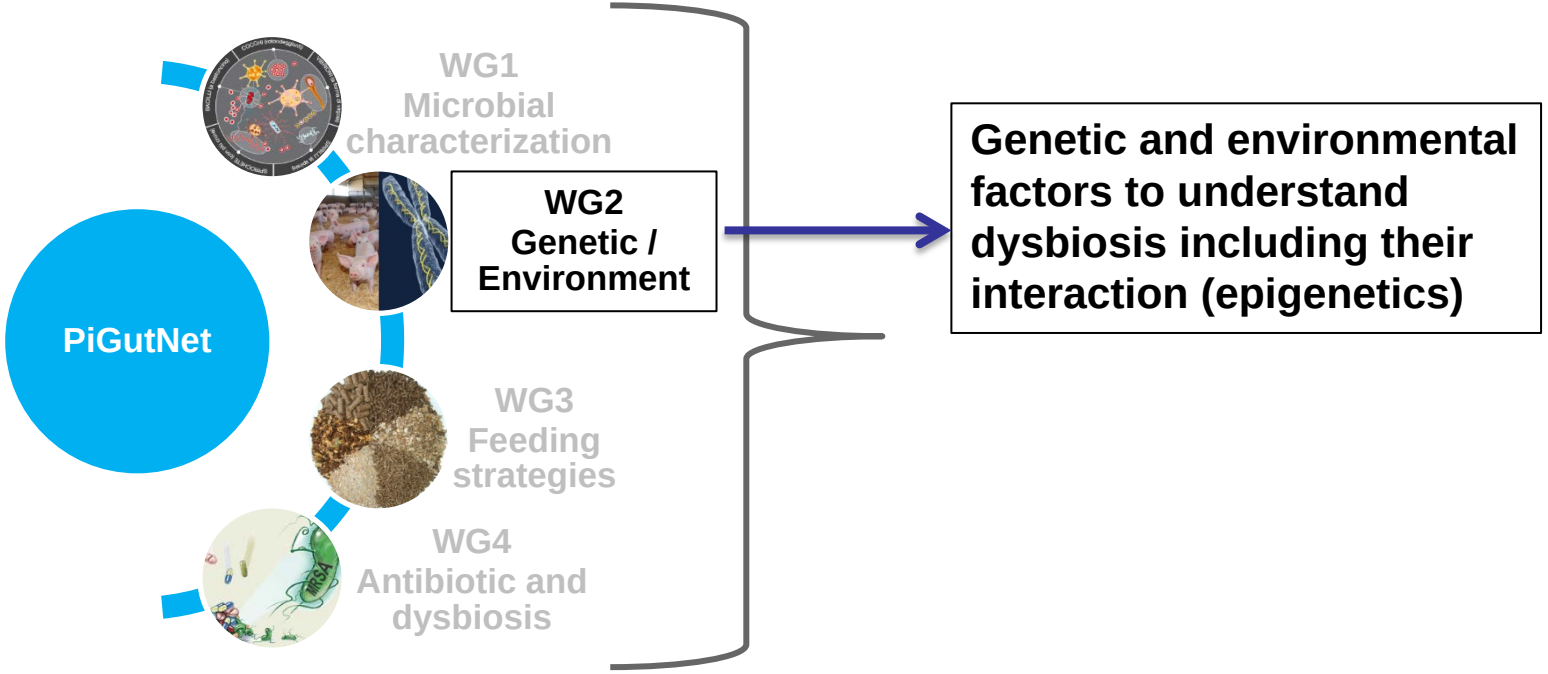
WG3
Feeding strategies

WG4
Antibiotic and dysbiosis



WG5
Dissemination

Session 61 -
Genetic and environmental factors to understand dysbiosis in the GI tract of pigs



Invited speaker

Prof. Thomas Thymann - Associate professor - Department of Veterinary Clinical and Animal Sciences - University of Copenhagen

Title of the Speech: "*Microbes, diet and host, - how do they interact in newborn piglets?"*

Invited speaker

Dr Jordi Estellé - Researcher - INRA, UMR Génétique Animale et Biologie Intégrative - Jouy-en-Josas, France

Title of the Speech: "*The porcine gut microbiota: composition and links with host's genetics and phenotypes"*

Session 61

Genetic and environmental factors to understand dysbiosis in the GI tract of pigs

Oral presetnations:

Hulsegge, B. - *Delineating spatio-temporal processes in the gut mucosa of pigs*

Maushammer, M. - *The effect of host genetics factors on shaping pig gut microbiota*

Lauridsen, C. - *FUT1 gene polymorphism: impact on gut microbiota, immune response and metabolomic profile of piglets*

Motta, V. - *The A0 blood groups effect on the porcine gut microbiota colonization*

Leblois, J. - *Impact of high-wheat bran diet on sows' microbiota, performances and progeny's growth and health*

Kar, S.K. - *Effects of dietary protein sources on intestinal and systemic responses of pigs*

You are kindly invited to visit the poster session

The PiGutNet network thanks you for attending the "Session 61"

For more information on PiGutNet and to join the network:

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Vice-Chair: ***Prof. Jürgen Zentek*** - Juergen.Zentek@fu-berlin.de

Website:
- www.pigutnet.eu/
- www.cost.eu/COST_Actions/fa/FA1401

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