

# Animal Genetics Networks

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**ASGGN** The animal selection,  
genetics and genomics  
network.

[www.asggn.org](http://www.asggn.org)



**METHAGENE**

[www.methagene.eu](http://www.methagene.eu)



Resource Efficiency  
Working Group



LIVESTOCK RESEARCH  
WAGENINGEN UR

Animal Breeding &  
Genomics Centre



The ability to debate and reach agreement on a variety of topics including:

- common protocols for measurement of CH<sub>4</sub> emissions
- co-measurement of appropriate correlated and productive traits
- formalised protocols for collection and storage of rumen samples from all animals measured
- criteria for data sharing and analysis (including meta analysis) among all contributing parties

# Aims METHAGENE



METHAGENE

Establish a network of European researchers that enables large-scale methane measurements on individual ruminants for genetic evaluations

- 1) Define best trait for methane emission;
- 2) Harmonise protocols for large-scale methane measurements using different techniques;
- 3) Identify proxies for methane emissions to be used for genetic evaluations; and
- 4) Quantify benefits for producers when incorporating methane emissions into national breeding strategies.



# Aims ICAR Working Group



- Provide a **forum** to collaborate, exchange information and learn from each other on all aspects of: recording and using dry matter intake data, and recording and using methane outputs data.
- Maintain, update, promote and extend universal **guidelines** for recording dry matter intake and methane output in cattle, sheep and goats worldwide.
- Develop, provide and promote a system and standards for **data storage** and genetic evaluation services on a user-pays basis.

# Involved people

## Members in email-lists:

- Africa – 18
- Asia – 38
- Australia – 42
- Canada/USA – 39
- Europe – 97
- Ireland/UK – 15
- New Zealand – 37
- South America – 30

## Active

- Australia ~10
- Europe ~40
- New Zealand ~10
- Canada ~5

# Current actions

- Listing methane-determining factors
  - Animal, Nutrition/Diet, Rumen/Microbes
- Listing proxies and smart combination of proxies for methane
- Protocols for comparing and combining methane records with different equipment
- Set up an international database for genetic studies

# Challenges-synergies-collaborations

Interdisciplinary approach needed

- Explicitly mentioned in call texts as well (e.g., H2020)

Lot to be gained!

- Get to know each other – enlarge network
- Learn and respect other disciplines



# Challenges-synergies-collaborations

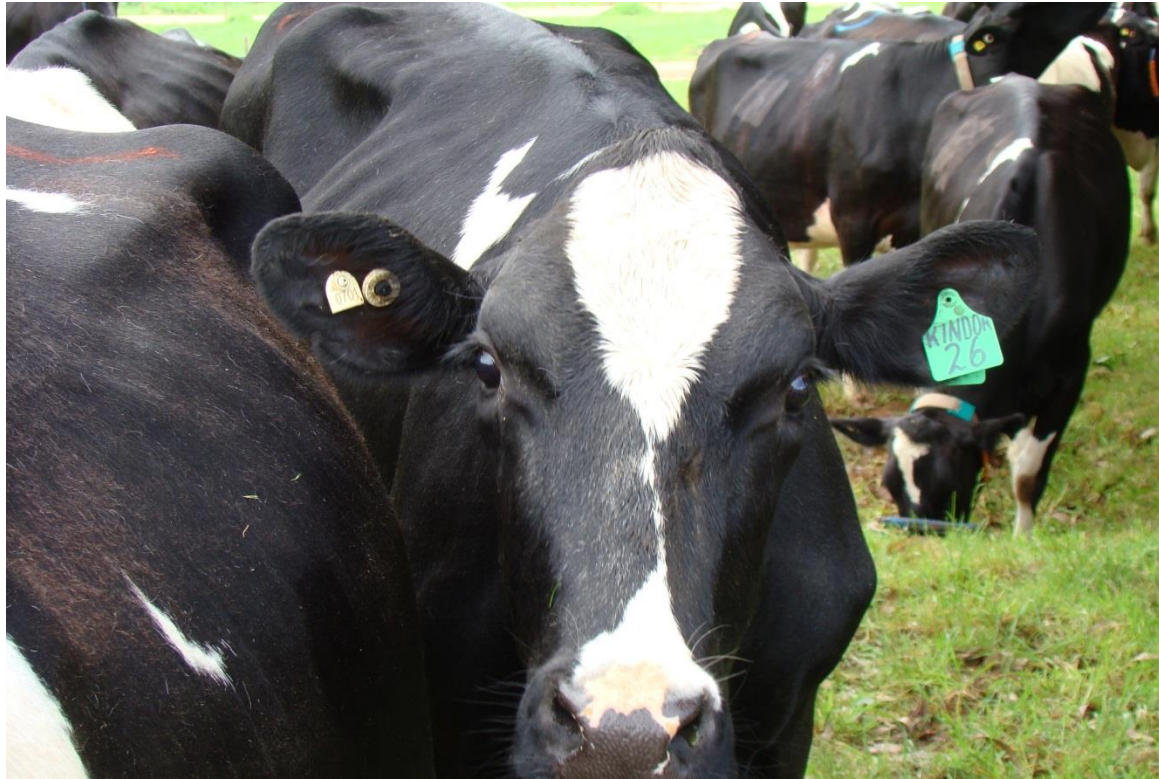
## Synergy

- Share data – make optimal use of data
- Be aware what specific info is needed for certain disciplines

## Collaboration

- New calls are coming up; e.g. ERANET (2016), H2020 (2017)
- Can we get a joint networks proposal together?

*Thank you for your attention*



**Questions??**



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