

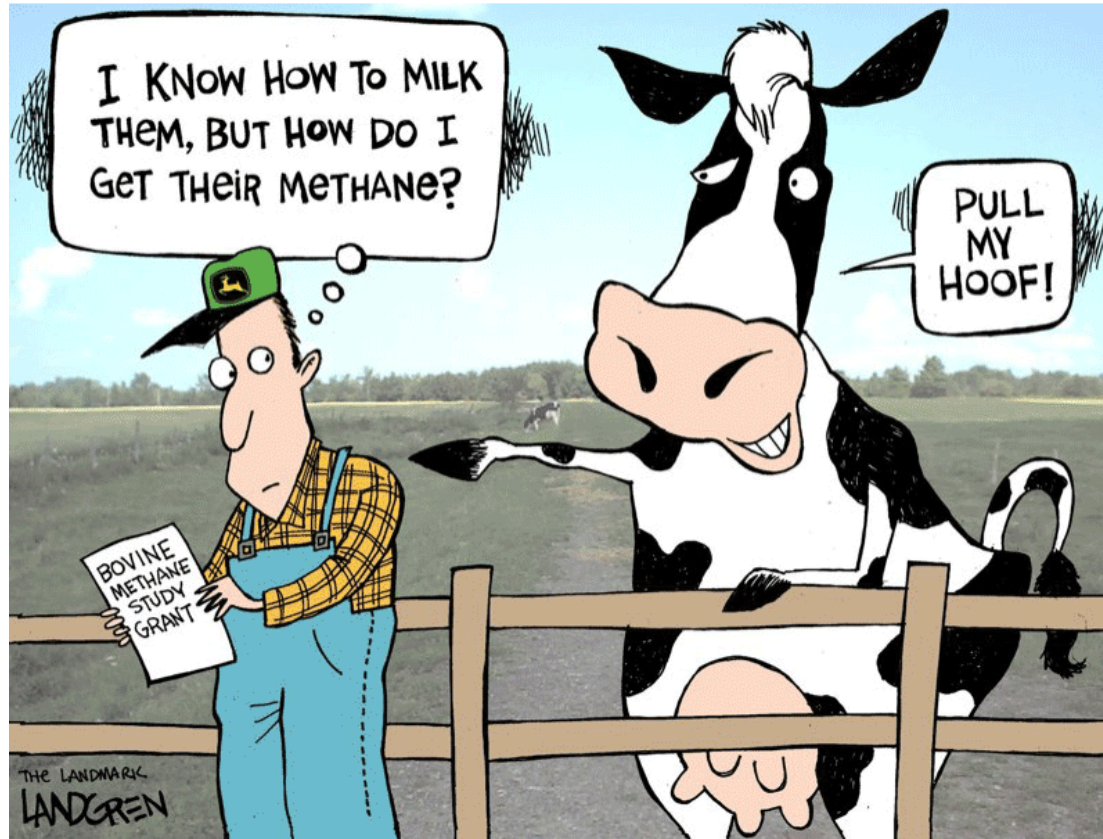


Animal Selection, Genetics and Genomics Network

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METHANE

History

- › Started in 2011 after Auckland meeting
- › First managed by Hutton Oddy AUS and Grant Shackell NZ
- › Now managed by Yvette de Haas NL and Natalie Pickering NZ
- › Focus on methane emission from ruminants

Challenge for genetic analysis

**PRECISE MEASUREMENTS IN
LARGE NUMBERS (+10000)**

Aim of Network

- › common protocols for measurement of methane emissions
- › correlated and productive traits
- › formalised protocols for collection and storage of DNA
- › collection and storage of rumen samples from all animals measured
- › criteria for data sharing and analysis

Strength of Network

- › $1 + 1 > 2$
- › Very interdisciplinary: genetics, nutrition, microbiology, physics
- › Sharing of knowledge, data, text, etc – if you bring some you get some...
- › Joint analysis
- › Joint publications
- › Joint solutions

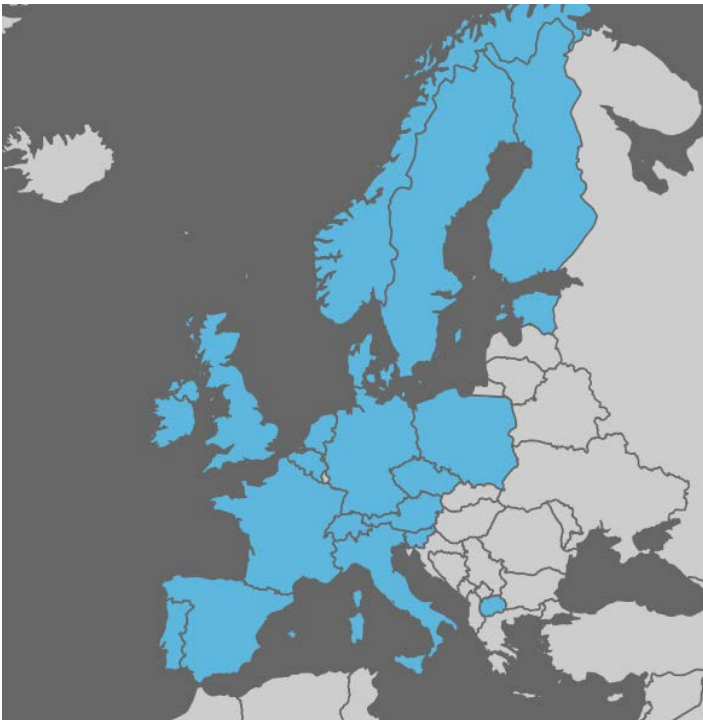
Achievements

- › Homepage www.asggn.org
- › MPWG white paper available on webpage
- › Submitted review on “Genetic possibilities to reduce greenhouse gas emissions in ruminants” for ANIMAL
- › A number of contributions for scientific conferences over the last 3 years

Next activities

- › Next ASGGN meeting in Vancouver at WCGALP on 17th of August
- › Session on "Animal breeding and the environmental challenge" at WCGALP

METHAGENE – EU COST ACTION



- › 4 year network project
- › Comparison of methods
- › Data base
- › Exchange of personnel
- › Workshops
- › ICAR, ASGGN

Methane data in Europe

Person	Country	Breed	Method	Approx. number of animals	Feed data
Yan Tianhai	UK	Hol	SF6/ chamber	1000	X
Jan Lassen	DK	HOL	Sniffer	2500	
Eileen Wall	UK	HOL	La ser	200	X
Phil Garnsworthy	Ruminomics	HOL/ RED	Greenfeed/ sniffer	1000	(X)
Yan Tianhai	UK	BEEF	SF6/ chamber	300	X
Gilles Renand	F	BEEF	Greenfeed	100	X
Yvette de Hass	NL	HOL	Sniffer	100	X
Enyew Negussie	SF	FAY	Sniffer	100	X
Phil Garnsworthy	UK	HOL	Sniffer	2000	
Britt Berglund	Nordic	HOL/ JER/ RED	Sniffer/ greenfeed	500	X
Herman Swalve	D	HOL	la ser	3000 (plan)	
Et al	Europe			1000	(X)
Total				~9000 (12000)	

Possibilities in COST

- › Room for more participating countries from Eastern Europe
- › Money for travels for meetings and STSMs within the COST project
- › Network to get knowledge on methane phenotyping
- › Network to get more data if you have some that you will share
- › Access to courses and meeting in Europe

Without ASGGN we would...

- › Not have a number of projects
- › Not have joint agreement on phenotypes
- › Not have sincere plans on joint databases
- › Not have same sharing of knowledge
- › Not have avoided replications of mistakes/ errors