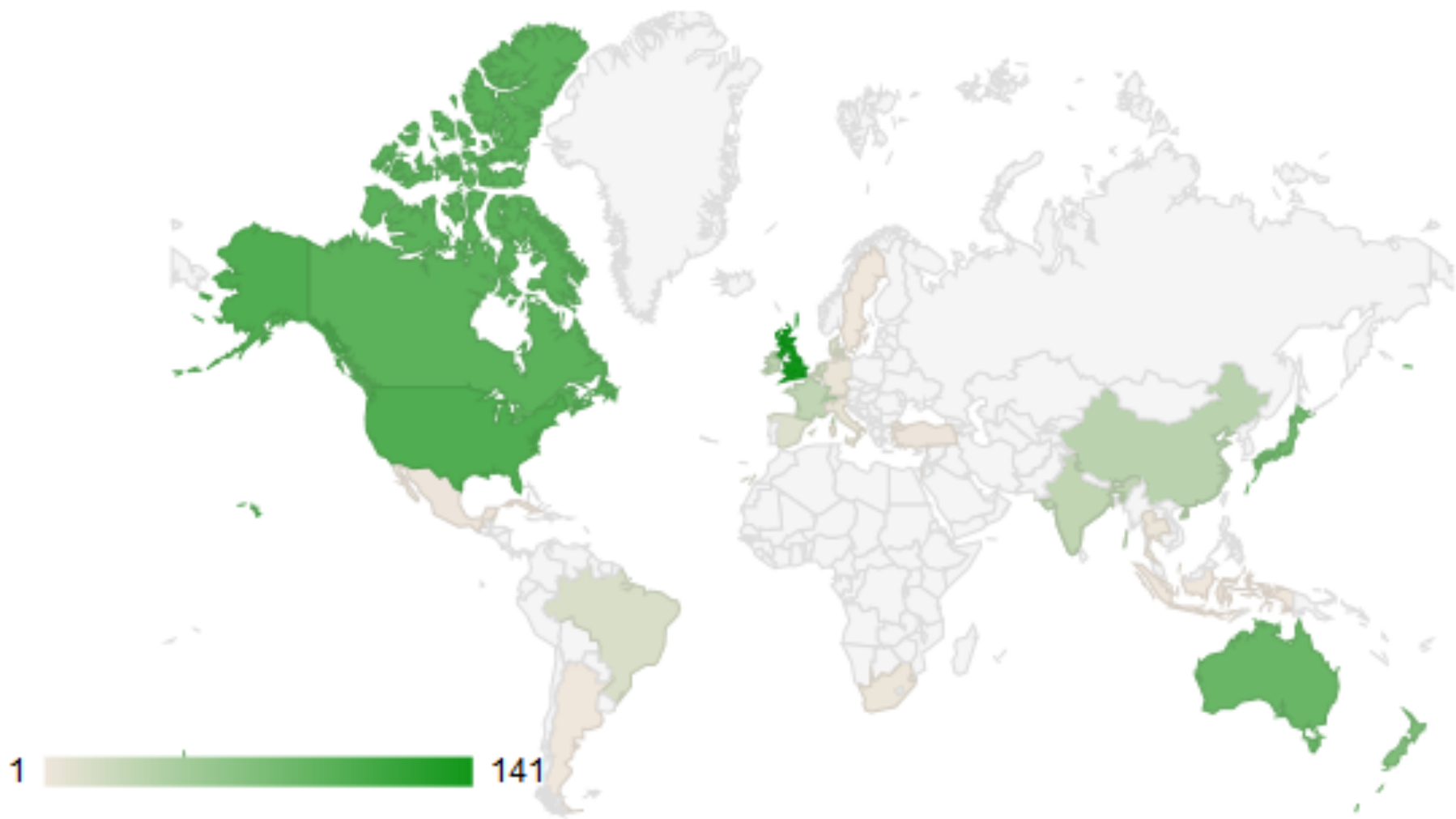




Gateway to ruminant CH<sub>4</sub> mitigation

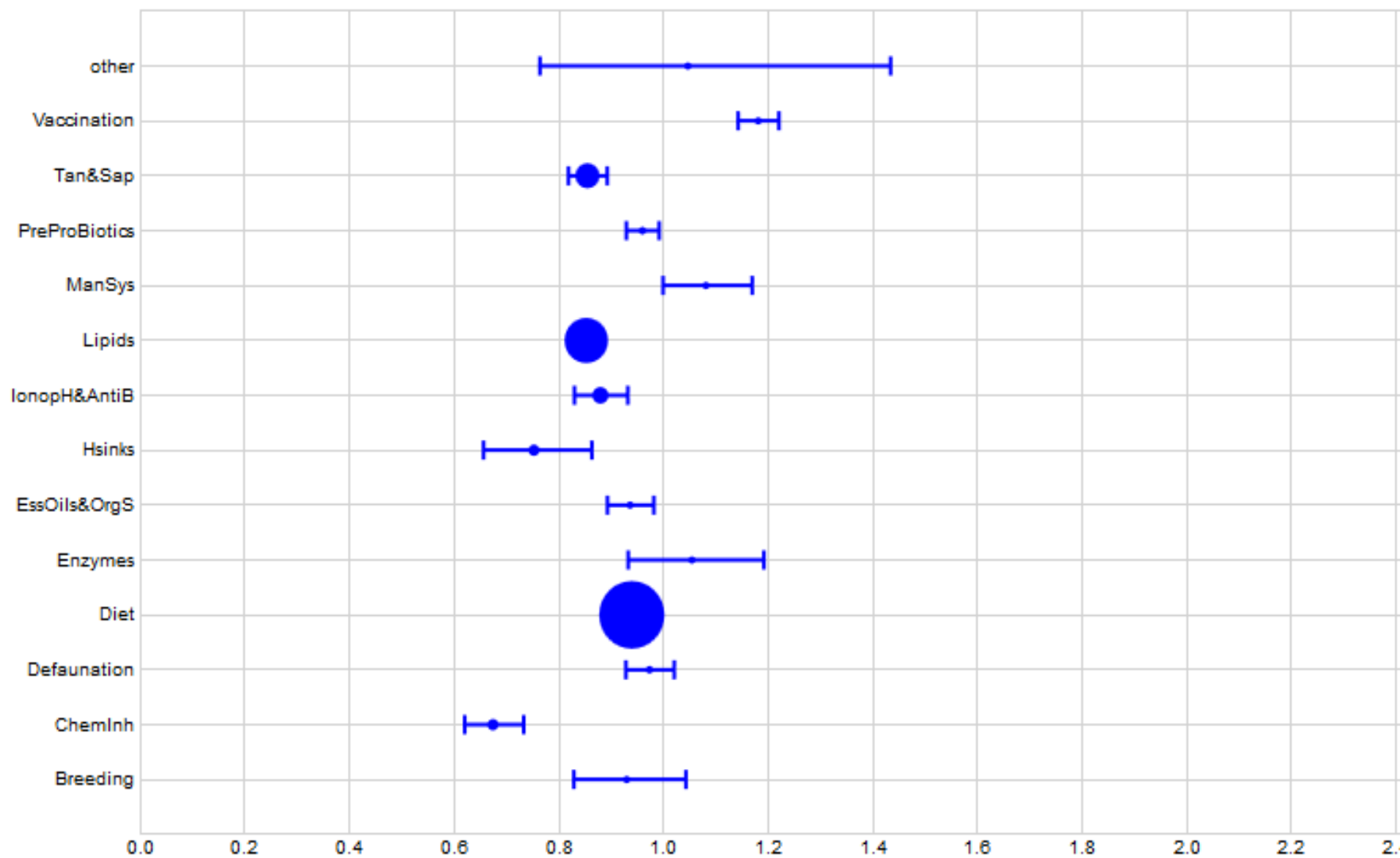
Dr. Eli R. Saetnan  
Aberystwyth University



# Broad meta-analysis

- 147 references selected from database
  - Emission relative to intake
  - Measure of variance reported
- $\log(\text{ratio of means}) + \text{variance}$
- Random effects model using “metafor” in *R*
- Moderators: Animal type, treatment type, duration, dose

# Mean effect size



Mitigate



**Search**

**Production Information**



**Study Information**



**Mitigation Strategies**



**Animal Breeding**

Breeds

RFI

Emissions

Output

Other

**Chemical Inhibitors**

Bromochloromethane

Nitroethane

Carboxylic Acids

Hemiacetal

Other

Author	Year	Reference	Country	Measure	Study Type	Production System
abecia	2012	"Abecia et al. (2012) Effect of bromochloromethane on methane emission, rumen fermentation pattern, milk yield, and fatty acid profile in lactating dairy goats. Journal of Dairy Science, 95, 2027-2036"	Spain	chamber	randomized trial	experimental
		"Adesogan et al. (1998) The chemical				

[Download data as CSV file](#)

# The MitiGate platform

- Flexible platform for future meta-analysis
- Updatable as new research is published
- Quantitative estimates of mitigation potentials and variability

<http://mitigate.ibers.aber.ac.uk/>

