

# Gonzalo Martinez Fernandez

## Academic qualifications

Veterinary Sciences degree, Master degree, PhD

## Employment history

- 2014 – current                      CSIRO Agriculture & Food, Brisbane, Australia  
*Position:*                              Post-doctoral researcher
- 2013 (3 months)                    IBERS Aberystwyth University, UK  
*Position:*                              Research technician
- 2009-2013                            Spanish Research Council (CSIC) (EEZ), Spain.  
*Position:*                              PhD student

## Publications

1. Abecia, et al. 2017. Natural and artificial feeding management before weaning promote different rumen microbial colonization but not differences in gene expression levels at the rumen epithelium of newborn goats. PloS one 12.8: e0182235.
2. **Martinez-Fernandez**, et al. 2017. Phloroglucinol Degradation in the Rumen Promotes the Capture of Excess Hydrogen Generated from Methanogenesis Inhibition. *Frontiers in microbiology* 8: 1871.
3. **Martinez-Fernandez**, et al. 2016. Methane Inhibition Alters the Microbial Community, Hydrogen Flow, and Fermentation Response in the Rumen of Cattle. *Frontiers in Microbiology*, 7:1122.
4. Huang, et al. 2016. Methanogen Diversity in Indigenous and Introduced Ruminant Species on the Tibetan Plateau. *Archaea*. Article ID 5916067, 10 pages.
5. Denman, et al. 2015. Metagenomic analysis of the rumen microbial community following inhibition of methane formation by a halogenated methane analog. *Frontiers in Microbiology*, 6: 1087.
6. **Martinez-Fernandez**, et al. 2015. Response of the rumen microbial ecosystem to anti-methanogenic organosulphur compounds in continuous-culture fermenters. *FEMS Microbiology Ecology*, 91(8).
7. Abecia, et al. 2014. Feeding management in early life influences microbial colonisation and fermentation in the rumen of newborn goat kids. *Animal Production Science*, 2014, 54, 1449–1454
8. Abecia, et al. 2014. An anti-methanogenic nutritional intervention in early life of ruminants modifies ruminal colonization by Archaea. *Archaea*. Article number 841463
9. **Martinez-Fernandez**, et al. 2014. Effects of ethyl-3-nitrooxy propionate and 3-nitrooxypropanol on ruminal fermentation, microbial abundances and methane emissions in sheep. *Journal of Dairy Science*. 97 (6), pp. 3790-3799
10. **Martinez-Fernandez**, et al. 2014. Effects of propyl propane thiosulfinate on nutrient utilization, ruminal fermentation, microbial population and methane emissions in goats. *Animal Feed Science and Technology*, 191: 16-25
11. Mohammadzadeha, et al. 2014. Molecular comparative assessment of the microbial ecosystem in rumen and faeces of goats fed alfalfa hay alone or combined with oats. *Anaerobe*, 29: 52-58
12. **Martinez-Fernandez**, et al. 2013. In vitro-in vivo study of the effects of plant active compounds on rumen fermentation, microbial abundances and methane emissions in goats. *Animal*, 7(12): 1925 - 1934.
13. Abecia, et al. 2013. Nutritional intervention at early life to manipulate the rumen microbial colonization in kids and effects on ruminal metabolism later in life. *Journal of Animal Science*, 91 (10): 4832-4840.
14. Ramos-Morales, et al. 2013. Garlic derived compounds modify ruminal fatty acid biohydrogenation and induce shifts in the *Butyrivibrio* community in continuous-culture fermenters. *Animal Feed Science and Technology*, 184: 38–48.
15. Abecia, et al. 2013. Comparative study of fermentation and methanogen community structure in the digestive tract of goats and rabbits. *Animal Physiology and Animal Nutrition*, 97: 80-88.
16. 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: 2027-4831.