

[Rafael Muñoz-Tamayo](https://sites.google.com/site/rafaelmunoztamayo/home) is researcher at the Systemic Modelling Applied to Ruminants ([MoSAR](https://www6.jouy.inrae.fr/mosar_eng/)) team from the French Institute for Agriculture, Food and Environment (INRAE). Rafael has a bachelor degree in chemical engineering and a Master of Science in automatic control at Universidad Nacional de Colombia. He has a PhD degree in applied mathematics from Université Paris-Saclay. Rafael is a mathematical modeller of biological systems. His research motivation is to develop a quantitative understanding of biological processes using modelling to combine and structure information across disciplines. Rafael’s current research project aims to enhance understanding of the dynamic interplay between the diet, the rumen microbiota and the ruminant animal *via* an interdisciplinary approach that gathers a solid scientific network covering microbiology, chemistry, thermodynamics, bioprocess engineering, animal nutrition, computational biology and mathematical modelling. The ultimate goal is to provide mathematical models that help the design of nutritional strategies for sustainable ruminant production. Rafael has more than [30 scientific publications](https://scholar.google.nl/citations?user=OH8HYM4AAAAJ&hl=en). He is member of the scientific board of the journal [Animal](https://animal-journal.eu/animal-journal/animal-scientific-board/). Rafael is strongly engaged in promoting open science practices and leads the international open science initiative [Peer Community In Animal Science](https://animsci.peercommunityin.org/).