



## Physiology, Nutrition, and Host-Microbiome Interaction in Ruminants

Guest Editors:

**Dr. Franziska Dengler**

Institute of Physiology,  
Pathophysiology and Biophysics,  
Department of Biomedical  
Sciences, University of Veterinary  
Medicine Vienna, 1210 Vienna,  
Austria

**Dr. Susanne Kreuzer-Redmer**

Unit of Nutrigenomics, Institute  
of Animal Nutrition and  
Functional Plant Compounds,  
Department for Farm Animals  
and Veterinary Public Health,  
University of Veterinary Medicine  
Vienna, 1210 Vienna, Austria

Deadline for manuscript  
submissions:

**closed (1 May 2023)**

### Message from the Guest Editors

Dear Colleagues,

In veterinary medicine, we often encounter ruminants as a patient torn between its own metabolic demands and enormous production demands, i.e., milk yield, gestation or meat production. The conflict between animal welfare and animal production is an old but still unsolved problem. Many peculiarities of ruminants' physiology remain to be unraveled and might hold clues to support better husbandry, therapy and prophylaxis. "You are what you eat" seems to apply not only to people, but maybe even more so to ruminants and their gut microbiota, offering a fascinating adaptation to their nutritional niches.

This Special Issue aims to enhance the current understanding of gastrointestinal, metabolic and regulatory physiology and implications for nutrition, as well as to summarize recent progress made in this field. We invite you to contribute original research or review articles covering research on (but not limited to) gastrointestinal physiology, microbiota–host interactions and metabolic adaptation to high yield production.

We look forward to receiving your contributions.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Patrick Butaye**

1. Department of Infectious Diseases and Public Health, Jockey Club College of Veterinary Medicine and Life Sciences, City University of Hong Kong, Kowloon, Hong Kong  
2. Department of Pathobiology, Pharmacology and Wildlife Medicine, Faculty of Veterinary Medicine, Ghent University, 9820 Merelbeke, Belgium

## Message from the Editor-in-Chief

Veterinary Sciences (ISSN 2306-7381) is an international and interdisciplinary scholarly open access journal that aims at publishing research in all fields of veterinary medicine in a democratic way. We encourage scientists to publish their original research articles, reviews, communications, and short notes in as much detail as possible. Articles submitted that involve subjecting animals to unnecessary pain or suffering will not be accepted, and all articles must be submitted with the necessary ethical approval (please refer to the Ethical Guidelines for more information).

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PubAg, AGRIS, and other databases.

**Journal Rank:** JCR - Q1 (Veterinary Sciences) / CiteScore - Q1 (General Veterinary)

## Contact Us

---

Veterinary Sciences Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/vetsci](http://mdpi.com/journal/vetsci)  
[vetsci@mdpi.com](mailto:vetsci@mdpi.com)  
[X@Vetsci\\_MDPI](https://twitter.com/Vetsci_MDPI)