Special Issue

Gut Microbiome Dynamics: Implications for Methane Emissions and Animal Productivity

Message from the Guest Editors

The rumen microbiome refers to the diverse community of microorganisms residing in the rumen and plays a fundamental role in digestion, nutrient metabolism, and the removal of fatal products such as hydrogen and methane. Original research in the following areas is invited for publication in this Special Issue on *Gut Microbiome Dynamics: Implications for Methane Emissions and Animal Productivity*.

- Impact of diet on the rumen/gut microbial community composition;
- Harnessing the effect of diet on the functional capabilities of rumen/gut microbes;
- Strategies for modulating the rumen/gut microbiota for enhancing productivity and minimizing environmental impacts;
- Diet–microbiota interactions and their implications for metabolic diseases;
- Recent developments in the antimicrobial resistance (AMR) gene in animals and the environment.

In addition to the listed research areas, other relevant research articles, if they hold merit, will also be considered for publication.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2024)

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

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