Special Issue

Interplays Between Gut Microbiome and Animal Health, Disease and Production Performance

Message from the Guest Editor

Gut microbial communities have been comprehensively involved in regulating host nutrient utilization, immune homeostasis, and production performance in all kinds of domestic animals. Conversely, both host genetic and non-genetic aspects, such as the genomic architecture, living conditions, health status, and production performance, may have significant impacts on the composition, relative abundances, and dynamic changes in gut microbial species. In this context, we are particularly interested in exploring the interplays between gut microbial communities and animal health and disease, as well as the important production traits in farm animals. The rapid advances in collecting and analyzing multi-omics data have largely facilitated studies in this field. Thus, in this Special Issue, we aim to publish original research, reviews, mini-reviews, and perspectives exploring the mutual influences between gut microbiome and diverse aspects of the host in all kinds of domestic animals.

Guest Editor

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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.

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