Special Issue

Recent Research on Gut Microbiota in Health and Disease

Message from the Guest Editor

The gut microbiota plays a pivotal role in human health and disease by modulating critical physiological processes including nutrient metabolism, cognitive function, and host development. Despite its recognized significance, the precise mechanistic underpinnings remain largely elusive. This Special Issue will highlight diagnostic innovations for microbiota-associated diseases as well as molecular mechanisms of microbiota-mediated health regulation. We particularly encourage submissions utilizing human microbiota-associated (HMA) animal models, and some potential topics include the following:

- Dynamic interplay between gut microbiota and suboptimal health states.
- HMA models for mechanistic studies of human diseases.
- HMA systems in deciphering host-microbe crosstalk.
- Microbial metabolites in immune/neurological modulation.
- Technical advances in cross-species microbiota transplantation.
- Microbiome-based precision health interventions.

Guest Editor

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Message from the Editor-in-Chief

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Editor-in-Chief

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