Special Issue

Editorial Board Members' Collection Series: Gut Microbiota and Host Diseases

Message from the Guest Editors

The gut microbiota plays an important role in a variety of physiological processes such as digestion, immune regulation, and metabolism. Changes in the composition and function of the gut microbiota are closely related to a variety of human diseases, including inflammatory bowel disease (IBD), obesity, diabetes, allergies, and even neurological diseases. A deeper understanding of these associations will help us explore the interaction between gut microorganisms and the host immune system, the impact on nutrient absorption, the production of metabolites, and the regulation of inflammation levels. In addition, studies have shown that regulating the gut microbiome through probiotics, prebiotics, dietary adjustments or fecal microbial transplants (FMT) may become an effective intervention for the treatment or prevention of certain diseases. Further exploration of the interaction mechanism between the gut microbiota and the host will reveal new insights into the pathogenesis of diseases and lay the foundation for the development of personalized microbiome medical methods.

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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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