Special Issue

Host-Associated Microbiome and the Diet-Gut-Brain Axis

Message from the Guest Editors

The human gut microbiome plays a fundamental role in our metabolic, cardiovascular, and immune health. Emerging studies show that the microbes inhabiting our gut also play a role in our neurocognitive health via the intricate gut-brain axis. Diet is one of the strongest regulators and modulators of the gut microbiome. Microbiome modulation by specific dietary/nutritional intervention may improve host brain health via the diet-microbiome-brain interaction. Accordingly, the diet-gut-brain axis is emerging as a primary scientific area of interest for understanding pathophysiological mechanisms, and for discovering novel targets and therapies for different neurological disorders.
This Special Issue aims to bring together state-of-the-art studies pertaining to the role of the bidirectional interactions between the gut-brain axis in host health and diseases, with an emphasis on the dietary, nutritional, and microbiome elements.

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"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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