Special Issue

Immune System and Commensal Microbiota

Message from the Guest Editor

The immune system and commensal microbiota engage in a complex and dynamic interplay that is essential for maintaining host health. This Special Issue of Microorganisms aims to provide a platform for cutting-edge research that explores the bidirectional interactions between commensal microbiota and the immune system. Topics of interest include, but are not limited to, the following:

- The role of commensal microbiota in immune system development and regulation;
- Mechanisms of immune tolerance to commensal microorganisms;
- Microbial metabolites and their immunomodulatory effects on host cells:
- Dysbiosis and its contribution to autoimmune diseases, allergies, chronic inflammation, and granulomatous diseases;
- Gut-brain-immune axis: the role of microbiota in neuroinflammation and neurodegenerative diseases;
- Microbiota-host crosstalk beyond the gut: interactions at the skin, respiratory, and oral mucosal interfaces;
- The impact of host genetics and environmental factors on microbiota-immune interactions;
- Therapeutic strategies targeting microbiota, including probiotics, prebiotics, postbiotics, and fecal microbiota transplantation (FMT).

Guest Editor

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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.

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