



## Molecular Aspects of Microbiota–Gut–Brain Axis Signaling

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### Message from the Guest Editor

Microbiota–gut–brain axis signaling describes the complex bidirectional communication pathways between the gut and the brain. While signals from the brain have multiple well-known regulatory functions on digestion, emerging evidence has shown that the multitude of gut-derived signals is not only relevant for satiety and appetite, but able to modify multiple other brain functions. These signals include neural signals from the enteric nervous system, the vagus nerve and the parasympathetic nervous system, hormonal signals secreted for example by enteroendocrine cells and immune mediators secreted by immune cells. It has become increasingly clear that the microbiota within the gastrointestinal tract including bacteria, viruses, fungi and archaea are also essential players interacting with host cells and producing metabolites able to act locally or even reach the brain. In fact, microbial alterations have been associated with a number of neuropsychiatric diseases.

This Special Issue welcomes both original research articles and review papers that deal with molecules relevant for microbiota–gut–brain axis in health and disease.





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## Message from the Editor-in-Chief

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