

Special Issue

Molecular Insights into Nutritional Neuroscience: Diet, Microbiota, and Brain Function

Message from the Guest Editor

The intricate relationship between diet, gut microbiota, and brain function represents one of the most dynamic and promising areas within molecular neuroscience. Recent advancements in the fields of genomics, metabolomics, and neurobiology have elucidated that nutritional factors and the gut microbial ecosystem exert their effects on the brain through varied molecular mechanisms, including the regulation of gene expression, epigenetic modifications, signal transduction pathways, and the synthesis of neuroactive compounds and metabolites that cross the blood–brain barrier.

This Special Issue will provide an opportunity for research focused on the molecular mechanisms via which diet and the gut microbiota influence brain function in both health and disease. We particularly welcome studies that elucidate signaling pathways, molecular mediators, and omics-based signatures underpinning diet–microbiota–brain interactions. Original research articles presenting novel molecular data and comprehensive reviews summarizing current advances are encouraged.

We look forward to receiving your contributions.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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