

Special Issue

MicroRNAs in Physiology and Pathophysiology

Message from the Guest Editor

MicroRNAs (miRNAs) are well-known members of the ncRNA family. MiRNAs are small, single-stranded RNAs about 22 nucleotides in length that are transcribed from our genome without the capacity to encode proteins. These ncRNAs are critical regulators of gene expression that affect a wide range of physiological processes necessary to maintain cellular homeostasis. On the other hand, the aberrant expression of miRNAs leads to various pathological conditions, particularly neoplastic disease. Binding of miRNAs to tumor suppressor and oncogene mRNAs is associated with cancer initiation, promotion, progression, and metastasis. Importantly, it is known that miRNAs are promising markers also for prediction, disease monitoring, and therapy response in various human disease states. Currently, one of the main goals of miRNA research is to translate this theoretical knowledge into clinical practice. This Special Issue is focused on recent advances in the involvement of miRNAs in physiological and pathological processes leading to different diseases. Discoveries of new molecular targets of miRNAs, miRNA-based diagnostic methods, and therapies are of special interest.

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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