

## Special Issue

# Epigenetic Regulation of Gene Expression

### Message from the Guest Editor

Gene expression in cells is defined by the epigenetic status of the chromatin, including DNA methylation, histone modifications, RNA modifications and noncoding-RNA-mediated regulation. Epigenetic machinery is at the core of an organism's adaptation to a changing environment. The precise mapping of the epigenome requires modern high-throughput profiling technologies and sophisticated analysis tools. The development of next-generation sequencing technologies and associated bioinformatics tools greatly facilitated investigations into epigenetics. The investigation of the epigenome at the systems level, however, requires the integration of data from other omics modalities, e.g., high-resolution imaging technology to visualize chromatin dynamics, genetic engineering to modify epigenomes and methods to integrate epigenomics with disease and physiology. This Special Issue aims to present the latest research regarding the epigenetic regulation of gene expression, as well as the application of omics technologies and statistical and bioinformatic approaches to decipher epigenetic mechanisms. Both original research articles and comprehensive reviews are welcomed.

### Guest Editor

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### Deadline for manuscript submissions

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## International Journal of Molecular Sciences

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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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### Editor-in-Chief

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