

## Special Issue

# Chromatin Organization during Cell Differentiation

### Message from the Guest Editors

Recent studies have highlighted the relevance of the chromosome organization in the cell nucleus for the correct expression of the genes. The two main chromatin compartments, A and B, identified by HiC analyses, are endowed with very different structural and functional properties: the former is very gene-dense and is replicated early on, mainly located in the inner part of the nucleus, and the other is gene-poor and is replicated late, located at the nuclear and the nucleolar periphery. This organization is highly dynamic, allowing a repositioning of genes and chromosomes within nuclei during cell differentiation to correctly reorganize expressing genes. Disturbances in chromatin organization during cell differentiation could be responsible for future genome malfunction, subsequently leading to genetic diseases. In this Special Issue, we aim to publish reviews and original papers covering recent advances in the dynamic reorganization of genes, chromatin and chromosomes within cell nuclei, not only during normal cell differentiation but also in pathological conditions, and we invite colleagues to present papers in this topic.

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### Guest Editors

Prof. Dr. Salvatore Saccone

Dr. Concetta Federico

Prof. Dr. Joanna Bridger

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### Deadline for manuscript submissions

closed (31 January 2023)



## International Journal of Molecular Sciences

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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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

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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