



Epigenetic Bioengineering

Guest Editors:

Dr. Pernette J. Verschure

Swammerdam Institute for Life
Sciences, University of
Amsterdam, Amsterdam, The
Netherlands

Dr. Nate Hathaway

The University of North Carolina
at Chapel Hill, Chapel Hill, NC,
USA

Deadline for manuscript
submissions:

closed (15 March 2021)

Message from the Guest Editors

Epigenetic gene regulation is essential for proper mammalian development and maintains the identity of cells that make up the body. Interestingly, epigenetic regulation exhibits a dual functionality. On one hand, the epigenome is very robust, instructing gene expression patterns that persist over many cell generations. Additionally the epigenome is highly dynamic, able to respond to environmental and developmental signals. Epigenetic fluctuations can allow critical diversification of cell function. Yet, alterations to the epigenome can provide unwanted subclonality such as tumor heterogeneity. Numerous crucial questions regarding the functional output of epigenetic regulation specially in clinical context remain unanswered.

This special issue will be dedicated to the impact of using innovative technologies to infer design principles of epigenetic regulation and the functional output. All explorative studies which enhance the field of epigenetics and bioengineering are welcomed to contribute to this issue.





an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI