



DNA Methylation

Guest Editors:

Prof. Dr. Reinhard Dammann

Institute for Genetics, Justus-
Liebig-University Giessen,
Heinrich Buff Ring 58-62, Giessen
D-35392, Germany

**Assoc. Prof. Alexander
Dobrovic**

Olivia Newton-John Cancer
Research Institute, Heidelberg
(Melbourne), Victoria 3084,
Australia

Deadline for manuscript
submissions:

closed (31 December 2017)

Message from the Guest Editors

Dear Colleagues,

Methylation of cytosine is a long-term epigenetic modification of the genome. Epigenetic deregulation of genes is achieved by aberrant DNA methylation of promoter sequences in different human malignancies, including cancer. The discovery of proteins that oxidase 5-methylcytosine (5mC) to 5-hydroxymethylcytosine (5hmC) has extended our knowledge of how aberrant DNA methylation is coupled to gene regulation in cancer and other human malignancies. Current models propose that 5hmC is an intermediate base in the DNA demethylation process, or a bivalent chromatin marker found in cancer and stem cells.

In this Special Issue of *IJMS* we invite you to submit an original research report or review article deciphering the role of DNA methylation in malignancies, aging or differentiation.

Prof. Dr. Reinhard Dammann
Assoc. Prof. Alexander Dobrovic
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. José L. Quiles

Department of Physiology,
Institute of Nutrition and Food
Technology “Jose Mataix”,
Biomedical Research Center,
University of Granada, Avda.
Conocimiento s/n, 18100 Armilla,
Granada, Spain

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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, CAPus / SciFinder, and other databases.

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