



Genome Editing 2018

Guest Editor:

Prof. Dr. Izuho Hatada

Laboratory of Genome Science,
Biosignal Genome Resource
Center, Institute for Molecular
and Cellular Regulation, Gunma
University, Maebashi 371-8512,
Japan

Deadline for manuscript
submissions:

closed (31 August 2018)

Message from the Guest Editor

Dear Colleagues,

A recent breakthrough is the development of site-specific endonucleases for selective genome cleavage. Because of this method's high efficiency, these endonucleases make it possible to direct gene targeting using fertilized eggs. These enzymes include zinc-finger nucleases (ZFN), transcription activator-like effector nucleases (TALEN), and Cas9 nucleases. The technology using these nucleases is called "genome editing." By using these technologies, we can make knockout organisms, including for most animals and plants, which cannot be created via conventional methods. Through combination with other technologies, genome editing can generate many new technologies, such as epigenome editing, live imaging, and genome-wide screening. The field of genome editing is growing at a surprisingly rapid rate and has had a great impact on basic science, clinical applications, and breeding technologies. The main purpose of this Special Issue is to provide an open-source sharing of significant works in the field of genome editing, so as to archive new technological developments and applications.





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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

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