

Special Issue

Cellular and Molecular Mechanisms in the Developmental Origins of Health and Disease

Message from the Guest Editors

The DOHaD concept suggests that the developmental plasticity of organisms allows them to mount adaptive responses to environmental cues, involving epigenetic regulation of gene expression in differentiating tissues. Epigenetic modifications, including DNA methylation, post-transcriptional modifications of histone, and noncoding RNAs, can permanently affect organ structure and function, resulting in the dysfunction of many systems, such as the metabolic, endocrine, nervous, and immune systems. At the cellular level, the acknowledged importance of epigenetic mechanisms in stem cell biology makes germinal and adult stem cells prime targets of the DOHaD. This Special Issue will cover recent advances in research on cellular and molecular mechanisms in the DOHaD field, revealing new insights into the development of new strategies in the prevention of adult diseases.

Guest Editors

Dr. Jean Pierre Segain

Nantes Université - INRAe, UMR 1280 Physiopathologies des Adaptations Nutritionnelle, IMAD, CRNHO, CHU-Hôtel Dieu, Place Alexis Ricordeau, F-44093 Nantes, France

Dr. Gwénola Le Dréan

Nantes Université - INRAe, UMR 1280 Physiopathologies des Adaptations Nutritionnelle, Institut des Maladies de l'Appareil Digestif, CHU-Hôtel Dieu, Place Alexis Ricordeau, F-44093 Nantes, France

Deadline for manuscript submissions

closed (20 December 2023)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/144384

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

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.

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

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 (Organic Chemistry)