

Special Issue

Obesity and Insulin Resistance: The Dark Sides of Adipose Organ Dysfunction in the Cardiometabolic Continuum

Message from the Guest Editors

Obesity represents a major contributor of the metabolic syndrome, a cluster of cardiovascular risk factors centered on abdominal adiposity and insulin resistance. Although the expansion of the adipose organ is, by definition, the hallmark of obesity, fat mass accrual per se is not sufficient for the development of a “cardiometabolically unhealthy” phenotype.

This Special Issue of IJMS is calling for both original articles and reviews providing a comprehensive picture and elucidation of the complex relationships between adipose organ dysregulation, insulin resistance, and cardiovascular homeostasis. Suitable topics include but are not limited to impairment of adipose precursor cell differentiation and trans-differentiation, role of fat microdepots and brown adipose tissue, as well as the importance of oxidative stress and different adipose-derived mediators (i.e., fatty acids derivatives, lipokines, adipokines, batokines, etc.) in the impairment of cardiometabolic homeostasis. Finally, the potential effect of current and future therapeutic strategies tailored to curb adipose dysfunction and obesity-associated insulin resistance will be highlighted.

Guest Editors

Dr. Giuseppe Murdolo

Department of Endocrinology and Metabolism, Perugia University
Hospital Santa Maria Misericordia, Ospedale di Perugia, 06081 Perugia,
Italy

Dr. Desirée Bartolini

Department of Pharmaceutical Sciences, University of Perugia, 06123
Perugia, Italy

Deadline for manuscript submissions

closed (20 August 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/147051

*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*, 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.

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

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)