

Special Issue

Carbonic Anhydrase and Biomarker Research 2021

Message from the Guest Editor

Carbonic anhydrase is a widely distributed metalloenzyme catalysing the reversible hydration of CO₂ to HCO₃⁻ and H⁺. It plays a fundamental role in a number of physiological processes, including gas exchange, pH homeostasis, electrolyte transport, metabolic reactions, bone resorption, and calcification. Recently, its involvement in several pathological conditions, as well as sensitivity to chemical pollutants, has advanced the research on carbonic anhydrase in the biomarker discovery field. In recent years, alteration in the expression of specific carbonic anhydrase isoforms has been proposed as diagnostic or prognostic biomarkers in the clinical field, mainly in cancer research. Moreover, the sensitivity of specific carbonic anhydrase isoforms to environmental pollutants has given rise to new perspectives in the potential use of carbonic anhydrase as a pollution biomarker. This Special Issue of *IJMS* is aimed to cover the more recent insights into the research of carbonic anhydrase as a promising biomarker in several areas of interest, from human health to environmental sciences.

Guest Editor

Dr. Maria Giulia Lionetto

1. Department of Environmental and Biological Sciences and Technologies (DiSTeBA), University of Salento, Via per Monteroni, 73100 Lecce, Italy
2. National Biodiversity Future Center (NBFC), 90133 Palermo, Italy

Deadline for manuscript submissions

closed (31 May 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/70998

*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 10.0
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 (Inorganic Chemistry)