

## 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  $\text{CO}_2$  to  $\text{HCO}_3^-$  and  $\text{H}^+$ . 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

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### Deadline for manuscript submissions

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## International Journal of Molecular Sciences

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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.

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### Editor-in-Chief

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