

## 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 CO<sub>2</sub> to HCO<sub>3</sub><sup>-</sup> and H<sup>+</sup>. 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

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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Department of Physiology, Institute of Nutrition and Food Technology  
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