





an Open Access Journal by MDPI

# Role of the 2-Oxo Acid Dehydrogenase Complexes in Metabolism: Genetics, Structure and Function

Guest Editors:

#### Prof. Dr. Frank Jordan

Department of Chemistry, Rutgers University, Newark, NJ 07103, USA

#### Dr. Natalia S. Nemeria

Department of Chemistry, Rutgers University, Newark, NJ 07103, USA

Deadline for manuscript submissions:

closed (28 February 2023)

## **Message from the Guest Editors**

The aim of this Special Issue is to bring together the latest research on 2-oxo acid dehydrogenase complexes (OADHc), the key players in cell metabolism, enabling researchers to present their recent findings and to share their opinions on the recent advances in the field. This research topic will enhance our current understanding of protein interactions in metabolism related to human diseases.

# **Keywords**

- neurodegenerative and neurodevelopmental diseases
- 2-oxo acid dehydrogenases pathogenic variants
- mitochondrial dysfunction
- reactive oxygen species (ROS)
- pyruvate,α-oxoglutarate and 2-oxoadipate dehydrogenase complexes
- macromolecular assemblies
- post-translational modifications (PTMs) of proteins by succinylation and glutarylation
- molecular mechanisms of SIRT 5 (NAD+)
- X-ray structures of a disease-causing variants
- cryo-EM reconstruction of macromolecular complexes



Specialsue









an Open Access Journal by MDPI

#### **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

### **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.

#### **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 (Inorganic Chemistry)

#### **Contact Us**