



Progress in Glucose Metabolism

Guest Editor:

Dr. Dirk Roosterman

LWL-Hospital of Psychiatry, Ruhr-
Universität Bochum, Bochum,
Germany

Deadline for manuscript
submissions:

closed (15 February 2021)

Message from the Guest Editor

Dear Colleagues,

The concept of glucose metabolism (GM) is well established. Unrecognized didactics rule the established concept. This Special Issue focuses on whether cytosolic-generated NADH-H⁺ is actually NADH and is directly recovered to NAD⁺ in the mitochondria or whether more complicated metabolic steps must be considered. Many researchers have different, well-established concepts of GM in mind. In addition to recovery of ATP, glucose and glucose metabolites have been shown to directly trigger the release of interleukins, growth factors, insulin, or TNF α . GAPDH participates in the repair of DNA damage as well as in redox regulation of transcription factors. ATP-driven Ca²⁺/H⁺ antiporter and metabolic adenylyl cyclase link GM to Ca²⁺ and cAMP signaling pathways. The expression of constitutively active G protein-coupled receptors can permanently change GM. The aim of this Special Issue is to collect a wide range of topics relating to the field of GM. Reviews and experimental manuscripts are welcome. Contrary points of view are welcome and necessary.





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

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI