

Special Issue

Gaseous Transmitters and Cardiovascular System

Message from the Guest Editors

In the last two decades, a large body of experimental evidence has demonstrated that gaseous transmitters, which have signaled the end of the traditional concept of intercellular signalization, might play a crucial role in cardiovascular system regulation. Unlike classical messengers, they are not readily stored in vesicular structures, are re-synthesized as needed, and affect cellular metabolism in a more immediate fashion. Hydrogen sulfide (H₂S) and carbon monoxide (CO), next to nitric oxide (NO), are the most recently studied endogenous gaseous mediators, and their role in the regulation of cardiovascular system physiology and pathophysiology has been emphasized. This Special Issue is focused on the role of NO, H₂S, and CO in the regulation of the cardiovascular system under both normal and pathological conditions. This Special Issue welcomes original research articles and reviews on all aspects of the molecular mechanisms and functional action of gaseous transmitters as well as those on the effectiveness of their donors in experimental or clinical studies.

Guest Editors

Dr. Sona Cacanyiova

Slovak Academy of Sciences, Bratislava, Slovakia

Dr. Satomi Kagota

Department of Pharmacology, School of Pharmacy and Pharmaceutical Sciences, Mukogawa Women's University, Nishinomiya 663 8184, Japan

Dr. Andrea Berenyiova

Center of Experimental Medicine of Slovak Academy of Sciences, Institute of Normal and Pathological Physiology, 841 04 Bratislava, Slovakia

Deadline for manuscript submissions

closed (31 August 2022)



Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/43860

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)





Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)



About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)