



Sterol Biosynthesis and Function in Organisms

Guest Editor:

Dr. Hubert Schaller

Institut de Biologie Moléculaire
des Plantes, CNRS, Université de
Strasbourg, 67084 Strasbourg,
France

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editor

Sterols are mandatory components of cellular life in eukaryotes. The astonishing variations of the sterolome and the sterol biosynthetic and genetic machinery in organisms are unveiled as genomes are sequenced and functionally analyzed. New enzymes are revealed besides the so-called canonical mevalonate-isoprenoid sterol pathways described in a few models. Sterol-autotroph as well as sterol-auxotroph organisms carve their sterol components for dedicated functions that may differ in the many different eukaryotic lineages. The complexity of the evolutionary history of sterol pathways is not restricted to the latter since a few bacterial phyla contain species that produce sterols.

In this Special Issue, sterol biosynthesis, metabolism and genetic regulation, and structural and biological functions of sterols and sterol conjugates, will be explored in an organismal perspective. Relevant chemical and biochemical tools are part of the strategies to address sterol functions in various cellular processes of crucial importance.





an Open Access Journal by MDPI

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

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.

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 & Molecular Biology*) / CiteScore - Q1 (*Biochemistry*)

Contact Us

Biomolecules Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/biomolecules
biomolecules@mdpi.com
[X@Biomol_MDPI](https://twitter.com/Biomol_MDPI)