Special Issue

Sterol Biosynthesis and Function in Organisms

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.

Guest Editor

Dr. Hubert Schaller

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

Deadline for manuscript submissions

closed (20 January 2025)

Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/180739

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

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

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)

MDPI