Special Issue

Drosophila as a Model System to Study Metabolism

Message from the Guest Editor

Defects in cellular and organismal metabolism can result in a number of diseases including obesity and type 2 diabetes, which are very prevalent worldwide. Increasing our knowledge of how metabolism is controlled is essential to better understand the pathogenesis of these diseases; however, studying metabolism in humans is very challenging. An organism that has recently emerged as a model system to study metabolism is the fruit fly, *Drosophila melanogaster*. Drosophila is an excellent system in which to study metabolism due to its short generation time and lifespan and the high similarity of its genes, cellular and biochemical pathways, and cellular and organ physiology with mammals. In addition, there are many genetic tools available in *Drosophila* that allow each gene in the genome to be manipulated. With this Special Issue, we aim to bring together a wide range of Drosophila researchers studying many diverse aspects of metabolism in the hope of highlighting the many important discoveries that can be made with flies; this research can ultimately be used to gain a more thorough understanding of metabolic biology in a wide range of biological systems.

Guest Editor

Dr. Justin R. DiAngelo

Division of Science, Pennsylvania State University, Berks Campus, Reading, PA 19610, USA

Deadline for manuscript submissions

31 October 2025



Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/196028

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



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)

