

Special Issue

Cellular and Molecular Basis of Parasite Infection

Message from the Guest Editors

Parasite infections are complex biological processes that involve intricate interactions between the parasite and the host at both cellular and molecular levels. Understanding these interactions is crucial for developing effective treatments and preventive measures. At the cellular level, parasites often invade host cells, utilizing the host's cellular machinery to replicate and evade the immune system. On a molecular level, parasites secrete various molecules that manipulate host cell functions. These molecules can interfere with signaling pathways, immune responses, and cellular metabolism. For example, the *Trypanosoma brucei* parasite, which causes African sleeping sickness, uses a process called antigenic variation to change its surface glycoproteins, helping it evade the host's immune system. Research in this field focuses on identifying the specific cellular and molecular mechanisms parasites use to infect hosts and how hosts respond to these infections. This knowledge is essential for developing new drugs, vaccines, and diagnostic tools to combat parasitic diseases.

Guest Editors

Dr. Adekunle Sanyaolu

D'Youville University, Buffalo, NY 14201, USA

Dr. Ricardo Izurieta

School of Public Health and Health Sciences, College of Health, Human Services and Nursing, California State University Dominguez Hills, Carson, CA, USA

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

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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

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