

Special Issue

Molecular Genetics of Parasitic Protozoa

Message from the Guest Editor

Parasitic protozoa are significant zoonotic agents, many of which are recognized as One Health concerns due to their ability to infect both humans and animals. Species such as *Toxoplasma*

gondii, *Plasmodium* spp., *Leishmania* spp., and *Trypanosoma* spp. cause severe diseases worldwide, posing major public health challenges. A deeper understanding of their molecular genetics is essential to uncover transmission routes, population dynamics, drug resistance, and phylogenetic evolution. All warm-blooded animals, including birds, livestock, and wildlife, play essential roles in parasite life cycles and may serve as significant sources of human infection, especially through the consumption of contaminated or undercooked meat. Recent advances in genomics and molecular tools offer new opportunities for improved diagnosis, control strategies, and vaccine development. This Special Issue welcomes original research and reviews focusing on molecular genetics, immunology, epidemiology, and evolutionary studies of parasitic protozoa, aiming to advance our knowledge and support effective prevention and management of protozoan diseases.

Guest Editor

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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.

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