



genes



an Open Access Journal by MDPI

Whole-Genome Sequencing and Population Genomics of Parasitic Infections

Guest Editor:

Dr. Asis Khan

Laboratory of Parasitic Diseases,
National Institute of Allergy and
Infectious Diseases, National
Institute of Health, Bethesda, MD
20892, USA

Deadline for manuscript
submissions:

closed (25 November 2020)

Message from the Guest Editor

Parasitic diseases contribute substantially to the global burden of disease. In the absence of vaccines, the prevention of these parasitic diseases relies solely on chemotherapy. Thus, there is an urgent need to broaden therapeutic horizons against these parasitic infections, and to do so, we need to have comprehensive knowledge of their life cycles, their genomes, and their population genetic structures. This understanding is critical to evaluating the impact of transmission methods in fixing and spreading important genes related to virulence and drug resistance through populations. With the advent of next-generation sequencing (NGS), comparative genomics has revolutionized our understanding of the architecture of parasitic genomes and how they are evolving and establishing within the population, including the role of asexual versus sexual recombination in this process. Hence, the overarching theme of this Special Issue is the recent advances in NGS, comparative genomics, and evolution analysis that have accelerated the field's progress in understanding population genomics and in developing new therapeutics against these parasitic diseases.



mdpi.com/si/44917

Special Issue



genes



an Open Access Journal by MDPI

Editor-in-Chief

**Prof. Dr. Selvarangan
Ponnazhagan**

Experimental Cancer
Therapeutics, The University of
Alabama at Birmingham, 1825
University Blvd., SHEL 814,
Birmingham, AL 35294-2182, USA

Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

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, PubAg, and other databases.

Journal Rank: JCR - Q2 (Genetics and Heredity) / CiteScore - Q2 (Genetics (clinical))

Contact Us

Genes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/genes
genes@mdpi.com
[X@Genes_MDPI](https://twitter.com/Genes_MDPI)