







an Open Access Journal by MDPI

Genomics of Host-Pathogen Interactions

Guest Editors:

Prof. Dr. Davide Roncarati

Department of Pharmacy and Biotechnology (FaBiT), University of Bologna, 40126 Bologna, Italy

Dr. Maria Letizia Di Martino

Science for Life Laboratory, Department of Medical Biochemistry and Microbiology, Uppsala University, Sweden

Deadline for manuscript submissions:

closed (10 September 2020)

Message from the Guest Editors

Dear Colleagues,

Host–pathogen interactions can be seen as a battle between two competitors. On one side, the pathogen employs several virulence factors to exploit the host. On the other side, the host counteracts with immune defense responses to clear the pathogen or reduce its deleterious effects. The genomics revolution has profoundly changed our perspectives in the field of infection biology. The development of high-throughput sequencing approaches has switched host–pathogen interaction studies from the single gene to the genome-wide perspective. Now, fitness effects as well as gene expression can be analysed in thousands of genetic loci on both the pathogen and the host side. This emerging trend in infection biology provides us with a complex tool to understand host–pathogen interactions at a previously unattainable level.

This Special Issue of *Genes* will address the main advances in the field of host–pathogen interaction, with a particular emphasis on genomics approaches employed to shed light on the complex interactions of bacterial pathogens with their hosts and/or host cells.

Prof. Davide Roncarati Dr. Maria Letizia Di Martino *Guest Editors*













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan

Department of Pathology, The University of Alabama at Birmingham, 1825 University Blvd, SHEL 814, Birmingham, AL 35294-2182, USA

Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving 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 & Heredity*) / CiteScore - Q2 (*Genetics*)

Contact Us