



an Open Access Journal by MDPI

When Genes Meet Microbial Ecology and Evolution

Guest Editor:

Dr. Renmao Tian

Institute for Food Safety and Health, Illinois Institute of Technology, Chicago, IL 60501, USA

Deadline for manuscript submissions: closed (10 February 2023)

Message from the Guest Editor

When genes meet microbial ecology and evolution, there are so many stories happening.

Microbial communities play an important role in the biogeochemical cycles of the planet and support for life. Microbial ecology studies the diversity, structure, and distribution of microbial communities, as well as their interaction with each other and with environmental factors. Microbial evolution explores the adaptation of microorganisms to the environment via genetic change under selective pressure. Different from the traditional ecology of macro-organisms, the microbial species cannot be quantified through counting due to the small size of cells. To overcome this barrier, gene-based technologies have been used to quantify the relative abundances of species in a community in a highly efficient way.

This Special Issue tells stories of microbial ecology and evolution using gene-based technologies (marker gene amplicon, genome, transcriptome, etc.). It will cover topics of but not be limited to microbial genomics, environmental microbiology, microbial diversity, host-microbe interaction, medical microbiology, and any other fields in the scope of microbial ecology and evolution.









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 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