

Special Issue

Interaction between Oral Microbiota and Immunity in Health and Diseases

Message from the Guest Editors

The oral microbiota is composed of biofilms, complex multicellular structures containing microorganisms embedded within a self-produced extracellular matrix, with the ability of interspecies communication. Biofilms are the causative agents of oral diseases like gingivitis, periodontitis, and caries. Gaining a better understanding of the pathogenic potential of microorganisms has been a key area of oral and dental research with the aim to develop novel antimicrobial therapies and early detection methods.

Effector cells of innate and acquired immunity maintain homeostasis in healthy oral conditions but can contribute to disease and mediate host tissue destruction in periodontitis. This collateral damage and the communication between host cells during antimicrobial defense have been another research focus identifying new targets for the prevention and treatment of oral diseases.

This Special Issue includes the latest research in the field of host-microbiota interactions and microbial communication in oral health and disease, providing further insight into pathobiological mechanisms and highlighting possible diagnostic and therapeutic approaches.

Guest Editors

Dr. Josefine Hirschfeld

The School of Dentistry, University of Birmingham, Birmingham, United Kingdom

Dr. Sarah A. Kuehne

The School of Dentistry, University of Birmingham, Birmingham, United Kingdom

Deadline for manuscript submissions

closed (31 May 2023)



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/131971

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

[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)





Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)



About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Toxicology, UFZ-Helmholtz Centre for
Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).