Special Issue

Microbiome in Fish and Their Living Environment

Message from the Guest Editors

Over the past few decades, aquaculture has emerged as one of the fastest-growing food-producing sectors, playing a crucial role in providing quality protein for human beings. Globally, the total aquaculture production reached 130.9 million tons in 2022, and fish species account for 53% of this amount. Thus, fish farming plays a vital role in the global aquaculture industry. Fish are the most diverse group of vertebrates, and there are huge quantities of microorganisms in the gut of fish. The immunity of fish can shape the intestinal microbiota and maintain intestinal homeostasis. Additionally, the intestinal microbiomes can control the abundant proliferation of pathogenic microorganisms and regulate the immunity of fish. Dietary composition has huge impacts on microbiomes in fish gut and their living environment, thus regulating intestinal health and disease resistance. In this collection, we welcome papers that provide insights on the effects of dietary input on the gut microbiome of fish, interactions between gut microbiomes and fish immunity, and interactions between the gut microbiomes of fish and their living environment.

Guest Editors

Dr. Yongjun Chen
College of Fisheries, Southwest University, Chongqing, China
Dr. Gang Yang
Department of Fisheries Science, School of Life Science, Nanchang University, Nanchang 330031, China

Deadline for manuscript submissions

closed (10 November 2025)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/222006

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

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

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 20 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).

MDPI