

Special Issue

Marine Natural Products and Gut Microbiota: From Interactions to Metabolic Health

Message from the Guest Editors

Gut dysbiosis, impaired intestinal barriers, and chronic inflammation are central drivers of metabolic disorders including obesity, diabetes, IBD, and NAFLD. Despite progress, effective nutritional interventions remain limited. The ocean represents an underexplored reservoir of unique bioactive compounds. Marine natural products, particularly polysaccharides (e.g., fucoidan, alginate, chitosan), polyphenols, and peptides, demonstrate promise in modulating gut microbiota composition, enhancing intestinal barrier function, regulating microbial metabolites (SCFAs, indoles, bile acids), and mitigating gut inflammation. This Special Issue highlights cutting-edge research on marine-derived bioactives for gut health, with a focus on molecular targets and mechanistic insights. We welcome innovative approaches, including fermentation models, in vivo studies, organoids, 3D co-cultures, and multi-omics analyses. Contributions from academia and industry of original research, reviews, and concept papersexploring synergies with probiotics, prebiotics, or existing therapies, as well as immunomodulatory and barrier-protective effects, are strongly encouraged.

Guest Editors

Dr. Xiaoqiong Li

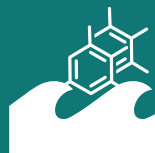
State Key Laboratory for Quality and Safety of Agro-Products, Institute of Food Sciences, Zhejiang Academy of Agricultural Sciences, Hangzhou 310021, China

Prof. Dr. Yadong Zhao

School of Food and Pharmacy, Zhejiang Ocean University, Zhoushan, China

Deadline for manuscript submissions

30 November 2026



Marine Drugs

an Open Access Journal
by MDPI

Impact Factor 5.7
CiteScore 11.6
Indexed in PubMed

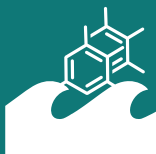


mdpi.com/si/281636

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

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





Marine Drugs

an Open Access Journal
by MDPI

Impact Factor 5.7
CiteScore 11.6
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

During the past few decades there has been an ever increasing number of novel compounds discovered in the marine environment. This is exemplified by the robust preclinical and clinical pipeline that currently exists for marine natural products. *Marine Drugs* is inviting contributions on new advances in marine biotechnology, pharmacology, chemical ecology, synthetic biology, and genomics approaches related to the discovery of therapeutically relevant marine natural products. Our goal is to share your contribution in a timely fashion and in a manner that will be valued by the scientific community.

Editor-in-Chief

Prof. Dr. Bill J. Baker

Department of Chemistry, University of South Florida, 4202 E. Fowler Ave., CHE 205, Tampa, FL 33620-5250, USA

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, MarinLit, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmacology, Toxicology and Pharmaceutics (miscellaneous))