

Special Issue

Marine Genomics and Metabolomics

Message from the Guest Editors

Marine natural product (MNP) discovery strategies can be classified into two main categories, namely top-down and bottom-up approaches. Top-down approaches do not rely on previous knowledge of MNP biosynthetic gene clusters, and start with sample collection for microbial isolation or chemical extraction. Then, bioassay-guided fractionation and/or the metabolomic profiling of crude extracts lead to the isolation of bioactive hits for structural characterization. Bottom-up approaches mainly employ genome mining, functional genomics, and genetic engineering to elicit the production of MNPs, often encoded by cryptic genes. Linking genomics and metabolomics has given new momentum to the identification of bioactive compounds from marine macro- and microorganisms. Therefore, this Special Issue invites articles on either genomic or metabolomic dereplication studies on marine macro- and microorganisms leading to the discovery and structural elucidation of novel secondary metabolites. We particularly welcome articles that integrate genomics and metabolomics to chart metabolic diversity in bacterial/fungal isolates as well as microbial communities.

Guest Editors

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Deadline for manuscript submissions

31 August 2025



Marine Drugs

an Open Access Journal
by MDPI

Impact Factor 5.4
CiteScore 10.1
Indexed in PubMed



mdpi.com/si/230368

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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

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