



an Open Access Journal by MDPI

# Multiomics and Machine Learning for the Discovery and Classification of Marine Specialized Metabolites

Guest Editors:

#### Prof. Dr. Raphael Reher

Institute of Pharmaceutical Biology and Biotechnology, University of Marburg, Marburg, Germany

#### Prof. Dr. Till F. Schäberle

Institute for Insect Biotechnology, Justus-Liebig-University Giessen, Giessen, 35392, Germany

Deadline for manuscript submissions: closed (30 June 2023)



mdpi.com/si/153194

### **Message from the Guest Editors**

Dear Colleagues,

Once neglected, marine organisms have been demonstrated to be a fruitful source of marine-specialized metabolites with unique structures and bioactivities.

Third-generation sequencing techniques and open source FAIR metabolomics databases such as MASSIVE offer vast amounts of highly complementary data. Recent efforts linking metabolomics and genomics data have resulted in the paired-omics database that has started various multiomics research projects.

Additionally, analytical NMR and MS methods for the classification of whole metabolomes, as well as the structure elucidation of prioritized specialized metabolites, have been revolutionized by the implementation of machine learning techniques.

This Special Issue invites articles from both multiomicsand machine learning-driven studies on marine organisms, with a focus on marine-specialized metabolites discovery and metabolome classification. High-quality metabolomics-based studies are also welcome.

Prof. Dr. Raphael Reher Prof. Dr. Till F. Schäberle *Guest Editors* 







an Open Access Journal by MDPI

## **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

## 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.

# **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))

## **Contact Us**

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