



an Open Access Journal by MDPI

Enzymes and Ice Binding Proteins from Marine Cold-Adapted Organisms

Guest Editors:

Prof. Dr. Marina Lotti

Department of Biotechnology
and Biosciences, University of
Milano-Bicocca, Milano, Italy

Dr. Marco Mangiagalli

Department of Biotechnology
and Biosciences, University of
Milano-Bicocca, Milano, Italy

Deadline for manuscript
submissions:

closed (15 December 2020)

Message from the Guest Editors

Dear Colleagues,

Cold environments host a surprising biodiversity and are an amazing source of bioactive molecules with particular properties evolved by organisms to cope with physiological stresses they experience in the cold.

This Special Issue focuses on two major adaptive strategies evolved by marine cold-adapted organisms: enzymes active at low temperature allowing efficient catalysis at low temperature, and ice-binding proteins (IBPs) that counteract the formation of ice crystals. Physiological and mechanistic issues will be tackled, as well as possible technological applications with particular attention paid to their relevance to human health, for example in the cryopreservation of tissue and organs, and lifestyle (e.g., food processing and preservation).

Prof. Dr. Marina Lotti
Dr. Marco Mangiagalli
Guest Editors



mdpi.com/si/36178

Special Issue



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](#)