Special Issue

Genomic Prediction and Functional Genomics in Aquaculture

Message from the Guest Editors

This Special Issue focuses on two major research areas: genomic prediction/selection and functional genomics in aquaculture. Topics include but are not restricted to the following:

- Genomic prediction for complex quantitative traits of commercial importance in aquaculture species
- Development and use of advanced on-farm data collection systems for improving aquaculture breeding programs
- Relationship between genotype and phenotype on a genome-wide (genome-, transcriptome-, proteome-, metabolome or epigenome-wide) scale
- Utilization of 'natural' genetic variation to enhance aquaculture breeding
- Functional genomic resources, such as expressed sequence tags, full-length cDNAs, and gene expression profiles
- Understanding and manipulating key biological genetic pathways for genetic improvement of important aquaculture species
- RNA silencing and CRISPR/CAS9 applications in aquaculture
- Bioinformatics tools that integrate and analyze data obtained from multiple 'omics' platforms
- Improving aquaculture genetic improvement programs through the incorporation of G×E effects.

Guest Editors

Dr. Nguyen Hong Nguyen

Faculty of Science, Health, Education & Engineering, University of the Sunshine Coast, Maroochydore, Australia

Prof. Dr. Kyall Zenger

Centre for Sustainable Tropical Fisheries and Aquaculture and College of Science and Engineering, James Cook University, Townsville, QLD 4811, Australia

Deadline for manuscript submissions

closed (30 June 2021)

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/si/29223

Journal of Marine Science and Engineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmse@mdpi.com

mdpi.com/journal/jmse

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/journal/jmse

MDPI

About the Journal

Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (*JMSE*; ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi
School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

Author Benefits

High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).