Special Issue

Genetic Breeding and Developmental Biology of Aquaculture Animals

Message from the Guest Editors

The strategic cultivation of high-quality varieties is critically important for the sustainable and efficient progression of the aquaculture sector. A thorough understanding of the developmental processes associated with the economic characteristics of aquaculture organisms is essential. Such knowledge enhances our grasp of the molecular mechanisms governing these traits, providing a solid scientific basis for their genetic enhancement. The rapid evolution of molecular biology techniques, notably advanced transgenic and gene editing methodologies, coupled with high-throughput sequencing, has substantially enriched our understanding of the genetic underpinnings of aquaculture species.

Novel and emergent breeding technologies such as genome-wide selection, precision molecular-assisted breeding, and modular breeding approaches offer more precise and efficient avenues for genetic improvement. This Special Issue is dedicated to exploring the molecular mechanisms involved in the formation of economic traits in aquaculture animals and delves into the latest research on efficient genetic breeding strategies.

Guest Editors

Dr. Zhi Ye

College of Marine Life Sciences, Ocean University of China, Qingdao 266003, China

Dr. Baofeng Su

School of Fisheries, Aquaculture and Aquatic Sciences, Auburn University, Auburn, AL 36849, USA

Deadline for manuscript submissions

closed (15 November 2024)

Fishes

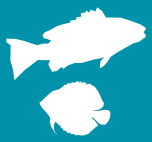
an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 3.0

mdpi.com/si/191785

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

mdpi.com/journal/fishes



Fishes

an Open Access Journal by MDPI

Impact Factor 2.4
CiteScore 3.0

mdpi.com/journal/fishes

About the Journal

Message from the Editor-in-Chief

Fishes is a multidisciplinary open access journal focusing on reports of original research and critical reviews and synthesis from the broad area of fishes and aquatic animals. The ultimate objective of *Fishes* is to facilitate the discovery of connections between research areas, advancing science and filling knowledge gaps, and providing solutions for all present and future issues encountered in the sector of fisheries and aquaculture. As Editor-in-Chief, I encourage you to consider *Fishes* for your scientific papers and would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Maria Angeles Esteban
Department of Cell Biology and Histology, Faculty of Biology, University of Murcia, 30100 Murcia, Spain

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), PubAg, FSTA, and other databases.

Journal Rank:

JCR - Q1 (Marine and Freshwater Biology) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.9 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

MDPI