

Special Issue

Molecular Design Breeding in Aquaculture

Message from the Guest Editors

In the burgeoning domain of aquaculture, the advent of precision molecular design breeding and bio-breeding technologies has positioned itself at the vanguard, heralding an epoch of unprecedented efficiency and specificity. This thematic issue is dedicated to the elucidation of the latest advances in the identification of key genes that govern the economically significant traits in aquatic species, leveraging multi-omics strategies such as resequencing and transcriptomics. These traits, which include growth, disease resistance, coloration, reproduction, sex control, and ploidy regulation, are paramount for the economic feasibility of aquaculture. We delve into the innovative development of molecular markers, gene editing, transgenic technologies, germline stem cell transplantation, and chromosomal engineering, which are pivotal for the expedited generation of superior germplasm.

Guest Editors

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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

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