

Special Issue

The Applications of Genome Editing and Genomics in Aquaculture

Message from the Guest Editors

Genome editing opens avenues for targeted genome modifications. This technology can be applied in aquaculture to manipulate almost all genes by means of gene insertion, modification, or knockout. In aquaculture, genome editing provides an efficient approach to study functional genomics. Understanding gene function can also assist in selecting the best individuals for selective breeding programs and commercial production. Genome editing can also be used for gene insertion at specific genomic targets to generate transgenic fish in a more precise and effective way, as well as to illuminate molecular mechanisms of biological processes and generate fish models to study diseases. This Special Issue focuses on genome editing and genomics, and their applications in aquaculture including—but not limited to— gene knockout, gene insertion, gene correction or modification, study of functional genomics, gene interactions with other genes and the environment, transcriptomics, genome-wide association studies, genomic selection, functional genomics, and the development of genome-scale technologies and their applications in aquaculture.

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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.

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