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## Genetic Breeding and Developmental Biology of Aquaculture Animals

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### 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.



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# Special Issue



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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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