

## Special Issue

# Molecular Mechanisms of Fish Sex Differentiation and Sexual Plasticity

### Message from the Guest Editors

The molecular mechanisms of sex determination is quite conserved in vertebrates, and an understanding of the mechanisms will contribute to the evolutionary pathways of sex determination mechanisms in all vertebrates. The sex determination and differentiation of fish is primitive, diverse, and changeable, and investigations of the genetics and epigenetic mechanisms of fish sex determination will promote the understanding of the mechanisms of the interaction between the environment and the organisms. The scope of this Special Issue includes, but is not limited to:

- The molecular mechanisms of fish sex determination and differentiation;
- The influence of environmental factors on sex determination in fish;
- Studies on the role of the sex chromosome composition of primordial germ cells in sex determination;
- The development of new sex genetic markers and analytic tools;
- The development of artificial sex control technology and breeding of mono-sex populations in fish;
- The selective breeding of cultured aquatic and marine mono-sex animals.

### Guest Editors

Prof. Dr. Linyan Zhou

Dr. Hong-Wei Yan

Dr. Li-Min Wu

Dr. Tapas Chakraborty

### Deadline for manuscript submissions

31 August 2025



## Fishes

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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.

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### Editor-in-Chief

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