# Special Issue

# Omic Study and Genes in Fish Sex Determination and Differentiation

## Message from the Guest Editors

Unlike the conservation of the sex-determining gene SRY in mammals, a series of sex-determining genes have been identified in fish including dmrt1, dmy, amhy, sdY, gsdf etc. In sex differentiation, a range of the gonadal differentiation types have been described in fish, including gonochorism, sequential hermaphroditism that can initially mature either as males (protandrous) or females (protogynous), and simultaneous hermaphroditism. The diversity of sex determination and differentiation in fish provides an ideal opportunity to understand the formation and maintenance of sexes at the evolutionary level. In addition, studying sex determination and differentiation in fish is practical in aquaculture because of the potential benefits of monosex production, providing higher growth rates due to the prevailing sexual size dimorphism.

Our Special Issue will mainly focus on omic and gene studies in both sex determination and differentiation in fish, including but not limited to the exploitation of gene resources through omic approaches, functional studies of genes, as well as genetic or epigenetic regulatory mechanisms.

### **Guest Editors**

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### Deadline for manuscript submissions

closed (25 August 2024)

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## Message from the Editor-in-Chief

Genes is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the Genes team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider Genes for your next genetics paper?

#### Editor-in-Chief

### Prof. Dr. Selvarangan Ponnazhagan

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