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Genetics as a Powerful Tool for a Sustainable Aquaculture: Host–Pathogen Interaction and Breeding for Resistance

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Deadline for manuscript submissions:
closed (30 September 2022)

Message from the Guest Editors

Dear Colleagues,

Infectious diseases are major losses that affect aquaculture production. Traditional systems such as vaccines and antibiotic treatments are used to prevent and control viral and bacterial diseases, but these approaches are sometimes ineffective, expensive, and difficult to manage. Knowledge of the genetic basis of host–pathogen interaction, disease-resistant, and antimicrobial-resistant genes and breeding for resistance could be useful tools to face this challenge. This global approach could, at the same time, enhance the sustainability of aquaculture production reducing direct and indirect costs related to disease management and reducing the environmental impact of drug treatment associated with the anti-microbic resistance phenomenon, one of the biggest public health challenges of our time.

Papers submitted this Special Issue should be original contributions focused on the following:

- Role of genetics in fish resistance to diseases
- Breeding for resistance
- Immunological response to fish pathogens
- Molecular characterization of fish pathogens
- Antibiotic resistance of fish pathogens

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Dr. Paolo Pastorino
Guest Editors

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Special Issue

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Message from the Editor-in-Chief

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