



*animals*



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## Morpho-Physiological Evaluation of Fish Welfare

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submissions:

**closed (31 December 2021)**

### Message from the Guest Editors

In recent decades, attention to animal welfare has been increasing, but the focus has been mainly on mammals, only 0.2% of the animal species on earth. This depends on the “anthropomorphic” judgment of sensitiveness, pain, and self-consciousness. Regarding non-mammalian species, several scientists retain fish feel only nociception, a reflex response to a noxious, potentially painful stimulus.

Ensuring the welfare of fish is a challenging issue because the number of extant species is much greater than that of all other vertebrates and each species has its own specific physical and chemical requirements. These factors make it difficult to provide generalized recommendations or requirements for all fish species. Adequate knowledge of the morpho-physiology is required and the ecology of each species needs to be considered.

This Special Issue of *Animals* welcomes multiple morpho-physiological approaches to understand how fish receive environmental stimuli and what leads them to a well-being or stress state, key features of reproductive, developmental, and growth performance.



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## Message from the Editor-in-Chief

*Animals* is an on-line open access journal that was first published in 2011. *Animals* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. *Animals* is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 3.0 (2022, ranks 12 /62 (Q1) in 'Agriculture, Dairy & Animal Science'; 13/143 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.2.

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