Special Issue

Antioxidant Response in Aquatic Animals

Message from the Guest Editor

Reactive oxygen species (ROS), which are produced via mitochondrial respiration in all tissues in aquatic organisms, are deactivated by the antioxidant enzyme system, which constitutes superoxide dismutase (SOD), glutathione peroxidase (GPx), and catalase (CAT), among other enzymes. This system is responsible for protecting cell membranes and preventing lipid peroxidation. This system is especially important in the case of the gills, in which there is gas exchange activity and ammonia excretion, since these processes release a high amount of ROS, which need to be controlled through the antioxidant system. This Special Issue welcomes original research and reviews on the antioxidant system in aquatic animals. Articles pertaining to invertebrates, such as shrimp and mollusks, and vertebrates, such as freshwater and marine fish, are welcome.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

Editor-in-Chief

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