Special Issue

Redox Regulation in Animal Reproduction

Message from the Guest Editor

Animal reproduction is a process that generates offspring in order to maintain breeds and is essential in increasing the number of animals, with the following processes involved: spermatogenesis; follicular development and oocyte maturation; fertilization; embryonic development and maternal recognition; and the process of parturition. Owing to the development of science and technology, it has been established that each process in animal reproduction is regulated by many factors, most of which are related to oxidative stress. The development of follicles is accompanied by the significant production of reactive oxygen species, which induce damage to follicular granulosa cells and oocytes; in turn, this induces follicular atresia. Furthermore, oxidative stress can cause the DNA fragmentation of spermatogonia and the lipid peroxidation of spermatozoa, leading to spermatogenesis disorders and a decline in the motility of sperm, ultimately causing male infertility. This Special Issue aims to highlight advances in the research on redox regulation, to increase knowledge regarding animal reproduction, and also develop novel methods or technologies that promote animal production.

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.

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