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Oxidative and Nitrosative Stress in Spermatozoa

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Message from the Guest Editors

Infertility is a highly prevalent disease, and oxidative stress contributes importantly to the aetiology of male infertility. Oxidative damage affects all aspects of sperm function, and DNA oxidation and fragmentation caused by ROS have a potential impact on embryo development and the health and wellbeing of the offspring.

Like ROS, RNS when produced at high levels during socalled nitrosative stress, are also associated to male infertility. The nitrosative damage can finally commit spermatozoa to cell death.

Thus, it is clear that an underlying aetiology of male infertility is mediated by an impairment of sperm function as a consequence of cellular stress mediated by ROS and RNS.

In this Special Issue entitled "Oxidative and Nitrosative Stress in Spermatozoa" we invite investigators to submit original research, short communication, and review articles in order to discuss the pivotal role of oxidative and nitrosative stress in different aspects of sperm function. Contributions describing the usefulness of antioxidants as strategies to improve sperm quality under oxidative/nitrosative stress conditions are particularly welcome.







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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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