

## Special Issue

# Early Metabolic Programming Mediated by Oxidative Stress

### Message from the Guest Editors

Maternal and perinatal oxidative stress is critical for the developmental origins of health and disease, while specific antioxidant and nutrient supplementations may serve as reprogramming strategies to prevent many diseases. The role of perinatal oxidative stress in the onset of insulin resistance, central nervous system development, cardiovascular diseases, early aging postnatal development and the possible interventions that may prevent or reduce such effects is a field of interest in the scientific literature. On the other hand, mitochondria are particularly adept at mediating early metabolic programming by oxidative stress, and they serve as subcellular substrates in the programming process at the same time. This Special Issue aims to gather current knowledge on the interplay of maternal oxidative stress during pregnancy and breastfeeding and the response to early-life insults to assess its impact on developmental programming during in utero and early postnatal life, because research into oxidative stress that begins early in life will have profound implications for future health.

### Guest Editors

Prof. Dr. Javier Diaz-Castro

Prof. Dr. Julio J. Ochoa Herrera

Dr. Jorge Moreno-Fernandez

### Deadline for manuscript submissions

closed (20 May 2025)



## Antioxidants

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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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### Editor-in-Chief

Prof. Dr. Alessandra Napolitano

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