



## Iron Metabolism, Redox Balance and Neurological Diseases

Guest Editor:

### **Prof. Dr. Yan-Zhong Chang**

Laboratory of Molecular Iron  
Metabolism, College of Life  
Science, Hebei Normal  
University, Shijiazhuang 050024,  
China

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### **Message from the Guest Editor**

The misregulation of brain iron homeostasis can lead to severe pathological changes in the neurological system. Iron deficiency slows the development of the neural system and causes mental and emotional disorders, while iron overload is closely related to neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease and cerebral ischemia. Free iron can elicit the generation of reactive oxygen species (ROS) due to its ability to catalyze the Fenton reaction, which contributes significantly to the pathophysiological mechanisms of neurological diseases. On the other hand, some free radicals also play an important role in the normal function of cells as signaling molecules. Iron misregulation and redox imbalance are the keys to the occurrence and development of many neurological diseases. This Special Issue aims to collect the latest research findings and review articles with great advances on the mechanisms or treatments of neurological diseases related to iron misregulation/redox imbalance, and to stimulate new thinking in the field of iron metabolism, redox balance and neurological diseases.





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## Editor-in-Chief

### Prof. Dr. Alessandra Napolitano

Department of Chemical  
Sciences, University of Naples  
"Federico II", Via Cintia 4, I-80126  
Naples, Italy

## 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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*Antioxidants* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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