Ferroptosis and Oxidative Stress

Science Exploration

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Ferroptosis and Oxidative Stress: A journal dedicated to the field

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Welcome to *Ferroptosis and Oxidative Stress* (*FOS*), a newly established journal dedicated to disseminating high-quality research in the field of cell death, with particular emphasis on responses to oxidative stress. This journal publishes studies on ferroptosis, other forms of regulated cell death, and cellular responses to altered oxidative conditions.

Ferroptosis is a distinct form of cell death, differing from apoptosis, necroptosis, and pyroptosis[1]. It occurs when membrane lipids are converted into lipid peroxides, leading to destabilization of essential cellular membranes. This process is typically initiated by the iron-dependent Fenton reaction (hence the term "ferroptosis") and proceeds when cellular mechanisms that prevent lipid peroxidation or detoxify lipid peroxides are impaired by cytotoxic drugs, metabolic perturbations, or other stressors.

The need for a dedicated journal arises from the rapid expansion of ferroptosis research. Novel antioxidant pathways continue to be identified[2-5], and new mechanisms through which ferroptosis is engaged are increasingly reported[6-9]. Currently, relevant publications are widely dispersed across multiple journals, potentially slowing the dissemination of important findings. By providing a centralized platform, *FOS* aims to accelerate communication and foster progress in this emerging field.

A brief introduction is warranted. I have been engaged in research on regulated cell death for nearly forty years, initially focusing on apoptosis and subsequently on necroptosis and pyroptosis. I consider cell death a fundamental biological process, as central to life as cell replication, differentiation, locomotion, and metabolism[10]. While I am not a leading expert in ferroptosis or oxidative stress, I have assembled an exceptional editorial board of recognized leaders in these areas. As Editor-in-Chief, I maintain a position independent of specific approaches, models, or interpretations, focusing solely on the rigor of the data. This perspective is intended to promote unbiased discussion and scientific discourse.

FOS is an open-access journal. During my tenure, no publication fees will be charged. Manuscripts will first undergo editorial assessment for relevance and novelty, followed by rigorous peer review to ensure scientific quality. Authors can expect a fair and transparent review process.

Recognizing the challenges of modern peer review, where extensive revisions and additional experimentation are often required, *FOS* emphasizes two primary criteria:

1. Do the conclusions advance the field?

2. Are the conclusions fully supported by the data?

Additional experiments suggested by reviewers will be considered optional unless essential for validating the conclusions. Final decisions will also consider overall scientific quality and clarity, reflecting our commitment to a fair and balanced review process.

We warmly welcome you to *Ferroptosis and Oxidative Stress* and look forward to your contributions to this exciting and rapidly evolving field.

Douglas R. Green

Editor-in-Chief

Declarations

Authors contribution

The author contributed solely to the article.

Conflicts of interest

Douglas R. Green is the Editor-in-Chief of *Ferroptosis and Oxidative Stress* . No other conflicts of interest to declare.

Ethical approval

Not applicable.

Consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data and materials

Not applicable.

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