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Adaptation, Aging, and Cell Death in Yeast Stress Response: Models, Mechanisms and Applications

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Message from the Guest Editors

Dear Colleagues,

Every cell experiences stress in its life cycle, but its capacity to counteract it makes the difference in terms of adaptation, aging, and, ultimately, cell death. The budding yeast *Saccharomyces cerevisiae* is an invaluable model organism for studying the molecular mechanisms underlying stress responses and regulating cell fate. The knowledge gained in yeast, together with the evolutionary conservation of genes, proteins, and pathways, represents a useful asset for studies in other relevant systems, enabling the translation to humans. This Special Issue aims to focus on:

- The role of environmental conditions on cell stress responses;
- The interplay between stress and nutrient signaling pathways in cell fate determination and aging;
- The hormesis paradigm in adaptive stress response;
- The relevance of stress responses in industrial fermentation processes;
- Omics and systems biology approaches in yeast.

Prof. Dr. Tiago Fleming Outeiro Dr. Nicoletta Guaragnella Dr. Anita Krisko *Guest Editors*











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Message from the Editor-in-Chief

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