

## Special Issue

# Advances in Yeast Engineering and Stress Responses

### Message from the Guest Editors

Microorganisms such as yeasts and filamentous fungi are exposed to changing environmental conditions (temperature, osmotic pressure, pH, chemicals, etc.). Moreover, they are often required to perform under harsh/non-optimal physiological conditions for the efficient industrial production of value-added products. To cope with these stress situations, they have developed adaptive responses that often involve extensive remodeling of gene expression, as well as metabolic and morphological alterations. Understanding how stress signals are sensed and deciphering the key molecular pathways leading to these responses provide fundamental knowledge for engineering stress-resistant yeast strains to improve industrial bioproduction processes. This Special Issue aims to combine current approaches to elucidating the molecular basis of the stress response in yeast with strategies that take advantage of this knowledge in order to generate more robust, efficient and productive strains and design optimized fermentation processes that minimize or exploit these stress responses.

### Guest Editors

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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