

## Special Issue

# Yeast Biotechnology: Current Challenges and Future Directions

### Message from the Guest Editors

The use of yeast in biotechnology has a long and fascinating history, dating back thousands of years. It is one of the major microorganisms that has been discovered by humans and utilized for benefiting our daily lives. With advances in modern biotechnology, microbiology, synthetic biology and metabolic engineering, yeast has been used to manufacture biofuels, commodity and specialty chemicals, industrial enzymes, food ingredients and pharmaceuticals. Yeast is a single-celled microorganism ideal for biomanufacturing due to its genetic manipulation, fermentation process, fast growth rate, ease of cultivation, high secretion capacity, and safety. This Special Issue of *Bioengineering* will focus on current challenges and future directions of yeast biotechnology, which includes: fundamental and applied research on yeast biology; metabolic engineering; molecular biology and genetic engineering; new products from yeast; new cell cultivation and fermentation methods; downstream process development and product recovery; bioprocess scale-up; techno-economic analysis of yeast biotechnology and products.

### Guest Editors

Dr. Dongming Xie

Dr. Quinn Zhu

Dr. Edward S. Miller, Jr.

### Deadline for manuscript submissions

closed (30 June 2024)



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### Editor-in-Chief

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