

Special Issue

Synthetic Biology for Natural Products

Message from the Guest Editors

Natural products are especially important targets because of their utility as medicines, flavors, fragrances, and colorants, but can be challenging to obtain due to their low content and structural complexity. Synthetic biology has enabled the tailor-made production of natural products by the fermentation of engineered microorganisms, but it requires much time, effort, and cost to make the strains industrially competitive. Advances in tools and strategies of omics, regulatory circuit rewiring, precise genome editing, in silico metabolic simulation, and high-throughput screening are facilitating the development of high-performance strains. Over the past decade, an increasing number of natural products have been produced and commercialized through applying synthetic biology. These successes represent a burgeoning bio-economy and will open up a new era for the biosynthesis of natural products. In this Special Issue, advances will be presented in the selection of host strains, metabolic pathway reconstruction, tolerance enhancement, and metabolic flux optimization. Reviews and original research articles are both welcome.

Guest Editors

Prof. Dr. Jun Ni

Prof. Dr. Shuangjun Lin

Prof. Dr. Xudong Qu

Deadline for manuscript submissions

closed (10 October 2022)



Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/99079

Life
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

mdpi.com/journal/

[life](https://mdpi.com/journal/life)





Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



[mdpi.com/journal/
life](https://mdpi.com/journal/life)



About the Journal

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)