

Special Issue

Developmental Biology in Cyanobacteria

Message from the Guest Editors

Filamentous, heterocyst-forming cyanobacteria constitute a genuine example of bacterial multicellularity. During cell division, the resulting daughter cells do not separate as in unicellular bacteria, but they remain bound by an unsplit outer membrane, which determines the presence of a continuous shared periplasm, and by proteinaceous structures—Septal junctions—that in addition to adhesion provide conduits for intercellular exchange of metabolites and regulatory molecules. Additionally, these cyanobacteria can undertake different developmental paths in response to diverse environmental cues. One of them is the differentiation of some cells of the filament into heterocysts, cells specialized in the fixation of atmospheric nitrogen, that takes place under conditions of nitrogen scarcity. This Special Issue of *Life* includes review and original research articles dealing with the complexity of heterocyst-forming cyanobacteria, gene expression regulation during heterocyst differentiation, heterocyst patterning and intercellular communication.

Guest Editors

Prof. Dr. Antonia Herrero Moreno

Instituto de Bioquímica Vegetal y Fotosíntesis, CSIC and Universidad de Sevilla, 41092 Seville, Spain

Prof. Dr. Enrique Flores García

Instituto de Bioquímica Vegetal y Fotosíntesis, Consejo Superior de Investigaciones Científicas, Universidad de Sevilla, Seville, Spain

Deadline for manuscript submissions

closed (30 September 2018)



Life

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/15186

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

mdpi.com/journal/

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





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)