

## 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

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### Deadline for manuscript submissions

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