Special Issue

Advances in Bacterial Genetics

Message from the Guest Editors

This Special Issue aims to expand the current state of the art regarding all the areas of bacterial genetics. -
Evolutionary mechanisms: bacteria are able to rapidly evolve and adapt to constantly changing environmental conditions, thanks to the constant fine tuning of their mutation rates and to the horizontal transfer of genetic information among different bacteria;
-Regulatory mechanisms: thanks to the huge array of genetic tools that enable bacteria to control all levels of gene expression;
-Growth and differentiation;
-Pathogenicity mechanisms and spreading of antibiotic resistance;
-Bacterial communication and interaction with each other and with the surrounding environment;
-Symbiotic lifestyle;
-Ecological roles;
-Systems biology and metabolic modelling: since most bacteria have not yet been characterized and there are many species that cannot be grown in the laboratory, these disciplines can allow studying and predicting those processes which could not be studied otherwise.

Guest Editors

Prof. Dr. Renato Fani

Prof. Dr. Marco Bazzicalupo

Prof. Dr. Anna Maria Puglia

Dr. Sara Del Duca

Deadline for manuscript submissions

closed (15 February 2025)

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

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