Special Issue

Research on Novel Bio-Active Metabolites Produced by *Microorganisms*

Message from the Guest Editor

Random mutagenesis or isolation of spontaneous variants of natural actinomycetes or fungal species with different abilities to produce antibiotics than the original strains has been a strategy extensively used in industry to improve the antibiotic titer of strains of interest. The outcomes of such approaches should guide the choice of rational genetic engineering strategies in clean genetic backgrounds to improve the production of already-known specialized metabolites or even trigger the expression of cryptic biosynthetic pathways. Submitted manuscripts are expected to include comparative phenotypic and genomic analysis of original strains with variants showing either enhanced or reduced production of specialized metabolites and resulting from:

- Transposon mutagenesis;
- Deletion/mutation of genes involved in DNA repair;
- Deletion/mutation of genes leading to an alteration of transcriptional or translational fidelity;
- Growth in stressful conditions promoting extensive genome rearrangements;
- Deletion/mutation of indispensable gene leading to extensive genome rearrangements.

(This list is not exhaustive)

Guest Editor

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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.

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