Special Issue

Engineering Cyanophages and Cyanotoxins

Message from the Guest Editor

The excessive proliferation of harmful cyanobacteria produces various toxic secondary metabolites which pose a threat to aquatic ecosystems and human health. Cyanophages are a kind of virus that exclusively infect cyanobacteria, which is considered a potential strategy of dealing with cyanobacterial blooms. Nevertheless, the infecting host range and lysis efficiency of natural cyanophages are limited, eliciting the necessity of constructing non-natural cyanophages via synthetic biology to expand their host range and efficiency. Meanwhile, recent studies have demonstrated the biotechnological application of cyanotoxins, suggesting they may be hidden gems. This Special Issue of *Microorganisms* will gather relevant papers that report on the recent advances in "Engineering Cyanophages and Cyanotoxins", either in the form of original research or review papers (covering different aspects of interactions between cyanophages and host cyanobacteria; the assembly, modification, and resurrection of artificial cyanophages in the host; the biosynthesis and heterologous production of cyanotoxins; and the application prospects of artificial cyanophages and cyanotoxins).

Guest Editor

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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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