Special Issue

Adaptive and Evolutionary Aspects of Integrons

Message from the Guest Editors

Although the role that integrons play in the adaptation of environmental bacteria is a major issue that has been less explored, the prevalence and importance of these elements among clinical isolates is a testimony to the adaptive value they provide to their bacterial hosts. Part of this value comes from the streamlining of integrons to become subtly coupled to bacterial physiology, providing adaptation on demand. How such a nifty and unique piece of genetic equipment has originated is a story of evolutionary innovation that is only starting to be unveiled. The aim of this Special issue of Microorganisms is to gather new data that highlight the adaptive value of integrons in all environments - including the clinical setting- as well as to provide a deeper view on the possible evolutionary origins of these structures.

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"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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