

Special Issue

Bacterial Chemoreceptors

Message from the Guest Editors

A chemotactic response is initiated by the chemoeffector-mediated stimulation of chemoreceptors. For the large majority of chemoreceptors, the function or the corresponding chemoeffectors are unknown, and such information will help to identify the forces that have shaped the evolution of chemoreceptors. Contrary to a wide-spread misconception within the scientific community, not all chemoreceptors are involved in chemotaxis, and there is paucity of information on receptors that carry out alternative cellular functions. Most of what we know on chemoreceptor function derives from the study of *Escherichia coli* proteins. However, research over mainly the last decade has expanded chemoreceptor research into a variety of different bacterial species with different lifestyles. These studies show that chemotaxis and chemoreceptor function is frequently important for virulence, plant root colonization, or biodegradation efficiency. In this context, the goal of this Special Issue is to further expand our knowledge of the chemoeffector function as well as the selective pressures that have shaped its evolution. We welcome the submission of original research and reviews.

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