Special Issue

Inter-kingdom Signaling—Chemical Communication between Bacteria and Eukaryotes

Message from the Guest Editor

It is well recognized that bacteria can communicate with each other via small diffusible molecules to manage group-coordinated behavior (quorum sensing). However, this cell–cell communication is not restricted to bacteria. Recent research has given evidence that similar systems also allow communication between bacteria and their eukaryotic hosts and vice versa. Bacteria have learned to eavesdrop hormone systems of their hosts to adapt and adequately regulate symbiosis and pathogenicity, but also to manipulate eukaryotic chemical communication to survive. This Special Issue invites research articles on inter-kingdom signaling, especially on novel communication molecules but also on the response mechanisms of bacteria upon host detection. Since inter-kingdom signaling systems are often involved in regulation of pathogenicity, they represent promising targets for novel antimicrobials. Therefore, research articles focusing on inhibition strategies of inter-kingdom signaling are also welcome.

Guest Editor

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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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