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Advances in Sulfate Reducing Bacteria

Guest Editor:

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Message from the Guest Editor

Sulfate reducing bacteria (SRB) are microorganisms that use sulfate as terminal electron receptors with a variety of compounds serving as electron donors. Numbering 220 species across 60 genera, SRBs are found across many different environments. The research was initially directed at the biology of SRBs, how their growth and metabolism could be controlled and even their use in the bioremediation of toxic materials. It is, however, the discovery of their outsized roles in health and disease that has generated the most excitement in SRBs. The dental community has reported the role of SRBs in periodontitis and halitosis along with the effects of H₂S-generating SRBs on orthodontic devices. Physiologists have observed the essential function of SRBs as key hydrogen consumers in supporting fermentation. More recently, researchers have reported the contribution of SRBs to intestinal inflammation, colorectal neoplasms, leaky gut, slowing of intestinal transit and impaired learning and other critical functions. These and other advances in our understanding of SRBs will be the focus of this special issue of Microorganism.











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Message from the Editor-in-Chief

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