Special Issue

Advances in Sulfate Reducing Bacteria

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.

Guest Editor

Prof. Dr. Henry Lin

Division of Gastroenterology and Hepatology, Department of Internal Medicine, University of New Mexico, Albuquerque, NM 87131, USA

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Microorganisms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
microorganisms@mdpi.com

mdpi.com/journal/microorganisms

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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.

Editor-in-Chief

Dr. Nico Jehmlich
Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

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