



water

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## Investigation of Amoeba and Associated Microbial Communities from Different Water Sources: Characterization, Interactions and Effects

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### Message from the Guest Editors

Dear Colleagues,

Most water studies focus on the bacterial component and not on the eukaryotes in the microbiome. While free-living amoebae (FLAs) make up a large component, their persistence and capacity for disease in water systems is not well-understood. Pathogenic FLAs have a direct role in human diseases such as *Naegleria fowleri* in primary amoebic meningoencephalitis (PAM), *Acanthamoeba* in Acanthamoeba Keratitis (AK) and *Acanthamoeba* and *Balamuthia* in granulomatous amoebic encephalitis (GAE). Both pathogenic and non-pathogenic FLAs can also influence the pathogenicity of bacteria as well as aid the presence and persistence of amoebae-resistant bacterial pathogens such as *Legionella*, *Chlamydia*, *Shigella* and non-tuberculous mycobacterium (NTM).

This Special Issue aims to provide further understanding of: potential organisms supporting FLAs' presence; interactions of FLAs with the surrounding microbes; potential impacts on FLA-microbial ecology interactions due to climate change; new methods to detect and identify the diversity of FLAs in natural and engineered water systems.



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# Special Issue



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## Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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