# Special Issue

# Photodynamic Inactivation in Bacterial Infections Within a One Health Setting

## Message from the Guest Editors

This Special Issue will explore the application of photodynamic inactivation (PDI) to bacterial infections through the integrated One Health framework, encompassing plant science, ethnobotany, human medicine, and veterinary medicine. PDI offers a novel method for microbial control. By harnessing the unique properties of photosensitizers activated by light, PDI can target and destroy bacterial pathogens across different environments. In plant science, PDI can enhance crop protection by mitigating plant diseases caused by, for example, bacterial infections. Ethnobotany can contribute insights into traditional plant-based photosensitizers, enriching modern PDI approaches. In human and veterinary medicine, PDI emerges as a promising alternative to conventional antibiotics, addressing the critical issue of antibiotic resistance. The manuscripts reviewed demonstrate the efficacy of PDI in various settings, highlighting its potential to bridge gaps in human health, animal health, and environmental sustainability.

## Guest Editors

Prof. Dr. Heinrich Walt
Dr. Tiziano Schweizer
Dr. Julia Buchholz

## Deadline for manuscript submissions

30 June 2026

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# About the Journal

## 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

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