

Special Issue

Wastewater-Based Epidemiology Assessment and Surveillance

Message from the Guest Editors

Wastewater-based epidemiology (WBE) has revolutionized public health surveillance by enabling non-invasive, cost-effective monitoring of population-level health trends through wastewater analysis. This Special Issue aims to highlight cutting-edge research and innovations in WBE methodologies, applications, and policy implications. Topics of interest include, but are not limited to, the following:

- **Pathogen surveillance** (e.g., SARS-CoV-2, emerging viruses, and antimicrobial resistance genes);
- **Community exposure assessment** for illicit drugs, pharmaceuticals, and environmental toxins;
- **Technological innovations** in sample collection, high-throughput sequencing, and real-time monitoring;
- **Ethical and governance frameworks** for data privacy and public health decision-making;
- **Case studies** demonstrating WBE's role in pandemic response, environmental justice, and One Health initiatives.

This Special Issue welcomes interdisciplinary perspectives from environmental science, epidemiology, data science, and public policy, fostering a holistic understanding of WBE's potential to transform global health surveillance in diverse settings.

Guest Editors

Dr. Zhenyu Wu
Dr. Zacharias Frontistis
Dr. Qiuda Zheng

Deadline for manuscript submissions

closed (15 April 2026)



Environments

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Impact Factor 3.7
CiteScore 5.7



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

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About the Journal

Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal *Environments*, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Sergio Ulgiati

1. Department of Science and Technology, Parthenope University of Naples, Centro Direzionale, Isola C4, 80143 Napoli, Italy
2. School of Environment, State Key Joint Laboratory of Environment Simulation and Pollution Control, Beijing Normal University, No. 19 Xijiekouwai Street, Beijing 100875, China

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