# **Special Issue**

# COVID-19: Wastewater-Based Epidemiology

# Message from the Guest Editors

The COVID-19 outbreak is caused by the SARS-CoV-2 virus, detected in China in December 2019. By evaluating wastewater composition, wastewater-based epidemiology may help in evaluating people's habits, such as diet, use of pharmaceutical compounds, abuse of drugs, specific diseases, etc. Additionally, this approach can provide valuable information on the prevalence of different human pathogens. It may represent a cost-effective alternative to testing a large number of random individuals in the population. Moreover, it can be used as an early warning system for SARS-CoV-2 virus. Accordingly, this Special Issue targets:

- SARS-CoV-2 presence in different water matrices such as wastewater, sludge, freshwater, groundwater, etc.
- Removal in wastewater treatment plants, including both water and sludge treatment lines
- Virus concentration and detection methods: developing new approaches and benchmarking existing methods
- Approaches for early warning systems
- Modelling, such as Quantitative Microbiological Risk Assessment (QMRA) analysis and artificial intelligence to link wastewater data and infected population data

# **Guest Editors**

Dr. Zeynep Cetecioglu Gurol

Dr. Gianluigi Buttiglieri

Dr. Vanessa Moresco

## Deadline for manuscript submissions

closed (28 February 2022)



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# Message from the Editor-in-Chief

Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers.

Scientific discoveries and advances in this research field play a critical role in providing a rational basis for informed decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards.

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# Editor-in-Chief

Prof. Dr. Paul B. Tchounwou

RCMI Center for Urban Health Disparities Research and Innovation, Richard N. Dixon Research Center, Morgan State University, Baltimore, MD 21251, USA

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