



## **Modeling Viral Diseases and Pandemics for Improved Medical Treatments and Public Health Policies**

Guest Editor:

**Prof. Dr. Wade Trappe**

Department of Electrical and  
Computer Engineering, Rutgers  
University, The State University of  
New Jersey, Piscataway, NJ  
08854, USA

Deadline for manuscript  
submissions:

**closed (31 December 2021)**

### **Message from the Guest Editor**

The COVID-19 pandemic has highlighted the need for accurately analyzing disease propagation both locally and globally, as well as the need for a close partnership between science, medicine, and public policy. One of the critical challenges that the ongoing pandemic has illustrated is that tracking and forecasting the evolution of a viral disease is particularly challenging in the modern era, where there is increased societal dependence on domestic and global travel for trade and commerce. Further complicating the challenge is the fact that viral diseases are prone to mutational evolution, with the initial disease often leading to distinct variants possessing uniquely different disease properties and resistance profiles.

The purpose of the *IJERPH* Special Issue on “Modeling Viral Diseases and Pandemics for Improved Medical Treatments and Public Health Policies” is to serve as a venue that will improve information exchange between science, medicine, and public policy—ultimately empowering the control and mitigation of current and future viral diseases.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Paul B. Tchounwou**

RCMI Center for Urban Health  
Disparities Research and  
Innovation, Richard Dixon  
Research Center, Morgan State  
University, 1700 E. Cold Spring  
Lane, Baltimore, MD 21251, USA

## Message from the Editor-in-Chief

Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Discovery and advances in this research field play a critical role in providing a scientific basis for decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards. *IJERPH* provides a forum for discussion of discoveries and knowledge in these multidisciplinary fields. Please consider publishing your research in this high quality, peer-reviewed, open access journal.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, PubMed, MEDLINE, PMC, Embase, GEOBASE, CAPus / SciFinder, and other databases.

**Journal Rank:** CiteScore - Q1 (*Public Health, Environmental and Occupational Health*)

## Contact Us

---

International Journal of  
Environmental Research and Public  
Health Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/ijerph](http://mdpi.com/journal/ijerph)  
[ijerph@mdpi.com](mailto:ijerph@mdpi.com)  
[X@IJERPH\\_MDPI](https://twitter.com/IJERPH_MDPI)