

Special Issue

Data Science Challenges and Opportunities in One Health

Message from the Guest Editors

One Health is an integrated, transdisciplinary approach based on the foundational concept that the health of humans, animals, plants, and the environment are all intercorrelated and impacted by the multiscale global ecosystem. The heterogeneity of data, data collection methods, reporting methods, and databases available all provide significant hurdles for making available datasets 'data science ready.' The nuanced interactions between and varying responses to threats by the environment, plants, humans, and animals—and the different scales of interactions and effects—present significant obstacles when developing data science approaches and thus require innovative integration techniques. At the same time, data science has been transformative across research and industry. It provides the ability to gain situational awareness and predictive insight into short- and long-term integrated health outcomes. In this Special Issue, we invite authors to submit research highlighting specific challenges and unique opportunities arising from the use of a One Health, multi-modal data science approach across a variety of applications.

Guest Editors

Dr. Lauren Charles
Dr. Samantha Erwin
Dr. Eva Brayfindley

Deadline for manuscript submissions

closed (15 September 2023)



Pathogens

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/152244

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

[mdpi.com/journal/
pathogens](https://mdpi.com/journal/pathogens)





Pathogens

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 6.8
Indexed in PubMed



[mdpi.com/journal/
pathogens](https://mdpi.com/journal/pathogens)



About the Journal

Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics.

Pathogens is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

Editor-in-Chief

Prof. Dr. Hinh Ly

Department of Veterinary and Biomedical Sciences, College of
Veterinary Medicine, University of Minnesota, Saint Paul, MN 55108,
USA

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, CaPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Infectious Diseases)