

Special Issue

HIV and SARS-CoV-2: Evolutionary Dynamics

Message from the Guest Editor

Two viruses in recent history have managed to successfully jump species and reach pandemic proportions—human immunodeficiency virus (HIV-1) in 1981 and severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in 2019. The adaptation of these viruses to humans and what makes them highly transmissible or effective viruses is a remarkable story. Studying within-host evolution of SARS-CoV-2 in chronically infected patients revealed it to be driven by immune escape from neutralizing antibodies in the absence of adequate B and T cell responses. This not only provided insights into the dynamic evolution of a virus thought to be slowly evolving on a population level but also turned out to be the blueprint for the emergence of virus variants that threaten the success of vaccines and longer-term control of the pandemic. This by no means is the only route of immune escape, and this Special Issue serves to bring together the up-to-date knowledge on within-host adaptations of HIV-1 and SARS-CoV-2 and what makes these viruses successful in evading the host immune system and establishing prolonged infection.

Guest Editor

Dr. Dami Collier

1. Cambridge University Hospitals NHS Foundation Trust, Cambridge CB2 0QQ, UK
2. Department of Pathology, University of Cambridge, Cambridge CB2 1TN, UK

Deadline for manuscript submissions

closed (31 December 2025)



Tropical Medicine and Infectious Disease

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/230655

*Tropical Medicine and
Infectious Disease*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
tropicalmed@mdpi.com

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





Tropical Medicine and Infectious Disease

an Open Access Journal
by MDPI

Impact Factor 3.1
CiteScore 6.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. John Frean

Pathologist, Parasitology Reference Laboratory, Centre for Emerging Zoonotic and Parasitic Diseases, National Institute for Communicable Diseases, University of the Witwatersrand, Johannesburg 2192, South Africa

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, Informit, and other databases.

Journal Rank:

JCR - Q2 (Tropical Medicine) / CiteScore - Q1 (Public Health, Environmental and Occupational Health)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 22.2 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the second half of 2025).