

Editorial

One Health Microbiology & Infection: a journal dedicated to advancing the One Health perspective globallyGamal Wareth* 

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**Abstract**

The One Health approach has emerged as a critical framework for addressing zoonotic diseases and infections during outbreaks worldwide. By recognizing the interconnectedness of human, animal, and environmental health, One Health promotes cross-sector collaboration essential to early detection, prevention, and response. However, translating this concept into practice requires more than policy endorsement; it demands operational integration, shared data platforms, and equitable partnerships that prioritize local leadership. From this point, we are delighted to announce the launch of the One Health Microbiology & Infection (*One Health Microbiol. Infect.*) journal, a dedicated platform for advancing research, innovation, and knowledge dissemination in the rapidly evolving fields of microbiology and infection within One Health insights.

Keywords: Infection, Microbiology, One-Health

The rapid emergence and re-emergence of infectious diseases, many of which originate at the human-animal interface, underscore the critical importance of veterinary and medical microbiology in the modern era [1]. Antimicrobial resistance, zoonotic spillover, foodborne pathogens, and climate-driven shifts in disease distribution challenge traditional disciplinary boundaries. Addressing these threats requires not only advanced diagnostic tools and molecular techniques but also collaborative frameworks grounded in the One Health concept, which recognizes the interconnectedness of human, animal, and environmental health [2, 3].

In recent decades, several animal-origin pathogens have caused major outbreaks of human disease through close contact between animals and humans. For instance, viruses such as COVID-19, monkeypox, Ebola, and Nipah have caused severe human epidemics following spillover from wildlife reservoirs [4, 5]. Foodborne bacterial pathogens, including *Listeria*, *Salmonella*, Shiga toxin producing *Escherichia coli*, and *Campylobacter*, are commonly transmitted from livestock to humans and remain significant public health threats worldwide [6]. Several parasites are naturally transmitted from animals to humans and represent significant public health concerns, including Toxoplasmosis (caused by *Toxoplasma gondii*), Malaria (caused by *Plasmodium* species), and helminths such as Echinococcosis (caused by *Echinococcus* species) [3]. Overall, a wide range of microorganisms causes most emerging infectious diseases in humans, underscoring the importance of integrating veterinary and medical microbiology within a single platform to emphasize the One Health perspective [7].

Microbiology impacts human and animal health, the environment, and industry, making it fundamental to contemporary life and research. Microorganisms such as bacteria, viruses, parasites, and fungi are key to health and ecological systems. Therefore, understanding how microbes interact with their hosts is essential not only for improved clinical outcomes but also for advancing research on antimicrobial resistance, zoonotic diseases, and vaccine and treatment development. This knowledge is crucial for protecting public health and ensuring global food security [8].

One Health Microbiology & Infection aims to bridge veterinary and medical microbiology, recognizing the intrinsic One Health connection among human, animal, and environmental health. We welcome high-quality original studies on all microorganisms. Our goal is to foster interdisciplinary collaboration, promote evidence-based practices, and advance innovative approaches to microbial research. By providing a platform for researchers, clinicians, and educators, we hope to catalyze knowledge sharing and deepen understanding of microbial threats and solutions in human and veterinary medicine.

The journal welcomes submissions from researchers investigating microorganisms that cause disease in humans or animals and in their environments, including bacteria, viruses, parasites, fungi, yeasts, archaea, microalgae, protozoa, and other organisms. Researchers are invited to submit studies focused on microorganism identification and detection; diagnosis and prevalence; infection burden; host-pathogen interactions; microbial sequencing; genomic or proteomic analysis; pathogenesis;

vaccination; and the treatment or eradication of microbial diseases.

One Health Microbiology & Infection journal prioritizes high-quality, innovative research on zoonoses and antimicrobial resistance, especially studies that advance knowledge in the field.

The journal accepts a range of article types, including review articles, meta-analyses, full research articles, short communications, editorial letters, and commentaries. Submitted manuscripts should be concise and comprehensive and must comply with the author guidelines. Systematic and narrative reviews of targeted microorganisms are welcome. The journal serves a global audience; however, regional reviews or research will be accepted if they provide thorough, valuable insights that advance knowledge in the field and do not focus solely on the author's own findings.

The journal's editorial board and reviewers are carefully selected from leading researchers in their fields, recognizing the importance of promoting innovative microbiology research and supporting the scientific community.

The editorial board and editorial office of *One Health Microbiol. Infect.* warmly invite scientists, veterinarians, microbiologists, and healthcare professionals from around the world to contribute to this important initiative and help advance the field. We welcome high-quality manuscripts that enhance understanding in One Health and address challenges at the human-animal-environment interface. We encourage you to consider *One Health Microbiol. Infect.*, as a platform for disseminating your research. We aim to provide a responsive, accessible, and affordable journal dedicated to publishing rigorous, peer-reviewed research for the global scientific community focused on microbiology and infection within the One Health framework.

Declarations and supplementary information

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