



Editorial

# Zoonotic Diseases: A New Open Access, Multidisciplinary Journal for Those with Interests in Zoonoses

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Last May 2021, we launched a new open access journal called *Zoonoses* [1] followed by the publication of a Publisher's Note [2] to introduce it. After careful evaluation, we re-assessed the project in order to distinguish our journal from other available platforms, and have decided to change the journal title to *Zoonotic Diseases* (ISSN: 2673-9968) [3].

Zoonotic diseases are defined as infections shared in nature between humans and other vertebrate animal species in which those infections are [4]. Zoonoses have been with us, emerging, and evolving for a long time. These mutually transmissible infections likely arose with the development of agriculture and a social structure with more congregated populations that increasingly encountered wildlife along with those species that became domesticated. Today, those relationships and encounters continue with a greater population density and interactions with companion animals, livestock, and wildlife that are combined with lifestyle choices that increasingly result in human encroachment into new and diverse habitats.

The field of zoonotic diseases encompasses the scope of disciplines that impact human and veterinary medicine, biosciences, public health, and environmental sciences. Never timelier than now, zoonotic diseases have a major impact on global public health that will continue to increase as we become more interconnected and our interfaces between animal species are altered or blurred, resulting in increased human interactions with other animal species, pathogens, and arthropod vectors of disease. Zoonotic infections are global threats to health security. The incidence and burden of zoonotic diseases are greater than many realize. A 2012 report estimated that, annually, 2.5 billion human illnesses and 2.7 million deaths are attributable to zoonoses [5]. Zoonoses constitute approximately 60% of the established and 75% of the emerging infectious diseases, with 72% of those emerging zoonoses attributed to wildlife reservoirs, and 23% are arthropod vector-borne diseases [6,7]. The incidence of zoonotic infections is increasing. Lyme borreliosis is a zoonotic infection that is currently estimated to cause 476,000 cases annually in the United States, resulting in an economic impact of potentially USD 1.3 billion [8,9]. Globally, rabies causes an estimated 59,000 human deaths each year, with children being frequent victims [10,11]. The annual global cost of rabies is USD 8.6 billion (WHO, 2021). The true economic and societal impacts attributable to zoonotic diseases remain unknown.

Zoonotic diseases are amenable to One Health integrated approach involving multidisciplinary teams with diverse perspectives that can address the problem at hand. With the spirit of this comprehensive approach in mind, *Zoonotic Diseases* aims to be a high quality, high impact venue where the full scope of topics relevant to zoonoses and the existing knowledge gaps are addressed. We envision the publication of original research articles, reviews, technique notes, opinion pieces by stakeholders, and manuscripts describing institutional, governmental, and other agency policies, approaches, and strategies to study and control zoonotic diseases. *Zoonotic Diseases* will be a forum for manuscripts focused on zoonotic bacteria, viruses, parasites, prions, and arthropod vectors, one health and Eco Health, surveillance networks, modelling, disease ecology, epidemiology, the natural nidality of zoonotic diseases, clinical studies, diagnosis, pathogenesis, novel treatment and control measures, and the social determinants of zoonotic diseases.



**Citation:** Wikel, S.K. *Zoonotic Diseases: A New Open Access, Multidisciplinary Journal for Those with Interests in Zoonoses*. *Zoonotic Dis.* **2021**, *1*, 1–2. <https://doi.org/10.3390/zoonoticdis1010001>

Received: 15 November 2021  
Accepted: 16 November 2021  
Published: 29 November 2021

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The Editorial Board and Editorial Office of *Zoonotic Diseases* look forward to receiving your manuscript submissions and to providing a vibrant forum for publishing your research, reviews, technique notes, discussion articles, and opinion pieces that contribute to our understanding and control of zoonotic diseases. We welcome your input regarding topics and themes that would benefit from a focused consideration. I hope that you will consider *Zoonotic Diseases* as a venue within which to publish your research. Our goal is to become a responsive and affordable venue for the publication of high-quality, peer reviewed manuscripts from the global zoonotic-diseases-focused scientific community.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The author declares no conflict of interest.

## References

1. Zoonoses Home Page. Available online: <https://www.mdpi.com/journal/zoonoses> (accessed on 14 November 2021).
2. Lin, S.-K. Publisher's Note: Zoonoses—A New Open Access Journal. *Zoonoses* **2021**, *1*, 1–2. [CrossRef]
3. Zoonotic Diseases Home Page. Available online: <https://www.mdpi.com/journal/zoonoticdis> (accessed on 14 November 2021).
4. Chomel, B.B. Zoonoses. In *Encyclopedia of Microbiology*; Schaechter, M., Ed.; 2009; pp. 820–829. Available online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7149995/> (accessed on 14 November 2021). [CrossRef]
5. Grace, D.; Mutua, F.; Ochungo, P.; Kruska, R.; Jones, K.; Brierley, L.; Lapar, L.; Said, M.; Herrero, M.; Phuc, P.M.; et al. Mapping of Poverty and Likely Zoonoses Hotspots. 2012. Available online: <https://hdl.handle.net/10568/21161> (accessed on 14 November 2021).
6. Jones, K.E.; Patel, N.G.; Levy, M.A.; Storeygard, A.; Balk, D.; Gittleman, J.L.; Daszak, P. Global trends in emerging infectious diseases. *Nature* **2008**, *451*, 990–993. [CrossRef] [PubMed]
7. Taylor, L.H.; Latham, S.M.; Woolhouse, M.E. Risk factors for human disease emergence. *Philos. Trans. R. Soc. Lond. B Biol. Sci.* **2001**, *356*, 983–989. [CrossRef] [PubMed]
8. Adrion, E.R.; Aucott, J.; Lemke, K.W.; Weiner, J.P. Health care costs, utilization and patterns of care following Lyme disease. *PLoS ONE* **2015**, *10*, e0116767. [CrossRef] [PubMed]
9. Kugeler, K.J.; Schwartz, A.M.; Delorey, M.J.; Mead, P.S.; Hinckley, A.F. Estimating the frequency of Lyme Disease diagnoses, United States, 2010–2018. *Emerg. Infect. Dis.* **2021**, *27*, 616–619. [CrossRef] [PubMed]
10. Centers for Disease Control and Prevention. Rabies around the World. Available online: <https://www.cdc.gov/rabies/location/world/index.html> (accessed on 14 November 2021).
11. World Health Organization. Available online: <https://www.who.int/news-room/fact-sheets/detail/rabies> (accessed on 14 November 2021).

## Short Biography of Author



**Prof. Dr. Stephen K. Wikel** received a Ph.D. in veterinary microbiology from the University of Saskatchewan, where he subsequently served as a faculty member before joining the staff of the Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases, National Institutes of Health. His tenured academic appointments included that of Professor and Acting Chair in the Department of Immunology, School of Medicine, University of Connecticut Health Center; Professor of Pathology at the University of Texas Medical Branch; and Senior Scientist at the Center for Biodefense and Emerging Infectious Diseases, Galveston National Laboratory. Dr. Wikel was subsequently appointed as Senior Associate Dean, Professor, and Chairman in the Department of Medical Sciences, and St. Vincent's Medical Center Endowed Chair at the School of Medicine, Quinnipiac University, where he was one of four deans who established the new medical school. Dr. Wikel has 50 years of experience studying the cellular, molecular, and genetic aspects of host immune responses to tick feeding and tick countermeasures to those host defenses. Dr. Wikel's research on host immune responses and vector countermeasures at the arthropod vector–host–pathogen interface established the role of those interactions in successful blood feeding and pathogen transmission, and to the development of novel immune-based anti-vector and vector-borne pathogen transmission blocking control strategies. Dr. Wikel is the author of numerous peer reviewed publications, invited reviews, and book chapters. He has been a featured speaker for seventy-five national and international symposia. Dr. Wikel received extramural research support for his program from the National Institutes of Health, U.S. Army Medical Research and Materiel Command, Centers for Disease Control and Prevention, U.S. Department of Agriculture, and industry. He has extensive service experience as a member of advisory panels, research study sections, editorial boards, and academic institution administrations.