# **Special Issue**

# Infectious Diseases in Animals: Community Ecology and Pathogen Dynamics

### Message from the Guest Editor

Since the beginning of time, animal pathogens have circulated worldwide, with many causing severe disease and death. Many of these diseases are known to be transmitted between animal species and between animals and humans, of which smallpox is a good example, having evolved from pathogens circulating in wildlife. Ecological changes can drive evolution and change the complex interplay between hostsenvironment-pathogens, ultimately favoring transmission. A good example can be seen in the El Niño events of the 1990s that led to the emergence of human hantavirus cases in the US through an ecological cascade. Increased precipitation led to a growth in vegetation, which sustained increased populations of rodents, facilitating hantavirus transmission between rodents and from rodents to humans. These ecological changes can apply to the dynamics of pathogens within individual hosts, where pathogens evolve in a complex interaction with other microbes within a host.

## **Guest Editor**

Dr. João R. Mesquita

- 1. Abel Salazar Biomedical Institute of Sciences (ICBAS), University of Porto, Porto, Portugal
- 2. EPIUnit—Instituto de Saúde Pública, Universidade do Porto, 4050-313 Porto, Portugal

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# **About the Journal**

# Message from the Editor-in-Chief

Animals is an on-line open access journal that was first published in 2011. Animals adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues in the many varied disciplines that involve animals, with a focus on animal science, animal welfare and animal ethics. Animals is covered in the Science Citation Index Expanded (SCIE) in Web of Science, with the latest Impact Factor: 2.7 (2023, ranks 10/80 (Q1) in 'Agriculture, Dairy & Animal Science'; 16/167 (Q1) in 'Veterinary Sciences'), 5-Year Impact Factor: 3.0.

#### Editor-in-Chief

Prof. Dr. Clive J. C. Phillips

1. Institute of Veterinary Medicine and Animal Sciences, Estonian University of Life Sciences, Kreutzwaldi 1, 51014 Tartu, Estonia 2. Curtin University Sustainability Policy (CUSP) Institute, Kent St., Bentley 6102, Australia

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