



## Ecology of Influenza A Viruses

Guest Editors:

**Dr. Maria Alessandra De Marco**

Institute for Environmental  
Protection and Research (ISPRA),  
Ozzano dell'Emilia, BO, Italy

**Dr. Claudia Cotti**

Department of Veterinary Medical  
Sciences, University of Bologna,  
Ozzano Emilia, BO, Italy

Deadline for manuscript  
submissions:

**closed (30 June 2022)**

### Message from the Guest Editors

Wild aquatic birds act the major natural reservoir of the influenza A virus (IAV) gene pool from which novel IAVs can emerge to infect other avian and mammalian species. From an ecological aspect, IAVs are natural components of wetland ecosystems in which they occupy trophic niches represented by susceptible hosts while interacting with other biotic and environmental components. But ecosystem interactions underlie possible bidirectional viral flows between natural and anthropogenic habitats.

Natural avian reservoirs enable the perpetuation of low-pathogenic avian influenza viruses (LPAIVs) that, in poultry, can occasionally evolve into highly pathogenic (HP) strains, posing a risk for animal and public health. But the increasing potential involvement of wild birds in HP avian influenza caused by H5 subtype circulation and long-distance spread by migratory populations opens a new scenario.

Our aim is to provide a collection related to IAV ecology and evolutionary adaptation to natural reservoir and spillover hosts. Manuscripts covering all aspects of research relating to IAV–host–environment interactions are welcomed.

Dr. Maria Alessandra De Marco

Dr. Claudia Cotti





an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Nico Jehmlich

Department of Molecular  
Systems Biology, UFZ-Helmholtz  
Centre for Environmental  
Research, 04318 Leipzig,  
Germany

## Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

## 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, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

**Journal Rank:** JCR - Q2 (*Microbiology*) / CiteScore - Q2 (*Microbiology*)

## Contact Us

---

*Microorganisms* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/microorganisms  
microorganisms@mdpi.com  
X@Micro\_MDPI