

Special Issue

Virulence-Associated Genes, Pathogenesis and Immuno-evasion Mechanisms of African Swine Fever Virus

Message from the Guest Editor

African swine fever (ASF) is a highly lethal viral disease affecting domestic pigs and wild suids, causing significant economic losses worldwide. The causative agent, African swine fever virus (ASFV), is a large, double-stranded DNA virus with a complex genome encoding numerous virulence-associated genes that are critical for viral replication, pathogenesis, and immune evasion. This Special Issue aims to showcase cutting-edge research and reviews on ASFV virulence, host–pathogen interactions, and immuno-evasion mechanisms. Topics of interest include the following:

- Identification and functional characterization of ASFV virulence-associated genes.
- Molecular mechanisms of ASFV-induced pathogenesis and tissue tropism.
- Viral strategies to evade innate and adaptive immune responses.
- Host factors influencing susceptibility, disease progression, and immune defense.
- Development of antiviral strategies and vaccine candidates targeting virulence and immune evasion.
- Advanced methodologies in ASFV genomics, transcriptomics, and proteomics related to pathogenicity.

We welcome original research articles, short communications, and comprehensive reviews.

Guest Editor

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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.

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