

## Special Issue

# Human Endogenous Retroviruses: Epigenetic and Immune Modulators in Health and Disease

### Message from the Guest Editors

HERVs influence their host's biology through several mechanisms. Their RNA and protein products may serve as immunostimulatory ligands, engaging pattern recognition receptors and driving proinflammatory signaling cascades. Simultaneously, HERV integration within or near regulatory elements can reshape the epigenetic landscape and alter the transcriptional activity of neighboring genes, particularly those involved in immune regulation, inflammation, and cellular stress responses. These dual roles—both as modulators of host gene expression and as active participants in innate and adaptive immune responses—position HERVs as key contributors to disease processes such as cancer, autoimmunity, and neurodegeneration.

This Special Issue seeks to present interdisciplinary research that advances our understanding of the biology, regulatory mechanisms, and disease associations of HERVs, addressing the following:

- The epigenetic and transcriptional regulation of HERVs;

- The immunological consequences of HERV expression;

- The roles of HERVs in exogenous virus coinfections, cancer, autoimmunity, and neurodegenerative diseases;

- The diagnostic and therapeutic relevance of HERVs.

### Guest Editors

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### Deadline for manuscript submissions

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## Pathogens

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## About the Journal

### Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics.

*Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

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### Editor-in-Chief

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