# Special Issue

# Retroviral Capsid: Assembly, Maturation and Interaction with Host and Antiviral Factors

## Message from the Guest Editors

The retroviral capsid (CA) protein is involved in multiple steps in the virus life cycle. In virus particle assembly, the CA protein is the key driver in forming the hexameric lattice found in immature particles, and following virus maturation forms a CA core in mature virus particles. Following infection, the CA protein is involved in core trafficking, uncoating, reverse transcription, and nuclear entry. CA is recognized by numerous cellular proteins, including those that can either facilitate or restrict CA core stability, trafficking, and/or nuclear entry. Mutation of CA and targeting by novel antiretroviral compounds can perturb core stability and particle infectivity. Structure-function analysis of CA variants and CA bound to small molecules have provided further insights into CA function and the mechanism of small molecule antiviral action. This special issue aims to highlight the cutting-edge advancements in methods and research on the retroviral CA protein, spanning topics such as CA trafficking and nuclear import, core stability, reverse transcription, virion assembly, maturation, and interactions with the host proteins and antiviral molecules.

## Guest Editors

Dr. Wei Zhang

Prof. Dr. Louis M. Mansky

Dr. Nathaniel Talledge

## Deadline for manuscript submissions

closed (31 October 2023)

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# About the Journal

## Message from the Editor-in-Chief

*Viruses* (ISSN 1999-4915) is an open access journal which provides an advanced forum for studies of viruses. It publishes reviews, regular research papers, communications, conference reports and short notes. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. The full experimental details must be provided so that the results can be reproduced. We also encourage the publication of timely reviews and commentaries on topics of interest to the virology community and feature highlights from the virology literature in the 'News and Views' section.

Electronic files or software regarding the full details of the calculation and experimental procedure, if unable to be published in a normal way, can be deposited as supplementary material.

## Editor-in-Chief

Dr. Eric O. Freed
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