Special Issue

Viral Nuclear Transport: From Molecular Pathogenesis to Antiviral Therapy

Message from the Guest Editor

Viruses intensively interact with the host cell nucleocytoplasmic nuclear transport apparatus. On the one hand, viral proteins involved in gene expression and replication, as well as virus genome delivery and encapsidation are actively translocated across the nuclear pore complex. On the other hand, viral proteins interfere with such process in order to modulate host cell function, modulating cell proliferation and survival, as well subverting antiviral defenses. Furthermore. recent developments of broad and specific nuclear transport inhibitors suggest a potential future pharmacological implications for antiviral drug discovery. Our Special Issue will welcome original research and review articles dealing with functional, biochemical and structural aspects on the subject, including the following topics

- Nucleocytoplasmic trafficking of viral proteins;
- Interaction of viral proteins with cellular transporters;
- Nuclear delivery and egress of viral genomes;
- Modulation of the nuclear pore function and composition during viral infection;
- Delocalization of nucleoporins to viral replication factories;
- Antiviral implications of nucleocytoplasmic transport inhibitors.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2023)



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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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