Message from the Guest Editor

Dear Colleagues,

Nuclear pore complexes (NPC) at the surfaces of nuclear membranes play a critical role in regulating the transport of molecules between the cell nucleus and cytoplasm. Aberrant functions of nucleoporins (Nups) and NPCs have been associated with many diseases, including autoimmune diseases (Nup358/RanBP2), viral infections (Nup358/RanBP2, Tpr, and Nup153), neuronal diseases (RanGAP1), cardiomyopathies (NDC1, Nup160, Nup153, and Nup93), and cancers, especially leukemia (Nup98, Nup214). However, and in spite of the importance of NPCs, we still only have a limited understanding of the spatial–temporal dynamics of NPCs.

In this Special Issue, we invite you to contribute original research articles, reviews, case reports or shorter “Perspective” articles on all aspects related to the theme of “Nuclear Pore Complex in Nanomedicine”. We especially hope to highlight current trends and novel models with functional insights from a cellular and nanoscopic perspective.

Keywords

- Nuclear pore complex
- Cell cycle and cancer
- Imaging and microscopy
- Structure and function
- Nano
- Medicine