

Special Issue

Structure and Roles of Dynein in Cellular Processes

Message from the Guest Editors

Dynein is a microtubule-based motor protein responsible for intracellular cargo transport and cell motility. Its cargos include many essential membrane-bound organelles, ribonucleoprotein particles, and aggregated proteins. A fully activated dynein transport machine requires the formation of a tripartite complex, consisting of dynein-1, the dynactin complex, and an adaptor protein. Dynein-mediated cargo transport is a highly regulated cellular process in time and space, which involves the participation of many different cofactors and adaptors. Due to the many fundamentally important cellular roles of dynein-1, a large number of human diseases are linked to dynein-1 mutations. Furthermore, during the evolution, myriads of viruses have evolved to ‘hitchhike’ the dynein-1-mediated intracellular transport to facilitate their translocation, assembly, and replication in the host cells.

The topics of this Special Issue will include but are not limited to the following themes:

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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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