

Special Issue

Microtubules in Nervous System Function

Message from the Guest Editor

In neurons of the central nervous system, microtubules play important roles in shaping dendritic and axonal arbors, regulating cellular migration, and maintaining general function. Additionally, they serve as structures for the transport of proteins to the synapse and use molecular motors to specify which cargo they transport. Transient changes to microtubules in dendritic spines occur after long-term potentiation, and these changes are thought to be essential for learning and memory. Degradation of microtubules occurs in response to neuronal injury, and in neurodegenerative disease, disorganization of microtubules can occur. A recent focus in the field includes the study of posttranslational modifications and the binding of microtubule-associated proteins to microtubules and how these influence development and function. Changes to the tubulin code affect how the microtubules shape the development and function of the nervous system. In this Special Issue, we will include papers that address the role that microtubules play in the nervous system, from the single cell level to the organism.

Guest Editor

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About the Journal

Message from the Editorial Board

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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