

Special Issue

Synaptic Dysfunction in Health and Disease

Message from the Guest Editors

Synapses are highly specialized junction structures that represent the basic units of communication in the brain. Over the last decades, the synapse has been the focus of research efforts that have yielded a body of knowledge about its structure, molecular constituents, and functional properties. However, much remains to be discovered in many fields of synapse development and plasticity. Defects in synapse assembly have been linked to a broad spectrum of neurodevelopmental disorders. In addition, synaptic defects are thought to precede neuronal death in many neurodegenerative diseases. An imbalance between excitatory and inhibitory synaptic signals gives rise to epilepsy. Loss of synaptic homeostasis in specific networks contributes to migraine and to other morbidities characterized by chronic pain, and synaptic dysfunction is an emerging hypothesis explaining affective disorders. This Special Issue of *Cells* is devoted to all aspects of synapse function in health and disease, both in humans and model organisms.

Guest Editors

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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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