

Special Issue

Serotonin in Development and Disease

Message from the Guest Editor

Serotonin (5-hydroxytryptamine or 5-HT) is a monoamine synthesized from the essential amino acid tryptophan. Although 5-HT was first identified as a substance with contracting properties found in gut cells, it was mostly studied as a neurotransmitter in the central nervous system. However, from the time when tryptophan hydroxylase—the rate limiting enzyme for its synthesis—was shown to exist in two isoforms, the study of both peripheral and central 5-HT revealed the critical roles played by the amine during development as well as in adult life. Defects in 5-HT signaling have been linked to a variety of psychiatric syndromes as well as to obesity/diabetes and diseases of the cardiovascular system such as hypertension. The new era of 5-HT research includes its role as a regulator for the activities of hematopoietic stem cells, and in inflammatory and immunomodulatory diseases, its possible involvement as a growth factor for tumor cells, in addition to understanding the link between 5-HT, gut microbiota, and the brain.

Guest Editor

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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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