Special Issue

Mechanotransduction in Cellular Function and Diseases

Message from the Guest Editor

Mechanotransduction is the process by which a mechanical signal is converted into a series of biochemical transduction cascades, followed by cellular responses, referring to the capacity of cells to actively perceive, integrate, and turn into biochemical signals and responses. Although the molecular mechanisms underlying mechanotransduction remain unclear, over the last decade, growing evidence has suggested that it is crucial for various biological processes, including cell migration, proliferation, growth, differentiation, organ development, and tissue homeostasis. Therefore, the dysregulation of the transduction of mechanical cues into biochemical signals has been causally linked to the pathogenesis of many illnesses, such as cancer and degenerative and metabolic diseases. This Special Issue includes all aspects of research focused on how mechanotransduction regulates cell signaling, cytoskeleton dynamics, apoptosis, proliferation, cell cycle, and differentiation. We welcome original research and reviews regarding all areas of mechanotransduction in health and illness.

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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