Special Issue

Collagen Remodeling and Degradation: Cellular Mechanisms and Functions

Message from the Guest Editors

The ubiquitous distribution of collagen molecules throughout metazoans underpins its broad evolutionary importance in tissue and organ development. Collagen is the most abundant protein in mammals and is present as multiple types of collagen, with surprisingly broad structures and functions. These molecules play critically important roles in health and notably in fibrotic diseases, which affect many organs in very large numbers of adult patients throughout the world. In this Issue we consider the fundamental characteristics of collagen molecules and their relationships with surrounding cells, which enable matrix remodeling. We examine how the transmission of forces through fibrillar collagen arrays mediates the long-range mechanosensing that is critical for matrix homeostasis and the invasion of matrices by metastatic cancers. Finally, we consider how the near-magical properties of collagen molecules are being harnessed to enable the development of novel biomaterials that are beginning to enable organ regeneration.

Guest Editors

Prof. Christopher A. McCulloch

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Deadline for manuscript submissions

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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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