Special Issue

Cellular and Molecular Events in Intervertebral Disc Development, Homeostasis and Disease

Message from the Guest Editor

The healthy intervertebral disc (IVD) is an aneural, avascular, and immune-privileged fibrocartilaginous structure. It presents regionally distinct phenotypes with a unique microenvironment and cellular composition. Despite a characteristically poor cell density, each cell type is crucial for maintaining the specific extracellular microenvironment and plays a vital role in ensuring the functional and structural integrity of the IVD. However, the cellular and molecular characteristics of the IVD are critically influenced by various factors such as age, genetic, metabolic, and mechanical factors, which can significantly affect IVD development, homeostasis, and disease.

This Special Issue is dedicated to interesting and innovative research on “Cellular and Molecular Events in Intervertebral Disc Development, Homeostasis, and Disease”. Further, it includes novel approaches in regenerative medicine and tissue engineering strategies for IVD tissue repair/regeneration.

Guest Editor

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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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