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

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Deadline for manuscript  
submissions:

**31 January 2025**

### 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.



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# Special Issue



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