

Special Issue

Molecular Insights into Mechanobiology of Regeneration

Message from the Guest Editors

We invite you to submit papers that explore the molecular mechanisms by which mechanical forces influence regenerative processes in tissues and organs for our Special Issue entitled “Molecular Insights into Mechanobiology of Regeneration”. The dynamic interplay between mechanical cues and biochemical signaling governs cell behavior, tissue repair, and structural remodeling. Advances in mechanotransduction, cytoskeletal dynamics, extracellular matrix remodeling, and mechanosensitive gene expression are shedding new light on regeneration across diverse biological systems. We welcome submissions that focus on molecular signaling pathways, mechanosensors, and the biomechanical modulation of stem cells and progenitor cells in regenerative contexts. Studies employing in vitro, in vivo, or computational models to elucidate the mechanobiological pathways relevant to tissue engineering, fibrosis reversal, and organ repair are encouraged. Contributions that integrate cutting-edge molecular biology tools with biophysical approaches are particularly suitable.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

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