

# Special Issue

## In Vitro Models of Tissue and Organ Regeneration

### Message from the Guest Editors

We welcome experimental research approaches investigating the mechanisms involved and the laboratory methods used to establish and optimize in vitro models for tissue and organ repair and regeneration, with a focus on the role of (mesenchymal stromal) stem cells, (pre-)conditioned media and extracellular vesicles in regenerative medicine, which may result in greater success in clinical applications. Therefore, this Special Issue welcomes original research and review papers addressing:

- In vitro models to investigate regenerative mechanisms during acute and chronic injury;
- In vitro models to investigate repair, fibrosis and scar formation;
- In vitro preconditioning regimens to enhance the regenerative potential of cells;
- Co-culture systems of supportive cells (e.g., mesenchymal stromal/stem cells) with injured cells;
- Characterization of extracellular vesicles and exosomes and their effects on cell proliferation and differentiation;
- Organoid cultures;
- RNA-seq-based transcriptional profiling of in vitro models;
- Proteomics based translational profiling of in vitro models;
- Investigations of the epigenetic regulation such as specific miRNA and ncRNA in these processes.

### Guest Editors

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### Deadline for manuscript submissions

closed (31 December 2022)



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### 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.

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### Editor-in-Chief

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