

## Special Issue

# Muscle Homeostasis and Regeneration: From Molecular Mechanisms to Therapeutic Opportunities—Series II

### Message from the Guest Editors

Regeneration is a highly coordinated program that partially recapitulates the embryonic developmental program, and involves the activation of the muscle compartment of stem cells, namely, satellite cells and other precursor cells, whose activity is strictly dependent on environmental signals. However, muscle regeneration is severely compromised in several pathological conditions due to either the progressive loss of stem cell populations or to missing signals that limit the damaged tissues from efficiently activating a regenerative program. It is therefore plausible that the loss of control over these cells' fate might lead to pathological cell differentiation, limiting the ability of pathological muscle to sustain an efficient regenerative process. This Special Issue offers an open-access forum that aims to bring together a collection of original research and review articles addressing the intriguing field of the cellular and molecular players involved in muscle homeostasis and regeneration, and to suggest potential therapeutic approaches for degenerating muscle diseases. We hope to provide a stimulating resource for the fascinating subject of muscle research.

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### Guest Editors

#### Prof. Dr. Antonio Musarò

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# Cells

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### Deadline for manuscript submissions

closed (31 May 2024)



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## About the Journal

### 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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### Editors-in-Chief

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Prof. Dr. Cord Brakebusch

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JCR - Q2 (Cell Biology) / CiteScore - Q1 (General  
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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).

