

## Special Issue

# Molecular Insight into Skeletal Muscle Atrophy and Regeneration, 2nd Edition

### Message from the Guest Editors

Skeletal muscle wasting can be induced by chronic illnesses, aging, malnutrition, disease, and acute/chronic inflammatory conditions. Muscle atrophy leads to mobility, fragility, and a loss of independence, while also increasing the mortality and morbidity of the illness. Muscle regeneration occurs after muscle injury, exercise, or physiological demands. Muscle regeneration involves the inflammation, activation, proliferation, differentiation, and the maturation of satellite cells. Growth factors and mechanical stress from exercise play critical roles in promoting this process. Therefore, understanding the processes of skeletal muscle wasting and regeneration offers insights for developing therapies to mitigate muscle loss and promote muscle recovery. This second edition of the Special Issue continues to invite both original articles and reviews that can provide the readers of *IJMS* with novel research on molecular mechanisms and possible treatments related to enhancing muscle regeneration and counteracting muscle wasting, such as growth factors, gene therapy, stem cell transplantation, exercise, and nutraceutical interventions.

### Guest Editors

Dr. Elena Nebot

Dr. Teresa Priego Cuadra

Dr. Ana Isabel Martín Velasco

### Deadline for manuscript submissions

closed (30 June 2025)



## International Journal of Molecular Sciences

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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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