

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

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/228750

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)