Special Issue

Unlocking the Future of Muscle Disease Treatment: Advancements in Gene Therapy, Antisense Therapeutics and Cutting-Edge Pharmacological Strategies

Message from the Guest Editors

Muscle disorders, including muscular dystrophy and various neuromuscular diseases, are remarkably heterogenic in terms of genetic defects, pathophysiology, and the age of onset. Unfortunately, effective treatments for these disorders have been elusive, principally due to their rarity and the necessity of often mutation-specific approaches and tailored therapies. However, in recent years, we have witnessed the emergence of novel therapies, such as gene therapy, antisense therapeutics, and pharmacological approaches. These breakthroughs have shown promise for the treatment of diseases like Duchenne muscular dystrophy and spinal muscular atrophy and ongoing advancements in the development of treatments for myotubular myopathy or limb girdle muscular dystrophy. These encouraging advancements demonstrate the feasibility of developing treatments for severe and complex muscle diseases using new tools and models and via collaboration between preclinical research laboratories and industries. Ultimately, this Special Issue seeks to shed light on the progress and potential of innovative therapeutic strategies for the treatment of muscular diseases.

Guest Editors

Dr. Ngoc B. Lu-Nguyen

Royal Holloway, University of London, Egham Hill, TW20 0EX Egham, Surrey, UK

Dr. Alberto Malerba

Royal Holloway, University of London, Egham Hill, TW20 0EX Egham, Surrey, UK

Deadline for manuscript submissions

closed (20 October 2024)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/186959

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

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

MDPI

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

Prof. Dr. Maurizio Battino
Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, CAPlus / SciFinder, and other databases.

Journal Rank:

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