

Special Issue

Advanced Research on Nucleic Acids: Therapeutic Potential and Applications

Message from the Guest Editors

This Special Issue will present a selection of original research, reviews, and commentaries focused on diverse topics in this field, with particular attention being paid to advancements in nucleic acid research at the molecular level. Nucleic acid therapeutics represent an innovative and challenging research field.

Oligonucleotide (ON)-based therapy has become an alternative to classical approaches in the search for novel therapeutics involving gene-related diseases. Nucleic-acid-based drugs can be designed to modulate cellular pathways that are not readily druggable, and different nucleic acid chemical modifications can be optimally combined in the context of various targeting mechanisms, in order to circumvent the main pharmacokinetic restrictions for therapeutic ON applications. The wide versatility of the mechanism of action of ONs, combined with various designs and multiple choices of chemical modifications, provide the concept of ON targeting with vast potential. Clinically relevant applications and remaining challenges in this field are still numerous and exciting.

Guest Editors

Dr. Veronica Esposito

Dr. Antonella Virgilio

Prof. Dr. Aldo Galeone

Deadline for manuscript submissions

closed (29 February 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/162813

*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*, 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)