

## 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.

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### Guest Editors

Dr. Veronica Esposito

Dr. Antonella Virgilio

Prof. Dr. Aldo Galeone

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### Deadline for manuscript submissions

closed (29 February 2024)



## International Journal of Molecular Sciences

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CiteScore 9.0  
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Molecular Sciences*  
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