

## Special Issue

# Emerging Concepts in miRNA-Based Therapeutics

### Message from the Guest Editor

microRNAs (miRNAs, miRs), which are short (18–26 nucleotides) RNA molecules, were discovered in 1993 in *Caenorhabditis elegans* (*C. elegans*). Since then, there has been an exponential growth in the number of publications describing new members of this emergent nucleic acid family, elucidating their biogenesis, mechanisms of action, and their roles in diverse signaling pathways and physiological processes. miRNAs act mainly by downregulating genes to whose mRNAs they are (partially) complementary. As almost ubiquitous master regulators of crucially important cellular functions and physiological processes, in recent years, miRNAs have become new promising diagnostic tools and therapeutic targets in multiple pathological conditions, from asthma and cancer, through cardiovascular and metabolic diseases, to Parkinson's disease and Zika virus infection. This Special Issue aims at presenting the most recent advancements in miRNA-based therapeutics, including new miRNA targets and novel promising approaches and solutions to overcoming existing obstacles in therapeutic applications.

### Guest Editor

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### Deadline for manuscript submissions

closed (15 August 2024)

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*Genes* is central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fast-moving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised. Why not consider *Genes* for your next genetics paper?

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### Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan  
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