

## Special Issue

# Non-Coding RNAs in Osteoarthritis: From Epigenetic Regulation to Therapeutic Targets

### Message from the Guest Editor

Osteoarthritis is one of the leading causes of disability and pain worldwide, with over 500 million people affected. Despite its high prevalence and socio-economic burden, current treatment strategies primarily address symptoms in the late stages of OA. Therefore, a deeper understanding of the underlying molecular mechanisms driving disease progression and new drug targets is urgently needed. Non-coding RNAs (ncRNAs), including microRNAs (miRNAs), long non-coding RNAs (lncRNAs), and circular RNAs (circRNAs), have emerged as key regulators in the complex molecular landscape of OA, by regulating the expression of genes implicated in OA-related processes such as chondrocyte proliferation, apoptosis, autophagy, extracellular matrix metabolism, and inflammatory responses. This Special Issue aims to provide a comprehensive overview of the latest findings on the role of ncRNAs in OA onset and progression, shedding light on these emerging molecular players to advance our understanding of OA biology and inspire the development of novel RNA-based diagnostic and therapeutic approaches. The submission of original articles and comprehensive reviews is welcome.

### Guest Editor

Prof. Dr. Ioanna Papathanasiou

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### Deadline for manuscript submissions

25 October 2025

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## Genes

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### Message from the Editor-in-Chief

*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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