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## Transfer RNA Modification

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### **Message from the Guest Editor**

The primary function of tRNA modifications is to regulate precise protein synthesis by contributing to the stabilization of tRNA's L-shaped structure, prolongation of tRNA's half-life, binding of correct amino acids to tRNA, and inhibition of misreading. In particular, modified nucleosides in anticodons act to enhance, alter, or suppress codon–anticodon pairing. Modified nucleosides are also key in tRNA transport, tRNA processing, and tRNA quality control. Moreover, the effects of tRNA modification on diseases are also becoming clearer.

Regarding the detection of modified nucleosides in tRNA, starting with classical TLC-based detection and mass spectrometry analysis, nanopore sequencing has finally made it possible to determine tRNA sequences containing modified nucleosides. In order to understand tRNA modifications broadly and deeply, I hope that this Special Issue brings together research from various perspectives.



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# Special Issue



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## Editor-in-Chief

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## Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving 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.

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