



## Epigenetic Connections between the Gene Regulatory Network and Chromatin Dynamics

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### Message from the Guest Editor

Cells in tissues have different phenotypes and functions determined by lineage-specific and signal-responsive gene expression patterns. Activation or repression of gene transcription is facilitated by epigenetic mechanisms controlling the accessibility of DNA in nuclear chromatin. Transcription factors and histone- and DNA-modifying enzymes cooperate in gene regulatory networks that act on individual genes or genomic domains in the nucleus and can maintain gene expression patterns through cell divisions. This Special Issue focuses on gene regulation mechanisms involving transcription factors, epigenetic modifying and chromatin remodelling complexes acting at specific genomic loci or altering chromosomal dynamics. A better understanding of how cell types and cell states are defined will advance further insight into cell differentiation and cell function in normal tissues and in disease.





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## Message from the Editor-in-Chief

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