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Nucleosome Structure, Dynamics and Interactions

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Message from the Guest Editors

The nucleosome is a minimal structural unit of chromatin that modulates the access of various nuclear proteins involved in DNA repair, transcription and replication to DNA. Various DNA transactions are accompanied with changes in the nucleosome structure, varying from local alterations to dramatic unwrapping of DNA from the histone octamer and nucleosome unfolding. Histone variants and post-translational modifications introduce additional diversity into the repertoire of the structural changes. Nucleosomes and nucleosome-bound proteins are targets for various drugs, which differently affect the structure of nucleosome–protein complexes and block unwanted nuclear processes. Structural analysis of nucleosomes and their complexes with nuclear proteins aims to reveal basic principles of DNA functioning in normal and pathological cells.

The aim of this Special Issue is to provide an opportunity for researchers to present their latest results in the field of study of nucleosome structure, dynamics and interactions, and to summarize the most recent developments in the field.



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Special Issue



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Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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