Chromatin Regulation and Dynamics

Edited by:
Anita Göndör
Assistant Professor, Department of Microbiology, Tumor, and Cell Biology (MTC), Karolinska Institutet, Solna, Sweden

Highlights the translational epigenetic aspect of chromatin regulation and dynamics in development and disease

Key Features

- Presents and discusses novel principles of chromatin regulation and dynamics with a cross-disciplinary perspective
- Promotes crosstalk between basic sciences and their applications in medicine
- Provides a framework for future studies on complex diseases by integrating various aspects of chromatin biology with cellular metabolic states with an emphasis on the dynamic nature of chromatin and stochastic principles

Chromatin Regulation and Dynamics integrates knowledge on the dynamic regulation of primary chromatin fiber with the 3D nuclear architecture, and then connects related processes to circadian regulation of cellular metabolic states, representing a paradigm of adaptation to environmental changes. The book also covers the many ways chromatin dynamics can synergize to fundamentally contribute to the development of complex diseases.

Chromatin dynamics, which is strategically positioned at the gene–environment interface, is at the core of disease development. As such, *Chromatin Regulation and Dynamics*, as part of the *Translational Epigenetics series*, facilitates the flow of information between research areas such as chromatin regulation, developmental biology, as well as ageing and complex diseases by focusing on recent findings of the fast-moving field of chromatin regulation.

Genetics/Epigenetics/Chromatin

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