

# Epigenetics

## A Reference Manual

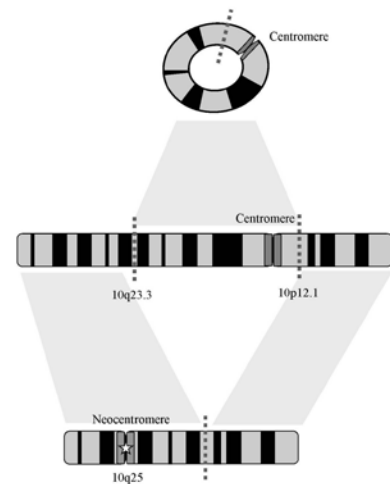
Edited by: **Jeffrey M. Craig and Nicholas C. Wong**  
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Epigenetics is the study of changes in gene expression caused by mechanisms other than changes in the DNA sequence. Epigenetics is a rapidly advancing field with an increasing impact on biological and medical research.

The editors of this book have assembled top-quality scientists from diverse fields of epigenetics to produce a major new volume. Comprehensive and cutting-edge, the 26 chapters in this book constitute a key reference manual for everyone involved in epigenetics, DNA methylation, cancer epigenetics and related fields. Topics include: early life environment, DNA methylation and behavior, histone acetyltransferase biology, transgenerational epigenetic inheritance, mammalian X inactivation, epigenetic memory in plants, polycomb-group regulation, centromeres and telomeres, DNA sequence contribution to nucleosome distribution, macrosatellite epigenetics, histones, cell-fate specification and reprogramming, DNA methylation in cancer, variant histone H2A and cancer development, RNA modification, paramutation in plants, DNMT3L dependent methylation during gametogenesis, non-coding RNA, bisulphite-enabled technologies, rapid analysis of DNA methylation, microarray mapping, DNA methylation profiling, ChIP-sequencing, genome-wide DNA methylation analysis, and epigenetics in maize. In addition there are useful chapters on bioinformatics in epigenomics, online resources and tools for epigeneticists, and educational resources for epigeneticists.

This up-to-date reference manual is an essential book for those working in the field and for scientists in other disciplines it represents a major information resource on the fascinating and fast-moving field of epigenetics.

### Table of Contents

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#### Part 1. Introduction to Epigenetics and Epigenetic Methods

- **Chapter 1:** Early Life Environment, DNA Methylation and Behavior.
- **Chapter 2:** Concepts in Histone Acetyltransferase Biology.
- **Chapter 3:** Murine Models of Transgenerational Epigenetic Inheritance.
- **Chapter 4:** The Molecular Mechanisms of Mammalian X Inactivation.
- **Chapter 5:** Epigenetic Memory in Plants: Polycomb-group Regulation of Responses to Low Temperature.
- **Chapter 6:** Centromeres and Telomeres.
- **Chapter 7:** DNA Sequence Contribution to Nucleosome Distribution.
- **Chapter 8:** Macrosatellite Epigenetics.
- **Chapter 9:** Histones: Dosage and Degradation.
- **Chapter 10:** The Epigenetic Basis of Cell-Fate Specification and Reprogramming.
- **Chapter 11:** DNA Methylation Changes in Cancer.
- **Chapter 12:** Variant Histones H2A and Cancer Development.
- **Chapter 13:** 5-methylcytosine As a Modification in RNA.
- **Chapter 14:** Paramutation in Plants.

- **Chapter 15:** Lessons from DNMT3L Dependent Methylation During Gametogenesis.
- **Chapter 16:** Non-Coding RNA: an Overview.

#### Part 2. Epigenetic Techniques

- **Chapter 17:** Bisulphite-enabled Technologies.
- **Chapter 18:** Methylation-sensitive High Resolution Melting for the Rapid Analysis of DNA Methylation.
- **Chapter 19:** Microarray Mapping of Nucleosome Position.
- **Chapter 20:** Enzymatic Approaches for Genome DNA Methylation Profiling.
- **Chapter 21:** ChIP-Sequencing.
- **Chapter 22:** Genome-wide DNA Methylation Analysis.

#### Part 3. Epigenetics Reference Material

- **Chapter 23:** Bioinformatics Analysis of Epigenomic Methylation Patterns in the Era of Massively Parallel Sequencing.
- **Chapter 24:** Genetic Resources for the Study of Epigenetic Gene Regulation in Maize.
- **Chapter 25:** Online Resources and Tools for Epigeneticists.
- **Chapter 26:** Educational Resources for Epigenetics.

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