

HANDBOOK OF EPIGENETICS

The New Molecular and Medical Genetics

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- Discusses the most recent advances in epigenetic technology and comprehensive aspects of epigenetic functions
- Ranges from basic science to clinical therapy
- Covers emerging aspects of epigenetics including newly discovered epigenetic processes, epigenomics, Polycomb mechanisms, computational epigenetics, prions, transgenerational epigenetics, population pharmacoeugenomics and epigenetics in adaptive evolution
- Includes essays on the epigenetics of numerous human diseases

An indispensable reference for those with interests in molecular genetics, medical genetics and the diagnosis and therapy of diseases related to epigenetic processes, this authoritative reference covers the critical and contemporary aspects of the exponentially-growing field of epigenetics which is now in its renaissance phase. Research pioneers in their field have contributed chapters on molecular mechanisms of epigenetics, epigenetic technology, model organisms of epigenetics, epigenetics of regeneration, diet and epigenetics, and other principle chapters to provide the foundation for understanding the effects of epigenetics on gene expression. Additional contributed chapters which provide detailed essays on the epigenetics of complex metabolic syndromes, cancer epigenetics, human imprinting disorders and the role of epigenetics in immune disorders, brain disorders, and aging elucidate this important topic for the vast number of researchers and practitioners integrating epigenetic understanding into their work.

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ACADEMIC PRESS

An imprint of Elsevier
elsevierdirect.com

ISBN 978-0-12-375709-8

