

EPIGENETICS

Edited by: **Jörg Tost** (*Evry, France*)

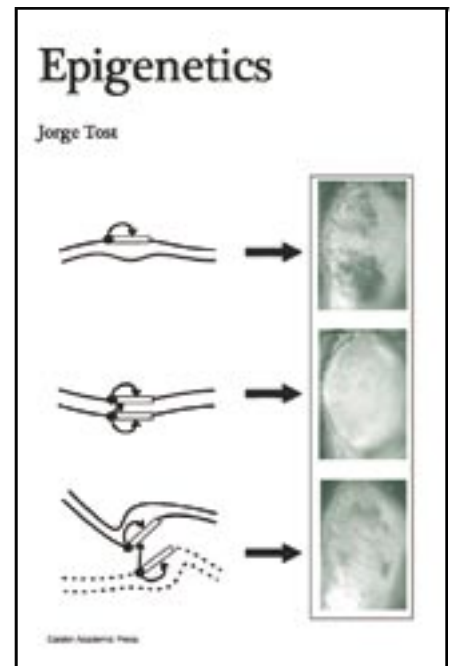
xii + 404, March 2008 (Shipping from January 2008 ... order now!)
ISBN 978-1-904455-23-3 \$3% /£15-

The field of epigenetics has gained great momentum in recent years and is now a rapidly advancing field of biological and medical research. Epigenetic changes play a key role in normal development as well as in disease. The editor of this book has assembled top-quality scientists from diverse fields of epigenetics to produce a major new volume on current epigenetics research.

In this book the molecular mechanisms and biological processes in which epigenetic modifications play a primordial role are described in detail. The first seven chapters describe the different biological mechanisms of the epigenetic machinery including: DNA methylation, histone tails, chromatin structure, nucleosome occupancy, Polycomb group proteins, siRNAs and miRNAs. The following chapters cover the epigenetic systems of plants, the epigenetic profile of embryonic stem cells, cell differentiation, imprinting marks, and random X chromosome inactivation. Further chapters deal with epigenetics in relation to cancers, premature aging, longevity and the developmental origins of disease. The final chapter, describes the fascinating potential transfer of epigenetic information across generations.

This up-to-date volume is a major resource for those working in the field and will stimulate readers of all levels to dive into the fascinating and fast moving field of epigenetics.

A recommended text for all bioscience and medical libraries.



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