

AN AUTHORITATIVE AND ACCESSIBLE INTRODUCTION TO EPIGENETICS

- Emerging discoveries about the deep linkages between genetics and environment
- Understanding reversible mechanisms of heredity that do not modify DNA sequence
- From cancer to psychiatry: what bioscientists are learning about epigenetics and disease

This is the first comprehensive, authoritative, and easy-to-understand introduction to modern epigenetics. Authored by Igor Kovalchuk and Olga Kovalchuk, two active researchers in the field, this book introduces key concepts one step at a time, enabling students at all levels to benefit.

After reviewing the field's history and context, the authors introduce and explain each key epigenetic mechanism. Next, they extensively discuss the roles these mechanisms may play in inheritance, development, health and disease, behavior, evolution, ecology, and the interactions of individual organisms with their environments.

The authors conclude by offering significant new insights into how knowledge of epigenetics and epigenomics may promote the development of technologies and solutions in areas ranging from behavioral neuroscience to cancer treatment, and toxicology to the development of hardier crops.

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