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Titolo	Beyond Our Genes : Pathophysiology of Gene and Environment Interaction and Epigenetic Inheritance / / edited by Raffaele Teperino
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Nota di contenuto	Section I: The physiology of the gene/environment interaction -- Nutrition -- Physical Exercise -- Circadian Rhythm -- Toxicants: Smoke, Alcohol and Heavy Metals -- Hormones -- Section II: Gene-Environment Interaction and Disease Susceptibility -- Obesity and Metabolic Syndromes -- Cancer -- Neurological and Psychiatric Disorders -- Asthma and allergic disorders -- Lamarck Versus Darwin: The Concept of Acquired Epigenetic Inheritance -- Section III: Genome/Epigenome -- Genetic Contribution to Epigenetic Inheritance -- The Controversial Role of DNA Methylation in Epigenetic Inheritance -- Small Non-Coding RNAs -- Chromatin Modifiers -- Soma-to-Germline Information Transfer: Questions and Promises.
Sommario/riassunto	The genotype/phenotype dichotomy is being slowly replaced by a more complex relationship whereby the majority of phenotypes arise from interactions between one’s genotype and the environment in which one lives. Interestingly, it seems that not only our lives, but also our ancestors’ lives, determine how we look. This newly recognized form of inheritance is known as (epi)genetic, as it involves an additional layer of

information on top of the one encoded by the genes. Its discovery has constituted one of the biggest paradigm shifts in biology in recent years. Understanding epigenetic factors may help explain the pathogenesis of several complex human diseases (such as diabetes, obesity and cancer) and provide alternative paths for disease prevention, management and therapy. This book introduces the reader to the importance of the environment for our own health and the health of our descendants, sheds light on the current knowledge on epigenetic inheritance and opens a window to future developments in the field.