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| Nota di contenuto | Genes -- Star-Recessive, a Spontaneous Mutation in Drosophila Melanogaster -- Another Case of Unequal Crossing Over in Drosophila Melanogaster -- The Relation of Repeats to Position Effect in Drosophila Melanogaster -- The pseudoallelism of white and apricot in Drosophila melanogaster -- Pseudoallelism and Gene Evolution -- The Theory and Application of a New Method of Detecting Chromosomal Rearrangements in Drosophila Melanogaster -- Some Aspects of Position Pseudoallelism -- Genes and Gene Complexes -- Genes and Development -- Genes and Developmental Pathways -- A Gene Complex Controlling Segmentation in Drosophila -- Genetic Control of Body Segment Differentiation in Drosophila -- Control of Body Segment Differentiation in Drosophila by the Bithorax Gene Complex -- |

Regulation of the Genes of the Bithorax Complex in Drosophila -- Molecules and Development -- Molecular Genetics of the Bithorax Complex in Drosophila Melanogaster -- The Abdominal Region of the Bithorax Complex -- Transabdominal, A Dominant Mutant of the Bithorax Complex, Produces a Sexually Dimorphic Segmental Transformation in Drosophila -- Molecular Basis of Transabdominal—A Sexually Dimorphic Mutant of the Bithorax Complex of Drosophila -- Sequence Analysis of the Cis-Regulatory Regions of the Bithorax Complex of Drosophila -- Splits in Fruitfly Hox Gene Complexes -- Evolution of the Homeobox Complex in the Diptera -- Radiation and Cancer -- Leukemia and Ionizing Radiation -- Thyroid radiation doses from fallout -- Leukemia, multiple myeloma, and aplastic anemia in american radiologists -- Ionizing Radiation and Tumor Production -- Leukemia, Radiation, and Hyperthyroidism -- Analysis of Lung Tumor Mortality in the Battelle Beagle Lifespan Experiment -- Ionizing Radiation, Cancer Induction, and Radioactive Fallout -- Historical perspectives -- Homeosis: the first 100 years -- Remembering Sturtevant -- C. B. Bridges' Repeat Hypothesis and the Nature of the Gene -- Did Demerec Discover Intragenic Recombination in 1928? -- The Bithorax Complex: The First Fifty Years.

Sommario/riassunto

Edward B. Lewis' science is the bridge linking experimental genetics as conducted in the first half of the twentieth century, and the powerful molecular genetic approaches that revolutionized the field in its last quarter. His Nobel Prize winning studies founded the field of developmental genetics and laid the groundwork for our current understanding of the universal, evolutionarily conserved strategies controlling animal development. A lesser-known aspect of Lewis' canon is the pioneering studies he carried out on ionizing radiation and human cancer. In doing so, he was propelled into a public storm over nuclear weapons testing policy. For the first time Lewis' key publications in the fields of genetics, developmental biology, radiation and cancer are compiled within one volume. The Second Edition has been expanded with new material and the commentaries have been updated.