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Autore	Keller Evelyn Fox <1936-2023.>
Titolo	The century of the gene [[electronic resource] /] / Evelyn Fox Keller
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Nota di contenuto	Frontmatter -- CONTENTS -- Introduction: The Life of a Powerful Word -- 1. Motors of Stasis and Change: The Regulation of Genetic Stability -- 2. The Meaning of Gene Function: What Does a Gene Do? -- 3. The Concept of a Genetic Program: How to Make an Organism -- 4. Limits of Genetic Analysis: What Keeps Development on Track? -- Conclusion: What Are Genes For? -- Notes -- References -- Acknowledgments -- Index
Sommario/riassunto	In a book that promises to change the way we think and talk about genes and genetic determinism, Evelyn Fox Keller, one of our most gifted historians and philosophers of science, provides a powerful, profound analysis of the achievements of genetics and molecular biology in the twentieth century, the century of the gene. Not just a chronicle of biology's progress from gene to genome in one hundred years, <i>The Century of the Gene</i> also calls our attention to the surprising ways these advances challenge the familiar picture of the gene most of us still entertain. Keller shows us that the very successes that have stirred our imagination have also radically undermined the primacy of the gene—word and object—as the core explanatory concept of heredity and development. She argues that we need a new vocabulary that includes concepts such as robustness, fidelity, and evolvability. But more than a new vocabulary, a new awareness is absolutely crucial: that understanding the components of a system (be they individual genes, proteins, or even molecules) may tell us little about the interactions

among these components. With the Human Genome Project nearing its first and most publicized goal, biologists are coming to realize that they have reached not the end of biology but the beginning of a new era. Indeed, Keller predicts that in the new century we will witness another Cambrian era, this time in new forms of biological thought rather than in new forms of biological life.
