Record Nr. UNINA9910808720603321 Autore Lima-de-Faria A **Titolo** Praise of chromosome "folly": confessions of an untamed molecular structure / / Antonio Lima-de-Faria Singapore; ; Hackensack, NJ, : World Scientific, c2008 Pubbl/distr/stampa 981-281-095-1 **ISBN** Edizione [1st ed.] 1 online resource (428 p.) Descrizione fisica Disciplina 572.8/7 Soggetti Chromosomes Mutation (Biology) Genetics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto To the Reader; References; Contents; Introductory Note; Part I The Source of "Folly" and the Reason for Confessions; 1. I am an Inconspicuous and Unattractive Creature Painted with Lipstick; 2. They Say That I Resemble a Sausage; 3. The Cell Is My Castle and Prison But I May Swim and Dance like an Odalisque in a Harem; 4. The Striptease Show - How I Dress and Undress at Every Cell Division; 5. I Have Created My Own Private World Full of Tricks, Back Door Exits and Novel Solutions - I am an Untamed Innovator 6. My Origins Were Humble - The Antithetical Nature of Matter Left a Mark on My Construction7. My Split Personality - The Source of "Folly"; 8. The Reason for Confessions; 9. I Have Been Abused and Covered With Insults; 10. The Wisdom of the Foolish; 11. Scientific Concepts Are Prone to Change Throughout Time - The Nature of Science Demands that Previous Ideas be Superseded, as New Technologies Allow a Deeper Insight into Matter 12. What Seems Ludicrous at a Given Time Turns Out to be the Correct Explanation Several Years Later. The Gene was Considered to Consist of Protein, But Is Now Known to be a Ribbon of DNA13. In the Last 20

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When examined carefully at the molecular level, the chromosome turns out to have created its own private world full of tricks, back door exits and novel solutions. This "folly" makes it an untamed innovator. Geneticists have been bewildered for decades. What kind of creature was actually the chromosome? Was it plastic, changing by innumerous rearrangements and mutations all the time; or was it a rigid structure which has preserved its basic organisation and functions since the dawn of the cell? It is this conflicting state that seems to be at the base of its "folly". Perplexed by this behavior