Praise of Chromosome "Folly:" Confessions of an Untamed Molecular Structure

By anchoring the chromosome's contradictory behavior on molecular processes directed by atomic self-assembly, the author expands a novel view of the chromosome with unexpected implications for genetics, evolution and physics.

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, cell biologists have called it a junkyard and even the ultimate parasite. Moreover, the chromosome has been regarded as a passive cell organelle prone to random mutations and subjected to the mercy of selection.

The latest molecular information discloses a radically different picture in which the chromosome appears as an independent molecular structure that follows its own path. It does not obey gravity, randomness, selection or magnetism.

This timely book contains the latest information on the molecular organization of the chromosome. The information is original and is presented in an unorthodox way, while carefully chosen elucidating and attractive figures serve to add clarity to the subject treated. Thus, the book will add greatly to the general debate on the evolution of living organisms, and will be of particular interest to those in the biotechnological field.