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Nota di contenuto	What Cancer Is by J. James Frost -- Complementarity, Complexity and the Fokker-Planck Equation; From the Microscale Quantum Stochastic Events to Fractal Dynamics of Cancer -- Quantitative in vivo Imaging to Enable Tumor Forecasting and Treatment Optimization.
Sommario/riassunto	This book presents unique compendium of groundbreaking ideas where scientists from many different backgrounds are united in their interest in interdisciplinary approaches towards origins and development of cancers, innovative ways of searching for cancer treatment and the role of cancer in the evolution. Chapters give an unequivocal slice of all areas that relate to a quest for understanding cancer and its origin as many-fold nonlinear system, complexity of the cancer developments, a search for cancer treatment using artificial intelligence and evolutionary optimisation, novel modelling techniques, molecular origin of cancer, the role of cancer in evolution of species,

interpretation of cancer in terms of artificial life and artificial immune systems, swarm intelligence, cellular automata, computational systems biology, genetic networks, cellular computing, validation through in vitro/vivo tumour models and tumour on chip devices. The book is an inspiring blendof theoretical and experimental results, concepts and paradigms. Distinctive features The book advances widely popular topics of cancer origin, treatment and understanding of its progress The book is comprised of unique chapters written by world top experts in theoretical and applied oncology, complexity theory, mathematics, computer science. The book illustrates attractive examples of mathematical and computer models and experimental setups.