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Sommario/riassunto	The three-dimensional organization of the DNA inside the eukaryotic cell nucleus has emerged a critical regulator of genome integrity and function. Increasing evidence indicates that nuclear pore complexes (NPCs), the large protein channels that connect the nucleus to the cytoplasm, play a critical role in the establishment and maintenance of chromatin organization and in the regulation of gene activity. These findings, which oppose the traditional view of NPCs as channels with only one: the facilitation of nucleocytoplasmic molecule exchange, have completely transformed our understanding of these structures. This book describes our current knowledge of the role of NPCs in genome organization and gene expression regulation. It starts by providing an overview of the different compartments and structures of the nucleus and how they contribute to organizing the genome, then moves to examine the direct roles of NPCs and their components in gene expression regulation in different organisms, and ends by describing the function of nuclear pores in the infection and genome integration

of HIV, in DNA repair and telomere maintenance, and in the regulation of chromosome segregation and mitosis. This book provides an intellectual backdrop for anyone interested in understanding how the gatekeepers of the nucleus contribute to safeguarding the integrity and function of the eukaryotic genome. .