Cancer, which has become the second-most prevalent health issue globally, is essentially a malfunction of cell signaling. Understanding how the intricate signaling networks of cells and tissues allow cancer to thrive - and how they can be turned into potent weapons against it - is the key to managing cancer in the clinic and improving the outcome of cancer therapies. In their groundbreaking textbook, the authors provide a compelling story of how cancer works on the molecular level, and how targeted therapies using kinase inhibitors and other modulators of signaling pathways can contain and eventually cure it.

The first part of the book gives an introduction into the cell and molecular biology of cancer, focusing on the key mechanisms of cancer formation. The second part of the book introduces the main signaling transduction mechanisms responsible for carcinogenesis and compares their function in healthy versus cancer cells. In contrast to the complexity of its topic, the text is easy to read. 32 specially prepared teaching videos on key concepts and pathways in cancer signaling are available online for users of the print edition and have been integrated into the text in the enhanced e-book edition.

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