In this third edition of *Cancer Cytogenetics*, the authors provide comprehensive coverage of the cytogenetic and molecular mechanisms underlying neoplasia in excellent summaries for each of the human cancers. Edited by two leading authorities, who were aided by a panel of international experts, this new edition has been updated to include greatly expanded coverage of solid tumors, enhanced coverage of acute and chronic myeloproliferative disorders, and the latest findings on acute and chronic lymphoproliferative disorders. This edition further includes detailed information on the most recent advances in the field, incorporating a vast amount of new cytogenetic as well as molecular genetic data from the latest basic and clinical investigations. The advent of new techniques, particularly those improving visualization of abnormalities, have opened up this field to a growing number of researchers from varying backgrounds, including those who lack the technical training of cytogenetics. Thus this third edition is a valuable resource for researchers in a wide range of fields, including cytogenetics, medical and molecular genetics, and cellular and molecular biology. This edition is also a valuable resource for medical students interested in oncology and hematology.

This book is organized into chapters, the first of which deals with the history of cytogenetics and provides an overview of conventional cytogenetic techniques including fluorescence in situ hybridization (FISH) and comparative genomic hybridization (CGH). The next chapter describes the different cytogenetic abnormalities in detail, potential mechanisms of formation, and the nomenclature employed (according to the International System for Human Cytogenetic Nomenclature [ISCN]). The next chapter looks at nonrandom abnormalities in cancer overall. This is followed by 19 additional chapters, one for each of the different groups of malignancies. In these chapters, a comprehensive summary of the published literature is provided for the common cytogenetic abnormalities that one might expect to observe in the cancers. Associations with specific chromosome rearrangements, deletions, and molecular and numerical abnormalities are detailed. The genes and gene regions involved in these cytogenetic anomalies are also described to further our understanding of the cause of the specific rearrangements. The authors also outline the potential effects that the different rearrangements may have on cells and individuals in terms of cancer prognosis and survival.

The authors provide clear, high-quality color figures and provide lists of the many cited references. Extensive information and research are included in each chapter and are summarized in a manner that is easy to understand and informative to the reader, such that it wouldn’t be necessary to delve into the immense mass of literature. Overall, this book is an excellent summary description of cancer cytogenetics and the corresponding molecular genetics in each human malignancy. It provides more detail on a larger number of cancers than *Human Cytogenetic Cancer Markers (Contemporary Biomedicine)* by Wolman and Sell, yet is not overwhelming the reader with experimental details as are provided in *Cancer Cytogenetics: Methods and Protocols* by Swansbury. This third edition of *Cancer Cytogenetics* reminds us that cancer cytogenetic research is as relevant today as other technologies in cancer research in our pursuit to understand human cancer.

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