Cancer Cytogenetics, Methods and Protocols is an immensely useful book for anyone working in the field of cytogenetics. The author has filled this volume with the sort of detail that enables ready translation of methods into practice and provides clear explanations of individual steps within procedures, which are as valuable to the experienced cytogeneticist as they are to the novice.

The book is organised into chapters dealing with conventional cytogenetic techniques for different malignancies including myeloid disorders, acute lymphoblastic leukaemia, other lymphoid malignancies and solid tumours. These chapters are then followed by explanations of other techniques: fluorescence in situ hybridisation (FISH), comparative genomic hybridisation and multicoloured FISH (M-FISH or spectral karyotyping). Each group of malignancies has a chapter devoted to background, summarising the utility of cytogenetics in these areas and the common abnormalities that one might expect to observe in such disorders. The subsequent chapter then outlines techniques for culturing and harvesting each type of malignancy. For areas that prove problematic, such as the culturing of acute lymphoblastic leukaemias (ALL), two chapters by different authors describe the techniques that work best in their laboratories.

Overall, the background areas are brief but appropriate. One might take issue with the author’s contention that the term chronic myeloid leukaemia (CML) can be used to cover a range of disorders including chronic myelomonocytic leukaemia and that the finding of a Philadelphia translocation, t(9;22), in essential thrombocythaemia does not necessarily indicate that the patient has CML. However, it is for the technical insights that this book should be read, rather than for the background details that are available from many other sources. The wealth of detail given with each method provides invaluable pointers. I found myself taking notes in a number of places to apply in my own laboratory; for example, the author provides an explanation and solution for a difficult problem frequently encountered with extremely blood dilute samples, causing the resulting cell pellet post harvest to meld into a gelatinous mass. The book is filled with such little nuggets of information for the practising cytogeneticist.

The author also makes some rather frank statements concerning the practical realities of providing a cytogenetics service. His comment in chapter eight regarding the cytogenetics of lymphoid disorders other than ALL would strike a chord with all who work in the area: “The relatively large amount of work involved in a proper cytogenetic study of lymphoid disorders can place a strain on the manpower and finances of a cytogenetics unit, an imposition that is rarely appreciated by the referring clinician”. Of course, the techniques outlined in this book for the “proper” analysis of lymphomas make it clear why such a heartfelt comment made its way into the book. He advocates the use of at least eight or nine cultures for each sample. This is probably an ideal way to analyse lymphomas, but the practical realities of a busy service laboratory preclude such practices.

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