Preface

Leukemia is a biologically and clinically diverse disease, and despite extraordinary advances in treatment over the past several decades, especially for childhood acute lymphoid leukemia, outcome remains poor for some subtypes and long-term therapy related side effects frequently associate with the treatment. There is considerable optimism however that the situation will improve.

Recent advances in molecular and cellular biology techniques have significantly improved our ability to detect, monitor, model and study the underlying molecular basis and aetiology of leukemia. The aim of this book “Leukemia” is to bring together a wide range of state-of-art laboratory methods and detailed protocols that are useful for both clinical and basic research scientists working on the disease. Leukemia contains chapters describing techniques for prenatal backtracking of leukemic clone, molecular diagnosis, detection of genome-wide genetic abnormalities and profiling, identification of unknown fusion genes, monitoring of minimal residual diseases, disease modelling using murine and human primary hematopoietic cells, studying of normal and malignant hematopoiesis, identification of interacting partners with leukemia associated oncoproteins, and global characterization of genome-wide epigenetic changes in leukemic cells. Leukemia should be of broad appeal to readers who are interested in molecular diagnosis, experimental Hematology, disease modelling and mechanistic studies of hematological malignancies.

Finally, I would like to express my greatest gratitude to all the authors for their useful and invaluable contributions, which constitute the most important elements of this book. Specific thanks are given to Mel Greaves for his constructive advice and support during the preparation of the book. Also I wish to thank Pui Yi Tse for assisting the editing, and professional graphic design. Clearly, we all share the same goal that this book will provide a useful reference to assist other investigators at different levels and aspects of leukemia research. Together, we will advance knowledge and have better understanding of the disease, which will ultimately improve anti-cancer therapy and quality of life for patients.

London, UK

Chi Wai Eric So
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