Dedication

This book is dedicated to the memory of my father
Constantine Platanias.
To my mother Efthimia Platanias.
To my wife Julie Platanias
and to my children Martina and Cokey.
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Foreword

Dramatic advances have occurred over the last few years in the research field of cancer biology. There has been a constant accumulation of important new information, resulting in a gradual transformation on the perceptions that exist among scientists regarding mechanisms by which the malignant phenotype develops. The recent developments in cancer research have also had a substantial impact in efforts towards the development of new cancer therapies. One of the most explosive and rapidly advancing research areas has been the area of cytokines and cancer. Many perceptions have changed from the original discovery, decades ago, of the interferon, to the current state of the art cytokine research. It is now well recognized that many cytokines play important roles in normal cellular functions, while some of them have prominent roles in the pathophysiology of cancer. It is also now firmly established that several cytokines promote the growth of cancer cells, while others act as suppressors of malignant cell proliferation.

The importance of the cytokine signaling field in cancer is reflected by the development of multiple treatments that have been introduced in clinical oncology over the last few years. Understanding the physiological functions of cytokines, as well as their precise roles in the pathogenesis of certain malignancies, is extremely important in the current clinical era. The paradigm of the development of imatinib mesylate for the treatment of chronic myelogenous leukemia has shown that translational approaches can occur rapidly, and new effective therapies for the treatment of cancer can be developed in a relatively short-time period. This volume includes an up to date comprehensive review on the knowledge on cytokines and cancer. The book is divided into two sections, with the first being focused on basic science research relating to cytokines in oncology, and the second on clinical and translational research. It is hoped that this review of various components of cytokine cancer research by prominent authors in basic and clinical science will prove useful to anyone with interest in this area.
BASIC SCIENCE RESEARCH