

PREFACE

A precise tuning of cell replication is mandatory for organismic and cellular homeostasis. Indeed, numerous aspects of human pathology can be thought of as malfunctions of the cell cycle. Cancer is unquestionably among these.

In the past, an accelerated mitotic rate traditionally has been considered to be a major characteristic of either benign or malignant neoplastic diseases. For this reason, cancer growth historically has been considered the epitomy of a disease caused by loss of control of the strategies that regulate the cell cycle. Although the complex and intricate mechanisms that drive malignant transformation are now better understood, nonprogrammed cellular replication still plays a key role in the theoretical schemes we use to understand, prevent, diagnose, and cure cancer.

Modern medicine now moves swiftly toward novel, and previously unsuspected, fields. The molecular approach to disease is ultimately providing a tremendous amount of knowledge that continuously produces revolutionary changes in our abilities to diagnose and cure most diseases. In this exciting scenario, where health care professionals, as well as graduate and medical students, are continuously asked to deal with radically innovative approaches, the role of the scientific literature is to provide constantly up-to-date information on the many recent advances in molecular medicine. In addition, this information should be communicated in a way that is user friendly and comprehensible.

Cell Cycle Inhibitors in Cancer Therapy: Current Strategies has been conceived as a scholarly book with the aim to provide state-of-the-art information about the molecules involved in cell cycle control. Such a book will deliver, in a clear language, fundamental information derived from the basic sciences to the medical community, where it can have a direct impact on diagnostics, prognostics, and therapeutics.

We feel there is a tremendous need for such a book as this, which is designed to educate physicians in cell cycle and cell growth control. In effect, *Cell Cycle Inhibitors in Cancer Therapy: Current Strategies* will bring current findings from the research laboratory directly into clinical practice. Finally, we also aim to provide an opportunity for feedback in which high-level clinical practice can stimulate basic science investigators to develop new insight into the many diseases that still constitute difficult medical problems.

Each thematic issue in *Cell Cycle Inhibitors in Cancer Therapy* is therefore designed to provide the latest research information and demonstrate its clinical relevance to our understanding of many of the most prevalent diseases afflicting our society today.

Antonio Giordano, MD, PhD

Kenneth J. Soprano, PhD