In this time-honored series, the editors have assembled a panel of internationally recognized experts and accomplished a "tour de force" in presenting an overview of the past year's most salient discoveries in cancer research. They have chosen topics such as angiogenesis, metastasis, polyomavirus persistence, tumor development, and animal models of melanoma. Editors George Vande Woude, PhD, of the National Cancer Institute, and George Klein, MD, of the Karolinska Institute, are prominent researchers with the knowledge and experience necessary to objectively gauge the significance of the progress made by others.

This small but densely written book highlights the emergence of new concepts and paradigms; it reads well and will benefit clinicians and basic researchers alike. Numerous illustrations and tables make reading the volume easy and stimulating.

Not surprisingly, the first chapter focuses on the present and future role of antiangiogenesis agents. One section is devoted to growth factors and receptor tyrosine kinases; other sections review platelet-derived endothelial cell growth factor/thymidine phosphorylase, matrix metalloproteinases, the plasminogen activator/plasmin system, and integrins. Emerging concepts related to angiogenesis are reviewed, and the pitfalls and promises of this therapeutic modality are highlighted. The concise yet exhaustive description of most antiangiogenic agents in development or in clinical trials allows an interested reader to understand the various therapeutic targets identified and the current stage of their laboratory and clinical validation.

Moreover, there is an interesting section on the hepatocyte growth factor (HGF)/Met pathway and its importance in tumor growth, invasion, and metastasis, as well as B-cell neoplasia development. After reading it, one can conclude that, although the precise role of this mechanism needs to be elucidated, evidence indicates that deregulated HGF/Met signaling may contribute to the development and progression of specific subtypes of B-cell lymphomas, including Burkitt's lymphoma, large B-cell lymphoma, and multiple myeloma.

The complex field of metastasis and the new tools for studying the metastatic process, such as in vivo videomicroscopy, are described. The latter method will enable researchers to study the metastatic process as it evolves, as well as the effects of molecular interventions on specific steps in metastasis. The "seed and soil" hypothesis of metastasis is revisited and discussed. The authors conclude the section by identifying potential targets for antimitastatic therapy.

An elegantly written chapter describes the indispensable role of the microenvironment in the natural history of low-grade B-cell neoplasms. Indeed, the authors address the fundamental role of bystander, nontumoral cells in both the onset and progression of these diseases.

The role of the Epstein-Barr virus is revisited with new knowledge about latent membrane protein 2 (LMP2). This protein may regulate reactivation from latency by interfering with normal B-cell signal transduction processes. Current concepts about the function of LMP2 are described, defining a new class of regulators of herpesvirus latency.

The chapter on mucin-associated antigens in gastrointestinal malignancies summarizes recent advances that may lead to the use of these antigens in the early diagnosis and, possibly, treatment of these forms of cancer. More specifically, the chapter focuses on alterations in mucin peptide and glycosylation during carcinogenesis. It addresses the prognostic relevance of these various antigens and explores their functional aspects regarding invasion and metastasis.

Finally, while the book undoubtedly reflects some key advances in the field of cancer research, the series, by its nature, can never review cancer research as broadly as one might wish. With each volume, the editors choose a few topics and give the authors enough space for a comprehensive review. That is both the strength and weakness of this book.