Book Reviews

Editorial Policy. Recently published books and journals (one copy) are invited by the Editorial Office for announcement and review in ANTICANCER RESEARCH (no fee). Each announcement should include the full title of the publication, authors or editors, the number of pages, price, year of publication, ISBN and publisher. Publishers will be notified upon receipt of books and tear sheets of reviews will be sent after publication. Books will be returned to the sender only if the announcement is rejected. Reviews will be objective and clear regarding the content, quality and usefulness of the publication.

Principles and Practice of Cancer Infectious Diseases.

Edited by A. Safdar.
2011, pp. 591, Eur 179.95, ISBN: 978-1-60761-643-6.
Springer Science + Business Media, New York, NY, USA.

This book provides a comprehensive and insightful work dedicated to elucidating the problem of infections in cancer patients. This essential volume reviews common and less often encountered infections, while establishing the difficulties behind preventing, diagnosing, and treating infectious diseases in cancer patients. Key sections are devoted to the presentation of clinical symptoms and the identification of major etiologic agents. A cadre of leading clinicians provide a detailed assessment of the risk factors for various infections, critical strategies in preventing and managing infections, and study of the interactions between the pathogen and host's immune function and inflammatory response. With its in-depth knowledge and concise treatment of the distinct facets of infections in cancer patients, this volume is an indispensible tool for all infectious disease specialists and clinical oncologists.

IMRT-IGRT-SBRT: Advances in the Treatment Planning and Delivery of Radiotherapy. 2nd Edition.

Edited by J.L. Meyer.
2011, pp. 495, Euro 146.50, ISBN: 978-3-8055-9680-0.
S. Karger AG, Basel, Switzerland.

This volume is a comprehensive guidebook to the new technologies of radiation oncology and the clinical treatment programs that bring them into practical use. Written by leading authorities, it is a standard reference in the field. This new edition has been completely revised, updated and substantially expanded with 14 new chapters that detail the rapid progress in the field.

Advances in intensity-modulated radiotherapy (IMRT), are clearly explained, including the clinical uses of dynamics arc therapy and 4D planning of moving targets. Image-guided radiotherapy (IGRT) systems are reviewed and compared for their practical benefits and limitations. The current and expected advances in linear accelerator, helical tomotherapy and CyberKnife systems are reviewed by foremost authorities. The book emphasizes clinical tutorials that illustrate and explain target definitions for the major cancer sites and include guidelines for PET/CT treatment planning. Practical techniques for organ motion management are fully described in additional step-by-step tutorials. There are also chapters which explore the technical basis and latest clinical experience with stereotactic body radiotherapy (SBRT). These include comprehensive clinical guides for SBRT treatment of lung and other sites, and the dose limitations for critical organs. The significant and increasing contributions of proton therapy are reviewed as well in chapters describing the current and emerging proton delivery systems, their current clinical results and the expected growth of the field. Finally, the practical economics of using advanced technologies in the clinic are reviewed.

This volume brings clinical and technical practitioners of radiotherapy fully up to date with the key developments in equipment, technologies and treatment guidelines.

Oxford Textbook of Palliative Social Work.

Edited by T. Altilio, S. Otis-Green.
2011, pp. 812, $99.95, ISBN: 978-0-19-973911-0.
Oxford University Press, New York, NY, USA.

This comprehensive textbook emphasizes the important role of the social worker in palliative care and sets the standards for the practice of palliative social work. The 85 chapters of the book are divided into eight sections:

Contents: I. Historical context; II Social work practice: Setting specific; III. Social work practice: Screening, assessment and intervention; IV. Population-specific practice; V. Collaborations in palliative care; VI. Regional voices from a global perspective; VII. Ethics; VIII. Professional issues.

The book will be an essential tool for all practioners and all those involved in palliative care.

Cancer Cell Culture. Methods and Protocols, 2nd Edition.

Edited by I.A. Cree.
2011, pp. 502, Eur 117.65, ISBN: 978-1-61779-079-9.
Springer Science + Business Media, New York, NY, USA.

With many recent advances, cancer cell culture research is more important than ever before. This timely edition of *Cancer Cell Culture: Methods and Protocols* covers the basic concepts of cancer cell biology and culture while expanding upon the recent shift in cell culture methods from the generation of new cell lines to the use of primary cells. There are methods to characterize and authenticate cell lines, to isolate and develop specific types of cancer cells, and to develop new cell line models. Functional assays are provided for the evaluation of clonogenicity, cell proliferation, apoptosis, adhesion, migration, invasion, senescence, angiogenesis, and cell cycle parameters. Other methods permit the modification of cells for transfection, drug resistance, immortalization, and transfer *in vivo,* the co-culture of different cell types, and the detection and treatment of contamination.

In this new edition, specific emphasis is placed on safe working practice for both cells and laboratory researchers. These chapters contain the information critical to success – only by good practice and quality control will the results of cancer cell culture improve. Written in the successful Methods in Molecular Biology™ series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible protocols, and notes on troubleshooting and avoiding known pitfalls.

Authoritative and accessible, this book serves as a practical guide for scientists of all backgrounds and aims to convey the appropriate sense of fascination associated with this research field.

Neuroendocrine Tumors.

Edited by J.C. Yao, P.M. Hoff, A.O. Hoff.
2011, pp. 267, Eur 171.15, ISBN: 978-1-60327-996-3.
Springer Science + Business Media, New York, NY, USA.

New research has shown that neuroendocrine tumors are more common than previously thought. Progress in our understanding of the molecular pathogenesis of these not-so-rare cancers has resulted in renewed interest in developing innovative therapeutic options. In particular, novel molecular targeted agents have been shown to have significant anti-tumor activity, and integration of these therapies has led to critical advances in management.

In this volume, an outstanding group of the world's leaders in the field have assembled to convey their knowledge of the epidemiology, biology, and management of all the major types of neuroendocrine tumors. The book takes a multi-modality approach to understanding disease processes and therapeutics, including chapters on medical and surgical treatment as well as a chapter devoted to imaging. Throughout, the authors emphasize recent advances in our understanding of molecular biology and the subsequent emerging therapeutic options.

Cell Migration – Developmental Methods and Protocols. 2nd Edition.

Edited by C.M. Wells, M. Parsons.
2011, pp. 463, Eur 117.65, ISBN: 978-1-61779-206-9.
Springer Science + Business Media, New York, NY, USA.

Cell migration is a key component of many biological processes including embryonic development, immune responses, wound healing, organ regeneration, and cancer cell metastasis, thus making it an exciting and crucial field of study. The aim of this book is to bring together a wide range of these techniques from the more basic migration assays, which are still the foundation of many cell migration studies, to state-of-the-art techniques and recent technical advances. Divided into three convenient parts, the volume begins with a number of basic *in vitro* migration assays including measurements of wound healing, cell scattering, invasion, and chemotaxis, as well as more complex measurements of transendothelial migration, the use of microfluidic chambers, and imaging cell migration in 3D. It continues with procedures for the imaging and measurement of cell migration *in vivo* including protocols for the use of chick, drosophila, and zebrafish embryos, and methods to measure metastatic spread and angiogenesis in mice, then concludes with a vital section on emerging techniques in the cell migration field including the use of TIRF, FRAP, and FRET microscopy. Chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible laboratory protocols, and notes from the experts on troubleshooting and avoiding known pitfalls.

Comprehensive and up-to-date, this volume provides a comprehensive catalogue of techniques for the study of cell migration that can be used as a useful reference source for any researcher who wishes to explore this significant area of cell biology.

Environment and Lifestyle – Effects on Disorders of the Digestive Tract.

Edited by H.E. Blum, R.H. Hunt, J. Schölmerich.
2011, pp. 268, Eur 68.00, ISBN: 978-3-8055-9809-5.
S. Karger AG, Basel, Switzerland.

This volume includes eighteen reviews presented at the 176th Falk Symposium, October 2010, Freiburg, Germany. The topics include: The genetic basis of digestive diseases, the mechanisms of environmental effects including hygiene, nutrition, physical activity, obesity, infections, drug toxicity, alcohol and smoking, analysis of specific digestive system organ disorders and implications for treatment and prevention.

Clinical Aspects of Electroporation.

Edited by S.T. Kee, J. Gehl, E.W. Lee.
2011, pp. 256, Eur 139.05, ISBN: 978-1-4419-8362-6.
Springer Science + Business Media, New York, NY, USA.

Electroporation is the forefront in tumor ablation. This book presents the basic principles and clinical applications of electroporation, including the latest research results and patient data. A comprehensive approach to the basic science behind the development of this ground-breaking technique and its introduction into clinical practice, the book discusses the entire spectrum of currently available reversible treatments, the emerging irreversible applications, and their impact on patient care.

Clinical Aspects of Electroporation is the first book intended for clinicians on this extremely important and rapidly developing field.

Cancer Cytogenetics. Methods and Protocols. 2nd Edition.

Edited by J.L. Campbell.
2011, pp. 273, Eur 101.60, ISBN: 978-1-61779-073-7.
Springer Science + Business Media, New York, NY, USA.

Cytogenetic studies of malignancy have become an essential tool in the clinical management of cancer patients. This volume presents eminently practical key cytogenetic and FISH techniques for every stage of diagnostic service. Experts in the field describe detailed cytogenetic analysis methods, fluorescence in situ hybridization and array methods currently being applied to investigate and diagnose different varieties of cancer. Written in the successful Methods in Molecular Biology™ series format, chapters contain introductions to their respective topics, lists of the necessary materials and reagents, and step-by-step, readily reproducible laboratory protocols. The authors of the various chapters have also provided extensive notes to guide individuals who are new to these methods through the pitfalls that bedevil all such testing.

Authoritative and accessible, *Cancer Cytogenetics: Methods and Protocols* serves as an ideal guide to scientists of all backgrounds, allowing them to either establish new techniques in their laboratories or find the different variations of standard methods helpful in improving their results.

Colorectal Cancer Screening.

Edited by J.C. Anderson, C.J. Kahi.
2011, pp. 205, Eur 149.75, ISBN: 978-1-60761-397-8.
Springer Science + Business Media, New York, NY, USA.

This volume provides a complete overview of colorectal cancer screening, from epidemiology and molecular abnormalities, to the latest screening techniques such as stool DNA and FIT, Computerized Tomography (CT) Colonography, High Definition Colonoscopes and Narrow Band Imaging. As the text is devoted entirely to CRC screening, it features many facts, principles, guidelines and figures related to screening in an easy access format. This volume provides a complete guide to colorectal cancer screening which will be informative to the subspecialist as well as the primary care practitioner. It represents the only text that provides this up to date information about a subject that is continually changing. For the primary practitioner, information on the guidelines for screening as well as increasing patient participation is presented. For the subspecialist, information regarding the latest imaging techniques as well as flat adenomas and chromoendoscopy are covered. The section on the molecular changes in CRC will appeal to both groups. The text includes up to date information about colorectal screening that encompasses the entire spectrum of the topic and features photographs of polyps as well as diagrams of the morphology of polyps as well as photographs of CT colonography images. Algorithms are presented for all the suggested guidelines. Chapters are devoted to patient participation in screening and risk factors as well as new imaging technology. This useful volume explains the rationale behind screening for CRC. In addition, it covers the different screening options as well as the performance characteristics, when available in the literature, for each test. This volume will be used by the sub specialists who perform screening tests as well as primary care practitioners who refer patients to be screened for colorectal cancer.

Tumor Markers: Immune Characteristics and Diagnostic Value.

By I. Zusman.
2010, pp. 423, ISBN: 978-81-7895-497-4.
Transworld Research Network, Kerala, India.

This volume presents the basic principles and knowledge leading to the concept and discovery of tumor markers, as well as the description and usefulness of tumor markers in cancer diagnosis and treatment.

Contents: I. Morphological and immunochemical characteristics of tumors. II. Role of apoptosis and apoptosis-related proteins in carcinogenesis. III. Intracellular morphological changes as markers for cancer detection. IV. p53 and other tumor-related proteins as immunohistochemical markers of tumorigenesis. V. Serological markers of cancer. VI. Soluble tumor-associated antigens in cancer detection.

The 21 chapters of the book are comprehensively written, providing extensive reference lists. This text will be essential tool for all oncologists and practitioners, as well as to all those involved in biomedical research on tumor markers.

Targeted Therapies. Mechanisms of Resistance.

Edited by D. Gioeli.
2011, pp. 201, Eur 106.95, ISBN: 978-1-60761-477-7.
Springer Science + Business Media, New York, NY, USA.

This volume explores the mechanisms of resistance to targeted therapeutics. The focus is on the cancer cell signaling network, although other mechanisms of resistance including target mutation, and new areas of study such as cancer stem cells are included.

Targeted Therapies: Mechanisms of Resistance highlights examples of changes in the signaling network in response to inhibition of a signaling event and underscores the importance in having a mechanistic understanding of the signaling network in cancer for developing effective targeted cancer therapies. Moreover, cutting edge tools to analyze the cell signaling network are discussed. This includes the leading edge of techniques as well as computational biology and systems theory. This volume provides the reader with both an overview as well as a detailed perspective on the mechanisms of resistance to targeted therapeutics and will be of great value to the oncologist, the physician-scientist treating patients and the translational scientist working on any aspect of targeted therapeutics.

Breast Cancer, a Heterogeneous Disease Entity. The Very Early Stages.

Edited by Z. Kahán, T. Tot.
2011, pp. 313, Eur 160.45, ISBN: 978-94-007-0488-6.
Springer Science + Business Media, New York, NY, USA.

The volume raises attention to the need of a completely new approach to breast cancer based on the knowledge collected

on early breast cancer in the past two decades. The chapters are contributed by experts of all the fields participating in the clinical research and care of breast cancer. The practical importance of such a book is underlined by the increasing number of breast cancer cases, and also the increasing proportion of early stage-cases. The ultimate goal of the book is to point to the heterogeneous nature of the disease which is more striking and has more importance in care at the very early stages than at the more advanced stages. The book recommends the utilisation of all the information provided by multimodality imaging and special pathological methods, a new classification system and therapeutic guidelines since early breast cancers should not be treated based on experience obtained with palpable tumors. No similar book has been yet released to the market. The book is written for all the members of the team participating in the diagnosis and treatment of breast cancer (radiologists, pathologists, surgeons, clinical and radiation oncologists), but may be useful for medical students and residents too. The chapters are illustrated with didactic pictures, and special emphasis is given to provide a peep into the practice of the special procedures for the careful examination and individualized therapy of each case.

Liver Metastasis: Biology and Clinical Management.
Edited by P. Brodt.
2011, pp. 446, Eur 160.45, ISBN: 978-94-007-0291-2.
Springer Science + Business Media, New York, NY, USA.

Once cancer cells enter the liver, several different scenarios may occur. The cancer cells may be immediately destroyed by local defence mechanisms, they may enter a state of dormancy as solitary cells and never produce a metastasis, initiate a short-lived process of proliferation that is aborted before a metastasis is established or actively proliferate to form macrometastases. The chapters in Part I of this book provide insight into the cellular/molecular mechanisms that determine which of these scenarios prevails. Written by experts, researchers in the filed of metastasis, these chapters provide state-of-the art reviews on the cellular and molecular processes that impact the early stages of the metastatic process. The unique microenvironment of the liver, its various anatomical, cellular and molecular features and the impact they have on metastasis are highlighted. In addition, the role of inflammation (pre-existing and tumor-induced), host innate and adaptive immune responses, cytokines, chemokines, growth factors and the unique molecular signatures of metastatic tumor cells are reviewed with an underscoring of the translational implications of the current state of knowledge.

Against this background, the chapters in Part II of the book provide critical reviews on major aspects of the clinical management of hepatic metastases. These include imaging strategies, surgical and chemotherapeutic treatment approaches and the use of targeted biological therapeutics such as anti-angiogenic drugs as treatment modalities. By combining information on biological and clinical aspects of liver metastasis, this volume will serve as an excellent resource for scientists, clinicians, clinician/scientists and trainees in the domains of oncology, surgical oncology, hepatobiliary physiology and radiology.