### **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.

# Imaging and Pathology of Pancreatic Neoplasms. A Pictorial Atlas.

Edited by M. D'Onofrio, P. Capelli, P. Pederzoli. 2015, pp. 432, Eur 85.59, ISBN: 978-88-470-5677-0. Springer Science + Business Media, Milan, Italy.

Although interest in pancreatic pathology is very high in the radiological and gastroenterological communities, it is still the case that less is known about pathology of the pancreas than about liver pathology, for example. Diagnosis depends on the structure of the pancreatic lesion, which can be directly visualized on US, CT or MR images. This atlas, which encompasses both the imaging and the pathology of pancreatic neoplasms, will therefore be invaluable in enabling radiologists and sonographers to understand the underlying pathology and in allowing pancreatic pathologists to understand the imaging translation.

The emphasis in the atlas is very much on the pathological and imaging appearances, with most of the text concentrated at the beginning of the chapters. A comprehensive overview is provided of typical and atypical presentations and diverse aspects of common and uncommon pancreatic neoplasms, including ductal adenocarcinoma, neuroendocrine neoplasms, intraductal papillary mucinous neoplasms, cystic neoplasms, metastases and lymphoma.

### Atlas of Operative Procedures in Surgical Oncology.

Edited by C.P. Karakousis. 2015, pp. 397, Eur 128.39, ISBN: 978-1-4939-1633-7. Springer Science + Business Media, New York, NY, USA.

This volume is the product of the author's long experience with melanomas and sarcomas and to a lesser but significant degree with upper gastrointestinal cancers, colorectal and breast cancers. As such, it offers a "hands-on" practical guide to approaching complex soft-tissue tumors and for performing more extensive tumor resections based on over 40 years of surgical experience. It provides important details about the positioning of patients, incision types, and exposure which can be of paramount importance in the resection of certain tumors. The book contains important general surgical principles for approaching tumors in a variety of locations but also offers the detail necessary for the safe and oncologically sound resection of these malignancies.

Moreover, this operative atlas contains specific information for procedures which are not as commonly encountered in surgical training, but can be invaluable in the management of patients with locally aggressive tumors, such as hemipelvectomy and its variants, sacral resections, and forequarter amputation.

Through the use of multiple detailed illustrations, this volume serves as a valuable resource to the general surgeon or surgical oncologist in the operative management of patients with cancer in the abdomen, retroperitoneum, pelvis or extremities.

# Surgery for Cancers of the Gastrointestinal Tract. A Step-by-Step Approach.

Edited by J. Kim, J. Garc;a-Aguilar. 2015, pp. 329, Eur 106.99, ISBN: 978-1-4939-1892-8. Springer Science + Business Media, New York, NY, USA.

This book provides an educational resource of modern and advanced operative techniques for patients with GI cancers. The textbook is designed to provide a step-by-step surgical approach, highlighting key learning points and potential operative pitfalls. When appropriate, two or more different approaches on an operative procedure are presented to provide additional perspective on surgical techniques. Written descriptions of laparoscopic and robotic cancer operations are paired with online video presentations of the same cancer operation.

Written by experts in the field, this book provides a concise summary of the current management of each GI cancer and is of great utility to not only surgeons at all levels of training, but also for surgeons in practice who seek to reinforce or learn new surgical techniques.

Videos to this book can be accessed: http://www.springerimages.com/videos/978-1-4939-1892-8.

## Targeted Drug Delivery: Concepts and Design.

Edited by P.V. Devarajan, S. Jain. 2015, pp. 790, Eur 181.89, ISBN: 978-3-319-11354-8. Springer Science + Business Media, Heidelberg, Germany.

This authoritative volume explores the fundamental concepts and numerous applications of targeted delivery of drugs to the body. This compilation has been divided into eight sections comprised of the basic principles of drug targeting, disease and organ/organelle-based targeting, passive and active targeting strategies, and various advanced drug delivery tools such as functionalized lipidic, polymeric and inorganic nanocarriers. Together, the twenty-three chapters cover a wide range of topics in the field, including tumor and hepatic targeting, polymer-drug conjugates, nanoemulsion, physical and biophysical characteristics of nanoparticles, and in vivo imaging techniques, among others. The book also examines advanced characterization techniques, regulatory hurdles and toxicity-related issues that are key features for successful commercialization of targeted drug delivery system products. Targeted Drug Delivery: Concepts and Design is a comprehensive reference guide for drug delivery researchers, both beginners and those already working in the field.

## Cancer Immunology. A Translational Medicine Context.

Edited by N. Rezaei.

2015, pp. 597, Eur 203.29, ISBN: 978-3-662-44005-6. Springer Science + Business Media, Heidelberg, Germany.

Cancer Immunology is intended as an up-to-date, clinically relevant review of cancer immunology and immunotherapy. The rapid flow of studies in the field of cancer immunology during the last decade has increased our understanding of theinteractions between the immune system and cancerous cells. In particular, it is now well known that such interactions result in the induction of epigenetic changes in cancerous cells and the selection of less immunogenic clones as well as alterations in immune responses. Understading the cross-talk between nascent transformed cells and cells of the immune system has led to the development of combinatorial immunotherapeutic strategies to combat cancer. This volume is focused on interactions between cancerous cells and various components of the innate and adaptive immune system are fully described. Notably, the principal focus is very much on clinical aspects, the aim being to educate clinicians on the clinical implications of the most recent findings and novel developments in the field.

### Pediatric Malignancies: Pathology and Imaging.

Edited by D.M. Parham, J.D. Khoury, M.B. McCarville. 2015, pp. 429, Eur 149.79, ISBN: 978-1-4939-1728-0. Springer Science + Business Media, New York, NY, USA.

This volume covers pediatric neoplasia by providing an in-depth analysis of the pathogenetic and diagnostic aspects of the most commonly encountered tumors. The volume covers the new advances in our understanding of the molecular processes underlying a number of pediatric tumors and the novel, sophisticated diagnostic tools that have now become an integral part of practice standards.

This book will be of great value for practicing clinicians, oncologists, radiologists, surgeons, pediatricians and pathologists for characterizing and diagnosing childhood tumors.

# Cancer Immunology. Bench to Bedside Immunotherapy of Cancers.

Edited by N. Rezaei.

2015, pp. 485, Eur 203.29, ISBN: 978-3-662-44945-5. Springer Science + Business Media, Heidelberg, Germany.

This translational book describes in detail the clinical application of novel approaches in cancer immunotherapy with the aim of educating clinicians in the implications of the most recent research and new developments in the field. The scope is broad, encompassing, for example, prognostic biomarkers for personalized cancer treatment, strategies for targeting tumor immunosuppression, gene therapy, virus-based vaccines, targeting of cancer stem cells, hematopoietic stem cell transplantation, the role of T lymphocytes in cancer immunotherapy, use of monoclonal antibodies, and many more innovative approaches. Clinical immunologists, hematologists,

and oncologists in particular will find the book to be of value in expanding their knowledge.

The book is the second in a three-volume series, *Cancer Immunology*, which offers an up-to-date review of cancer immunology and immunotherapy. The remaining volumes focus on the immunopathology of cancers and cancer immunotherapy for organ-specific tumors. In total the series, designed for both clinicians and researchers, includes contributions from more than 250 scientists working at leading universities and institutes from across the world.

### Adult Stem Cells in Aging, Diseases and Cancer.

Edited by K.L. Rudolph.

2015, pp. 88, Eur 66.00, ISBN: 978-3-318-02731-0.

S. Karger AG, Basel, Switzerland.

The functionality of adult tissue stem cells from various organ systems declines during aging. This publication summarizes novel molecular mechanisms responsible for the development of aging-associated deficiencies as discussed by leading experts during the 5th Else Kröner-Fresenius Symposium. It is the first book that explicitly focuses on molecular mechanisms of stem cell aging and its consequences for disease and cancer development including both cell-intrinsic mechanisms as well as aging-induced alterations in the stem cell niche and the systemic environment.

Cutting-edge information on stem cells, aging, cancer, and disease make this publication of special interest to basic researchers in the respective fields. Further, it is also intended for medical doctors in the fields of geriatrics, internal medicine, and cancer as it provides a novel understanding of the evolution of tissue dysfunction, diseases and cancer as a consequence of aging.

### Genomic Instability and Cancer Metastasis. Mechanisms, Emerging Themes, and Novel Therapeutic Strategies.

Edited by C. Maxwell, C. Roskelley. 2015, pp. 247, Eur 160.49, ISBN: 978-3-319-12135-2. Springer International Publishing AG, Cham, Switzerland.

Metastasis is the primary cause of mortality associated with cancer, and tumor genomic heterogeneity is a likely source for the cells that support cancer progression, resistance to therapy, and disease relapse. This book connects cancer metastasis with genomic instability in a comprehensive manner. Section 1 outlines the fundamental mechanisms responsible for these cellular and tissue phenotypes. Section 2 discusses *in silico, in vitro*, and *in vivo* models used for the experimental study of these processes. Section 3 reviews emerging themes (ex., microenvironment, mechanotransduction, and immuno-modulation), and Section 4 highlights new therapeutic approaches to overcome the unique challenges presented by the heterogeneous and metastatic tumor.

This book is intended for undergraduates and postgraduates with an interest in the areas of medicine, oncology, and cancer biology as well as for the content expert searching for thorough reviews of current knowledge in these areas.

# Cellular Pathology of Glandular Lesions and Uncommon Neoplasms of the Cervix.

By W.G. McCluggage, J. Tidy, J.H.F. Smith. 2015, pp. 187, Eur 128.39, ISBN: 978-1-4471-2209-8. Springer Science + Business Media, London, UK.

٠

This book provides a comprehensive account of the cellular pathology of glandular lesions and uncommon neoplasms of the cervix and places these in a contemporary clinical context. The book features comprehensive, detailed descriptions and a consistent approach to each tumor or tumor-like condition with clear color illustrations. Cytological/histological correlation is emphasised and diagnostic pitfalls are highlighted. The book is aimed at both trainee and consultant pathologists.

#### Current Understanding and Treatment of Gliomas.

Edited by J. Raizer, A. Parsa. 2015, pp. 184, Eur 149.79, ISBN: 978-3-319-12047-8. Springer International Publishing AG, Cham, Switzerland.

This book reviews the significant advances in our understanding of glioma biology that have been achieved during the past decade and describes in detail the resultant new approaches to treatment. Improvements in surgical techniques, radiation therapy, and chemotherapy are comprehensively covered, with discussion of their impact in decreasing patient morbidity and increasing survival. In addition, individual chapters are devoted specifically to current treatment for low-grade gliomas, anaplastic gliomas, and glioblastoma multiforme. Other topics addressed include treatment of the elderly patient, investigating emerging therapies from small molecules to immunotherapy and palliative care. This timely book will be a valuable source of up-to-date information for practitioners and will also be of interest to researchers.

# BRAF Targets in Melanoma. Biological Mechanisms, Resistance, and Drug Delivery.

Edited by R.J. Sullivan.

2015, pp. 204, Eur 149.79, ISBN: 978-1-4939-2142-3. Springer Science + Business Media, New York, NY, USA.

This volume contains a collection of writings from the leaders in the fields of Molecular Biology and Melanoma Research which will begin to tell the ever-expanding story of the most recent findings, discoveries, and potential of BRAF-directed targets in melanoma. Recent research has shown that BRAF inhibitors are effective for a short period of time, but there is little hope that this drugs as single agents will lead to durable benefit in a majority of patients. Among scientists and researchers who work in drug discovery, there is a lot of interest in the development of molecularly targeted cancer agents. Namely, the identification of a molecular target, the selection of molecules which effectively inhibit this target. What is starkly different about the development of this class

of compounds, however, is that the mechanism of action of these agents are not as straightforward as was once previously assumed and the mechanisms of resistance that tumor cells employ to evade complete destruction are unlike any that have been described before. These discoveries in addition to utilization of modern molecular biology techniques have led to a series of hypotheses regarding which other types of molecules could be used in combination with BRAF-inhibitors in hopes of revolutionizing the potential of therapeutics in melanoma.

## Photobiology. The Science of Light and Life. Third Edition.

Edited by L.O. Björn.
2015, pp. 455, Eur 160.49, ISBN: 978-1-4939-1467-8.
Springer Science + Business Media, New York, NY, USA.

The new edition of this authoritative text provides an interdisciplinary treatise of all aspects of the interactions between light and the living world. It starts with a description of the physics of light, and how to deal with it in experiments and observations. The phenomena described in the rest of the book covers all organisms: how light is used by organisms for obtaining energy for life processes, for gathering information about the environment, and for communicating with others of the same or other species. The book also describes "bad" effects of light in causing disease or contributing to formation of environmental toxins. New techniques used by scientists to investigate life processes using light are also explored in the volume.

# Hodgkin Lymphoma. A Comprehensive Overview. Second Edition.

Edited by A. Engert, A. Younes. 2015, pp. 437, Eur 128.39, ISBN: 978-3-319-12504-6. Springer International Publishing AG, Cham, Switzerland.

This book examines in detail the current treatment options for first-line, relapsed, and refractory Hodgkin lymphoma and the management appropriate in special clinical circumstances, including in the elderly, pregnant women, and those with lymphocyte-predominant disease. Careful attention is devoted to the emerging individually tailored treatment strategies that are especially appealing given their potential to reduce early and late treatment side effects in this generally young patient population. In addition, clear guidance is provided on the management of Hodgkin survivors. Other topics addressed include epidemiology, pathogenesis, the role of the microenvironment, initial clinical evaluation, imaging diagnosis, use of staging systems, and prognostic factors.

The second edition of *Hodgkin Lymphoma: A Comprehensive Overview* has been revised and updated by the key opinion leaders to reflect recent progress in the field. It will be of great value to hematologists, oncologists, and all others with an interest in Hodgkin lymphoma.

## Urological Oncology. Second Edition.

Edited by V.H. Nargund, D. Raghavan, H.M. Sandler. 2015, pp. 907, Eur 203.29, ISBN: 978-0-85-729-481-4. Springer Science + Business Media, London, UK.

With a fully updated look at urological cancers and a comprehensive approach to the basic principles behind chemotherapy, radiotherapy and gene therapy. *Urological Oncology, 2nd Edition* addresses the advances in MRI, hormone therapy, anesthesia for minimally invasive surgery, drug trials, new therapeutic techniques, as well as the new histological types of renal cancer, bringing this second edition fully up-to-date with current practices.

This book is a valuable tool for residents, specialists, nurse practitioners and other medical personnel in Urology, Radiotherapy, Oncology and Palliative Medicine involved in the treatment of urological cancers.

## Technical Aspects of Focal Therapy in Localized Prostate Cancer.

Edited by E. Barret, M. Durand. 2015, pp. 246, Eur 85.59, ISBN: 978-2-8178-0483-5. Springer Science + Business Media, Paris, France.

Focal therapy is a promising option for selected patients who have localized low or intermediate-risk prostate cancer, providing a compelling alternative between active surveillance and radical therapies by targeting the index lesion and preserving as much tissue as possible. Numerous cohort studies have already investigated multiple focal techniques, such as cryotherapy, high-intensity focused ultrasound, brachytherapy, photodynamic therapy, laser therapy, irreversible electroporation and cyberknife methods, all of which have demonstrated positive oncological outcomes with 70 to 90% negative follow-up biopsy.

These various ablative techniques have produced only minor side-effects concerning urinary function, a low rate of erectile dysfunction, and have demonstrated a limited rectal toxicity.

As a result, the primary end-point has now shifted and a new strategy needs to be established for patient follow-up and for defining treatment failure.

Written by international experts in the field, this book is mainly focused on new techniques, all of which are amply illustrated. This book will be of great practical value to all urologists and oncologists.

# Mimically Invasive Foregut Surgery for Malignancy. Principles and Practice.

Edited by S.N. Hochwald, M. Kukar. 2015, pp. 276, Eur 106.99, ISBN: 978-3-319-09-341-3. Springer Science + Business Media, Cham, Switzerland.

This book provides detailed, comprehensive and illustrative content to the surgical community in the areas of foregut oncologic surgery. The text contains an in depth review of all surgical aspects of oncologic diseases involving the stomach and esophagus. The main focus is on the minimally invasive techniques including potential complications and their management. The text also

includes an online link for the videos for all minimally invasive foregut surgical procedures including animation content which provide a more comprehensive learning experience.

This volume is structured in a way that makes it useful at every level of training and will be of great utility to practicing surgeons, fellows in surgical subspecialty training and surgical residents.

### Renal Tumors of Childhood. Biology and Therapy.

Edited by K. Pritchard, J.S. Dome. 2015, pp. 281, Eur 85.59, ISBN: 978-3-662-44002-5. Springer Science + Business Media, Cham, Switzerland.

This book provides a comprehensive overview of the biological basis of renal tumors in childhood and the clinical approaches to their treatment. Recent advances in our understanding of the molecular genetics of Wilms and other renal tumors are placed in their clinical context, including the differing treatment approaches of immediate surgery or pre-operative chemotherapy. The challenges in applying this knowledge to improve risk stratification and to incorporate biologically targeted agents into front-line therapy are discussed. In addition, the current state of thinking of the two major clinical trial groups in these diseases is presented. All of the authors are experts from Europe and North America and the book has been written specifically as an easy reference for the practising clinician and the research scientist. It lays the basis for understanding the future direction of clinical and translational research to improve outcomes in patients with childhood renal tumors and will prove indispensable for those treating or researching into these diseases.

### Stem Cell Therapy for Organ Failure.

Edited by I. Somasundaram. 2015, pp. 278, Eur 149.79, ISBN: 978-81-322-2109-8. Springer Science + Business Media, New Delhi, India.

This book demonstrates the in vitro and in vivo therapeutic strategies and applications of pre- and post-natal stem cells for treating the failures of various organ systems of our body in a wide perspective. It explores the past, present and the futuristic approach of the exciting field of stem cells and its intriguing properties involved in tissue repair and regeneration. The prime focus of this volume is to unravel the basic, advanced, therapeutic and translational approaches put-forth so far in the field of stem cells and regenerative medicine at research, pre-clinical and clinical levels. Stem cells has ushered in widespread interest and exciting possibilities for cell based therapies, albeit failures do prevail and small uncontrolled phase I/II studies are only signals generating, rather than definite proof of concept thereby limiting its applicability in curative therapeutics. Despite certain initiatives and meticulous untiring efforts, bringing this basic bench side research into advanced transitional bedside remained a challenge. Thus, this book embarked upon the expanding researches in these areas that seem decisive in improvising regenerative medical therapeutics, thereby leading to further pathbreaking studies that cure all health challenges facing mankind. Overall, this book reveals the imperativeness of various stem cell sources and its utility in curative therapeutics.

## Rare Tumors and Tumor-like Conditions in Urological Pathology.

By A. Lopez-Beltran, C.L. Menendez, R. Montironi, L. Cheng. 2015, pp. 437, Eur 149.79, ISBN: 978-3-319-10252-8. Springer Science + Business Media, Cham, Switzerland.

This book is a comprehensive guide to rare tumors and tumor-like conditions of the urinary system and male genital organs. It comprises five chapters, devoted to the kidney, bladder, prostate, testes, and penis. Each chapter begins with a brief overview of "common" tumors and tumor-like conditions and with a section on the classification of both common and rare entities. The main clinical, pathological, immunohistochemical, and molecular findings for each rare tumor or tumor-like condition are then described and discussed. Significant characteristics are also documented by representative high-quality illustrations, with emphasis on those aspects of most relevance to differential diagnosis. In addition, prognostic features are fully covered.

### Transcriptomics in Health and Disease.

Edited by G.A. Passos. 2015, pp. 344, Eur 149.79, ISBN: 978-3-319-11984-7. Springer International Publishing, Cham, Switzerland.

After sequencing the human genome a decade ago, researchers have continued their projects, but now to try to better understand how, and when, genes are expressed in health and disease. Efforts have been concentrated on the measurement of the expression of RNA transcripts. In an analogy to the genome, the term "transcriptome" was created to refer to the complete set of RNAs in a cell type or tissue in a particular situation. Transcriptomics is the science that studies this issue and it is a branch of functional genomics. Transcriptomics in Heath and Disease provides a comprehensive overview of the science of transcriptomics initially in health, focusing on the concept of the transcriptome and the main methods to evaluate it. The authors discuss the concept and use of gene expression signatures and transcriptional biomarkers in normal development and diseased tissues and organs. As the transcriptome changes depending on the pathology, there is also a focus on the variations in the gene expression in different diseases such as autoimmune, inflammation, cancer and infections. This book should be very useful for researchers in molecular biology focusing on gene expression, human genetics, immunology, and genomics.

Supplementary video files are available for this book and can be accessed at http://www.springerimages.com/videos/978-3-319-11984-7.

#### Rare Malignant Skin Tumors.

By F. Rongioletti, I. Margaritescu, B.R. Smoller. 2015, pp. 347, Eur 160.49, ISBN: 978-1-4939-2022-8. Springer Science + Business Media, New York, NY, USA.

This book provides practitioners with a single volume that reviews the clinical and pathologic features of rarely encountered cutaneous neoplasms. The text includes an in-depth discussion of the clinical findings, as well as the histologic and immunologic features of these diseases that are rarely encountered, reported, or recognized. Additional laboratory data used to make and support the diagnoses with some therapeutic and prognostic hints are discussed for each entity. The volume is organized into general categories correlating with the cell(s) of origin. An atlas of clinical manifestations is presented for each entity that will serve as a bedside clinical reference, followed by a series of photomicrographs depicting the histologic changes. In all cases, recent updates on molecular tools helpful in attaining the diagnosis are added to the sections on histology and immunohistochemistry.

This volume is a valuable bedside reference for the practicing dermatopathologist, general pathologist reviewing skin biopsies, general dermatologists, cutaneous oncologists and Mohs' surgeons.

#### Biological Basis of Alcohol-Induced Cancer.

Edited by V. Vasiliou, S. Zakhari, H.K. Seitz, J.B. Hoek. 2015, pp. 436, Eur 149.79, ISBN: 978-3-319-09613-1. Springer International Publishing, Cham, Switzerland.

This proceedings volume will contain chapters based upon the presentation of the 2nd International Conference on Alcohol and Cancer in Colorado, 2013. The various topics explore the affects of alcohol on: liver and breast cancer, cell signaling and cancer, stem cells, biomarkers and metabolomics, aerodigestive cancers, cancer and the immune system and more. In the recent years, a significant amount of research has emerged connecting the link between alcohol and cancer. The field has rapidly advanced, especially since the complex connection between alcohol and cancer has several unique sub areas that are being investigated and this volume gives a comprehensive overview of these advancements.