Histopathological Analysis Of Renal Cystic Epithelia In The

Renal cell carcinoma (RCC) is the most common primary malignancy of the kidney, with an estimated 64,000 new cases diagnosed each year in the United States. Worldwide, this figure approaches 270,000 annual incident cases. At the time of initial presentation, 80% of patients with RCC will be diagnosed with a tumor localized the kidney. The majority of these lesions will be small (i.e. ≤4 cm) and potentially curable with either partial or radical nephrectomy. In recent decades, the rate of incidentally detected small renal tumors has risen substantially due the increasing use of cross-sectional imaging performed across the field of medicine. This rise in the incident number of localized renal tumors has unfortunately not resulted in a corresponding decrease in cases of metastatic RCC. This observation has led to our understanding that a significant proportion of incidentally detected renal tumors are of low malignant potential and may be safely managed with alternatives to surgery such active surveillance and thermo ablation. The use of these less invasive management approaches, however, must be balanced by the reality that upon spreading beyond the confines of the kidney, RCC is almost always incurable. Thus, when selecting a management strategy for a given patient, one must employ a risk-adapted approach that includes knowledge of a tumor's histology and metastatic potential. In each patient, the goal of management should be to minimize the risk of progression to metastatic disease while preserving renal function and minimizing morbidity. This text provides a contemporary review of the diagnosis and surgical management of RCC. It opens with chapters on the pathology, radiology, and genetics of RCC. It then covers the risk stratification of renal tumors utilizing renal mass biopsy as well as non-invasive novel imaging-based scoring systems. Next, the surgical management of small and locally advanced renal tumors as well as the role of surgery in cases of metastatic RCC is reviewed. In addition, alternative approaches to surgery including active surveillance and ablative techniques are reviewed. Other chapters detail the emerging role of neoadjuvant and adjuvant systemic therapy in patients who are at high risk of progression to metastatic disease. Finally, the text covers the post-operative surveillance of patients with RCC as well as a summary of contemporary guidelines on the management of this disease. Diagnosis and Surgical Management of Renal Cell Carcinoma will serve as a comprehensive resource for physicians and researchers interested in RCC. All chapters will be written by experts in the field and will include the most up to date scientific and clinical information.

Ciliopathies: a reference for clinicians provides a clinical overview and reference to this newly emergent group of disorders, ranging from Alström syndrome to putative ciliopathic disorders. Each chapter provides an in-depth discussion on a specific disorder, including the latest scientific research.

This book highlights the similarities and differences in the pathology of the genital and urinary tracts in males and females.

An algorithmic approach to interpreting renal pathology, updated in light of recent advances in understanding and new classification schemes.

Physiology and Pathophysiology

Cystogenesis

Renal Disease: New Insights for the Healthcare Professional: 2011 Edition

Pathology, Radiology, Ultrasonography, Therapy, Immunology

ECT

Urologic Pathology

The present volume constitutes an attempt to compile contem porary features of diagnosis and treatment of renal and adrenal tumors. A thorough survey of the field is ensured by the authors' considerable scientific experience. Tumors of the kidneys and the adrenal glands are being diagnosed and treated by physicians of different medical disciplines. For both types of tumor, the pathologic cellular substrate is of crucial importance in diagnosis and therapy. In recent years significant diagnostic advances have been made, ranging from angiography through ultrasonography and computer tomography to immunology. New impulses in oncologic therapy have occurred in surgery, radiation therapy, and tumor emboliza tion. A further important topic is renal tumors in infants. Such tumors involve special aspects of both diagnosis and therapy and also have a distinctive prognosis. We are indebted both to Springer-Verlag, who supported us in our intention to write this book, and to our colleagues, whose help is greatly appreciated. For the authors: E. LOHR Essen/Heidelberg, September 1979 Contents (Chapters marked with an asterisk have been translated by H.-U. Eickenberg) Pathology of Renal and Adrenal Neoplasms L.-D. Leder, H.J. Richter, and Chr. Stambolis ..... . 1. Tumors and Tumor-Like Lesions of the Kidney in the Adult 1.1. General Remarks . 1.2. Heterotopic Tissue . . . . l.2.l. Adrenal Tissue . . . . . .

Principles of Hepatic Surgery introduces the reader to current trends in Liver surgery knowledge and practice. This reference book covers liver surgery fundamentals as well as cutting-edge progress in this exciting surgical specialty. Contributions have been written by expert hepatic surgeons from major medical centers around the world. Key features include:Information organized into five comprehensive sections: i) Liver Anatomy and Perioperative Care, ii) Approach to Malignant Hepatic Disease, iii) Approach to Benign Hepatic Disease, iv) Technical Aspects of Liver Resections, and v) Liver Transplantation Over 350 illustrations Truly effective didactic text, with logical, clear explanations, giving readers a pleasant reading experience Commentary sections written by experts for specific surgical cases. Principles of Hepatic Surgery is a valuable reference for both novice hepatologists and practicing liver surgeons.

This volume, which explains why, when, and how abdominal MRI should be used, focuses in particular on the most recent developments in the field. After introductory chapters on technical considerations, protocol optimization, and contrast agents, MRI of the various solid and hollow viscera of the abdomen is addressed in a series of detailed chapters.

Relevant clinical information is provided, and state of the art protocols presented. With the help of numerous high-quality illustrations, normal, variant, and abnormal imaging findings are described and potential artefacts highlighted. Differential diagnosis is given extensive consideration, and comparisons are made with competing methodologies when relevant. Each of the chapters is rounded off by a section on "pearls and pitfalls". The closing chapters focus on findings in the pediatric abdomen, advances in MRI specifically relevant to cancer patients, and the use of abdominal MRI at 3 Tesla. This book, written by leading experts, will be of value to all who are involved in learning, performing, interpreting, and reporting abdominal MRI examinations.

The last few years have seen major advances in all aspects of the understanding and treatment of kidney cancer, particularly the commonest variant clear cell carcinoma of the kidney. This book brings the reader up to date with these developments, covering aetiology, epidemiology, pathogenesis, prognostic factors, presentation, interventional radiol

3D Nephrology in Small Animals

Kidney Disease and Nephrology Index: Subject Section : 2. Author Section

Silva's Diagnostic Renal Pathology

The Kidney

Renal Cancer

Differential Diagnosis in Surgical Pathology

Differential Diagnosis in Surgical Pathology, 2nd Edition, by Paolo Gattuso, MD, Vijaya B. Reddy, MD, Odile David, MD, and Daniel J. Spitz, MD, is skillfully designed to help you confidently sign out your most complex and challenging cases. Covering a complete range of tumors and tumor-like conditions in all organ systems, it provides a user-friendly road map to the main criteria you should consider in order to differentiate between a variety of potential diagnoses that all have a very similar appearance. Over 1,350 new full-color macro- and microphotographs provide a realistic basis for comparison to what you see under the microscope. Quick checklists cover all diagnostic possibilities to make sure nothing falls through the cracks. A concise, bulleted textual format facilitates quick retrieval of essential facts. A consistent approach to diagnosis and interpretation expedites reference. Coverage of all relevant ancillary diagnostic techniques addresses all of the investigative contexts needed to formulate an accurate diagnosis. Expert "pearls" offer practical tips on what diagnostic criteria to consider or exclude. A comprehensive, yet manageable size allows for quick consultation. Over 1,350 new full-color macro- and microphotographs provide a realistic basis for comparison to what you see under the microscope. Immunohistochemical and molecular techniques throughout enable you to review all of the latest diagnostic considerations in one place. Expanded coverage of non-neoplastic entities assists you in recognizing benign lesions that may mimic the appearance and characteristics of malignant ones. Extensive updates include the latest classification schemes and relevant diagnostic techniques. A brand-new, color-coded layout highlights key points more clearly and helps you turn to the sections you need more speedily.

Diagnose tumors with confidence with Diagnostic Histopathology of Tumors, 4th Edition. Dr. Christopher Fletcher's renowned reference provides the advanced, expert guidance you need to evaluate and interpret even the most challenging histopathology specimens more quickly and accurately. Consult this title on your favorite e-reader with intuitive search tools and adjustable font sizes. Elsevier eBooks provide instant portable access to your entire library, no matter what device you're using or where you're located. Diagnose efficiently and effectively using diagnostic flow charts, correlations of gross appearances to microscopic findings, and differential diagnosis tables for better recognition and evaluation of similar-looking entities. Employ immunohistochemistry, molecular and genetic diagnostic tests, and other modern techniques as well as the best morphologic diagnostic methods to effectively identify each tumor or tumor-like entity. Utilize new, clinically important molecular genetic data and updated classification schemes to help guide treatment and targeted therapy. Apply the latest techniques and diagnostic criteria with completely rewritten chapters on Small and Large Intestines, Heart, Larynx and Trachea, Ear, and Peritoneum. Find critical information quickly thanks to more tables and bulleted lists throughout.

This book provides a comprehensive review of diagnosis and treatments of renal cell carcinoma (RCC) for practitioners and researchers with an interest in this disease. A major aim of the book is to present the most important and most recent advances in molecular bases and targeted therapy for this neoplasm. The remarkable resistance to chemotherapy and radiotherapy and the minimum contribution of cancer genes that commonly mutate in other adult epithelial cancers have made RCC highly distinct from other types of solid neoplasms. In the past decade, however, treatment options for RCC have been expanding and moving quickly toward laboratory-based and molecular-targeted therapies. Advances in RCC therapy also have brought novel treatment options to other types of cancer, such as a TKI for hepatocellular carcinoma and gastrointestinal tumors, as well as mTOR inhibitors to progressive neuroendocrine tumors of pancreatic origin and to breast cancer, suggesting that RCC is no longer an "orphan disease" in the field of molecular oncology. Additional topics covered in the book include pharmacokinetics and pharmacodynamics in molecular-targeted agents and the putative mechanism of resistance to anti-angiogenic agents, such as intratumoral heterogeneity or cancer stem cell population. This volume provides the latest and most useful information for all readers who are eagerly devoted to curing renal cell carcinoma.

"Imaging-based quantification and characterization of tumor phenotypes has been the main goal of numerous efforts in recent years for developing and integrating precision oncology in clinical practice. Identifying optimal quantitative image features and machine learning pipelines for computer-aided diagnosis constitute crucial steps towards the development of reproducible, standardized, and clinically relevant imaging biomarkers of cancer phenotypic characteristics. An “image feature” can be understood as an image-derived descriptor of intensity, shape, texture, etc. In radiomics studies, the main hypothesis is that combining many of these quantitative features extracted from tumor regions in medical images can predict underlying genetic or pathological changes occurring in response to disease activity. Given the high variability of processing pipelines in radiomics studies, we first aimed to develop and validate a standardized, IBSI-compliant, and evidence-based processing pipeline for radiomics studies. Second, we aimed to evaluate the diagnostic performance of the well-established robust set of rotationally invariant features from spherical harmonics (SPHARM) decompositions in predicting outcomes from volumetric medical images and compare it to radiomics. Pipelines for these two methods were built and validated on synthetic 3D texture datasets and in two distinct dual-centre diagnostic retrospective studies: i) a study on identifying renal cysts malignancy on contrast-enhanced CT, and ii) a study on identifying histopathological features of endometrial cancer on multi-parametric MRI.For distinguishing benign from malignant renal cysts, a random forest model based on a set of five most discriminative and reproducible radiomics features resulted in high diagnostic performance (testing area under the receiver operating characteristic curve [AUC] = 0.91). Similarly, for SPHARM decomposition coefficients, a tensor logistic regressor resulted in good diagnostic

performance for predicting malignancy of renal cysts (testing AUC = 0.83). For detecting histopathological deep myometrial invasion in endometrial cancer on multi-parametric MRI, a random forest model based on our set of five most discriminative and reproducible radiomics features resulted in good diagnostic performance (testing AUC = 0.81). For SPHARM decomposition coefficients, a tensor logistic regressor resulted in higher diagnostic performance using only dynamic-contrast-enhanced MRI images (testing AUC = 0.86). Furthermore, we show that in specific situations, approximate spherical tumor segmentations can rival or even outperform painstakingly obtained but accurate tumor segmentations. Both radiomics features and SPHARM descriptors show promise as reproducible surrogate biomarkers of histopathological features of cancer activity on CT and MRI. Implementing such computational pipelines in clinical practice could improve and accelerate patients' stratification and decision-making for radiologists and radio-oncologists in cancer diagnosis or treatment"--

A Reference for Clinicians

Histopathology Reporting

Cumulated Index Medicus

Characterisation of Pathophysiological Function of NEDD4-2 in Kidney

Polycystic Kidney Disease

Index Medicus

The second revised and updated edition is an easily comprehensible and practical handbook, companion or aide-memoire for the diagnostic pathologist in the routine histopathology reporting of the common cancers. It also incorporates the Current WHO Histological Classification, the Royal College of Pathologists minimum data sets and 6th edition TNM Classification of Malignant Tumors. This book is invaluable for trainee and consultant diagnostic histopathologists all over the world

Featuring over 600 full-color illustrations, the Third Edition of this definitive reference provides comprehensive, current, and authoritative coverage of the entire spectrum of urologic surgical pathology. The book emphasizes diagnostic morphology and includes clinical-pathologic correlations. This thoroughly updated edition clarifies histologic variants of prognostic value in urinary bladder cancers and prostate carcinomas and identifies tumor markers useful in both diagnosis and post-therapy management of cancer patients. Also included are current diagnostic criteria for urothelial carcinomas, the latest TNM staging of urogenital organ malignancies, and up-to-date renal tumor classifications, including cytogenetic, immunohistochemical, and morphologic correlations. A companion Website will offer the fully searchable text and an image bank.

Leading experts distill their extensive experience into user-friendly methods for the study of fluid-electrolyte homeostasis and kidney function in health and disease. Described in step-by-step detail, the techniques move from the molecular level to the whole organism, from simple models to integrative physiology. Here the researcher will find established disease models, methods for optimizing renal disease research, as well as much help in choosing imaging techniques for studies of the kidney's structure and function in health, disease, and during embryonic development. Subjects covered include molecular diagnostics, strategies for studying the molecular mechanisms of kidney disease, technical means to assess the functional correlates of disease, and the planning of clinical trials.

Confidently sign out your most complex and challenging cases with the updated edition of Differential Diagnosis in Surgical Pathology. Widely used by residents and practicing pathologists alike, this comprehensive medical reference provides brief, bulleted descriptions of both common and rare disorders, integrating excellent illustrative examples of the pathology with selected references. It's the perfect go-to resource to have by your microscope! Quickly access essential information through concise, bulleted text; a consistent approach to diagnosis and interpretation; and a comprehensive yet manageable size. Formulate an accurate diagnosis with coverage of all of the relevant ancillary diagnostic techniques, and ensure every diagnostic possibility is explored with help from quick checklists throughout. Make informed decisions when delineating one disease from another with discussions covering all of the major organ systems. Understand what diagnostic criteria to consider or exclude with expert "pearls" and practical tips throughout. Take advantage of extensive updates on tumor classifications and diseases, as well as expanded coverage of medical renal pathology. Stay abreast of the latest developments in molecular testing, including diagnostics, biomarkers, and targeted therapies, for entities such as the breast, lung, gastrointestinal tract, and melanoma. View over 1,350 full-color macro and microphotographs that provide a realistic basis for comparison to what you see under the microscope. Expert Consult eBook version included with purchase. This enhanced eBook experience allows you to search all of the text, figures, references, and videos from the book on a variety of devices. Your purchase entitles you to access the web site until the next edition is published, or until the current edition is no longer offered for sale by Elsevier, whichever occurs first. Elsevier reserves the right to offer a suitable replacement product (such as a downloadable or CD-ROM-based electronic version) should access to the web site be discontinued.

Differential Diagnosis in Surgical Pathology E-Book

Guidelines for Surgical Cancer

Diagnostic Histopathology of Tumors

Translating Mechanisms into Therapy

Advances in Mechanisms of Renal Fibrosis

Modern Soft Tissue Pathology

Offering comprehensive coverage of this fast-changing field for more than 20 years, Urologic Surgical Pathology is an expert guide to all common and rare entities in the genitourinary system. The 4th Edition keeps you fully up to date with discussions of newly recognized tumors and terminologies, the latest classification schemes, current grading approaches, molecular alterations, and commonly used ancillary diagnostic techniques. With its clinical focus on day-to-day urological pathology sign-out and an emphasis on clinicopathologic and radiographic-pathologic correlations, this thoroughly revised uropathology reference is an excellent resource for diagnostic decision making. Includes expanded coverage of differential diagnosis for all tumor types encountered in urological surgical pathology practice. Incorporates the latest TNM staging and WHO classification systems, as well as new diagnostic biomarkers and their utility in differential diagnosis, newly described variants and

new histologic entities. Discusses advances in molecular diagnostic testing, its capabilities, and its limitations, including targeted therapy/personalized medicine. Covers new developments in immunohistochemistry and the latest diagnostic tumor markers. Features more than 1,600 high-quality images – all in color – including gross pictures, histopathologic and cytopathologic images, special stains, other ancillaries, drawings, and illustrations. Helps you find information quickly with a consistent chapter format; an abundance of tables, diagrams and flowcharts; boxed lists of types and causes of diseases; differential diagnosis; characteristic features of diseases; complications; classifications; and staging.

Taking a high-yield, "just the essentials" approach, Abdominal Imaging: The Core Requisites helps you establish a foundational understanding of both gastrointestinal and genitourinary imaging during rotations, prepare for the core and certifying exams, and refresh your knowledge of key concepts. This new title solves the "information overload" problem often faced by trainee and practicing radiologists by emphasizing the essential knowledge you need in an easy-to-ready hybrid format of traditional text and bullet points. Emphasizes a "just the essentials" approach to foundational abdominal imaging content presented in an easy-to-read, quick reference format, with templated content that includes numerous outlines, tables, pearls, boxed material, and bulleted text for easy reading and efficient recall. Helps you build and solidify core knowledge to prepare you for clinical practice with critical, up-to-date information on GI/GU topics, including relevant anatomy, lesion characterization, tumor staging, indication-based protocols and techniques, and more. Prioritizes high-yield topics and explains key information to help you efficiently and effectively prepare for board exams. Contains problem-based and disease-focused chapters such as right upper quadrant pain, chronic liver disease, colorectal cancer and screening, postoperative imaging, and abdominal/pelvic trauma. Includes reporting tips and recommendations with sample structured reports. Features more than 500 high-quality images spanning a variety of critical abdominal and pelvic disease processes, including discussions of advanced imaging techniques such as multiparametric MRI, dual energy CT, and elastography. Published as part of the newly reimagined Core Requisites series, an update to the popular Requisites series for today’s busy clinician.

A classic nephrology reference for over 25years, Seldin and Giebisch’s The Kidney, is the acknowledged authority on renal physiology and pathophysiology. In this 5th edition, such new and powerful disciplines as genetics and cell biology have been deployed to deepen and widen further the explanatory framework. Not only have previous chapters been extensively updated, but new chapters have been added to incorporate additional disciplines. Individual chapters, for example, now provide detailed treatment of the significance of cilia; the role of stem cells is now given special consideration. Finally, there has been a significant expansion of the section of pathophysiology, incorporating the newer findings of cell biology and genetics. If you research the development of normal renal function or the mechanisms underlying renal disease, Seldin and Giebisch’s The Kidney is your number one source for information. Offers the most comprehensive coverage on the market of fluid and electrolyte regulation and dysregulation in 85 completely revised chapters and 10 new chapters Includes 4sections, 62 chapters, devoted to regulation and disorders of acid-base homeostasis, and epithelial and nonepithelial transport regulation Includes foreword by Donald Seldin and Gerhard Giebisch, world renowned names in nephrology and editors of the previous three editions

This issue of Emerging Cancer Therapeutics provides a comprehensive review for practitioners on the current status of renal cancer treatment. Renal cancer treatment has undergone major changes over the course of the past few years and Renal Cancer addresses current best practices in the light of the most recent evidence. All of the chapters are written by international experts in the field, address the common clinical scenarios in renal cancer and are multidisciplinary in scope covering surgical, medical, and radiation therapy. Chapters examining emerging and novel therapeutic targets, the management of both CNS, and skeletal metastases in renal cancer round out the coverage. Emerging Cancer Therapeutics features: Editorial board of nationally recognized experts across the spectrum of Cancer Therapeutics In-depth, up-to-date expert reviews and analysis of major new developments in all areas of Cancer Therapeutics Issues edited by an authority in specific subject area Focuses on major topics in Cancer Therapeutics with in-depth articles covering advances in clinical and translational research developments, as well as clinical applications and experience Emphasizes multidisciplinary approaches to research and practice

Membrane Structure in Disease and Drug Therapy

Tumors and Non-Neoplastic Conditions

Rare Kidney Tumors

Computational Methodologies for Solid Tumor Characterization and Outcome Prediction in Volumetric Medical Images

Principles of Hepatic Surgery

Renal and Adrenal Tumors

This volume provides a practical, comprehensive overview on benign and malignant disease of the adult kidney. The text addresses the topic of assessment and management of patients with surgical renal disease. Within this scope, it includes hereditary and spontaneous renal neoplasms, as well as non-neoplastic disease that manifests as a clinically relevant mass. The book is organized into chapters focusing on discrete disease entities and incorporating pathology, surgical management, oncologic therapy, radiologic findings, and molecular alterations. This text is designed to address relevant areas of clinical management of renal neoplastic and non-neoplastic disease across multiple specialties and levels of training. Written by experts in the field, The Kidney: A Comprehensive Guide to Pathologic Diagnosis and Management is a valuable resource on the diagnosis and management of patients with not only renal cell carcinoma, but also other renal processes that require surgical intervention.

Tissue fibrosis may occur for unknown causes or be the consequence of many pathological conditions including chronic inflammatory or infectious diseases, autoimmune disorders, graft rejection, or malignancy. On the other hand, malignant tumors have been identified in fibrotic tissues decades ago, and now accumulating evidence suggests that fibrotic lesions enhance the risk of cancer in several organs such as liver, lungs, and breast. Disruption of

an organ parenchymal cells and of its normal structural scaffold during tissue fibrogenesis appears to induce loss of cell polarity, promoting uncontrolled cell proliferation that may eventually lead to cancer development. Many cellular and molecular abnormalities including aberrant expression of microRNAs, genetic and epigenetic alterations, evasion or delayed apoptosis, unregulated intracellular signal pathways, and dysregulation or defective intercellular communications have been proposed to explain this link between fibrogenesis and carcinogenesis. However, the precise mechanisms of this fibrosis-to-cancer transition remain unclear. This book presents a collection of reviews and original articles summarizing recent advances in understanding the molecular mechanisms of cancer development in fibrotic organs.

Completely updated, the Fourth Edition of this standard-setting two-volume reference presents the most advanced diagnostic techniques and the latest information on all currently known disease entities. More than 90 preeminent surgical pathologists offer expert advice on the diagnostic evaluation of every type of specimen from every anatomic site. The Fourth Edition contains 3,494 full-color photographs, of which over 1,100 are new. This edition has three distinguished new editors—Joel K. Greenson, MD, Victor E. Reuter, MD, and Mark H. Stoler, MD—and many new contributors. Updates include new immunohistochemical markers for lymphoid neoplasms, current nomenclature for lymphoid tumors, and state-of-the-art molecular genetic tests. A bound-in CD-ROM contains all the images from the book, downloadable to PowerPoint presentations.

This study asserts that cellular and intracellular membranes are active in every aspect of the body's physiology and pathophysiology. It compares secondary through to quaternary structures and protien sequences and guages their influence on health, disease and drug therapy. The book highlights the importance of correlations, homologies and categori

Sternberg's Diagnostic Surgical Pathology

Diagnosis and Surgical Management of Renal Tumors

Abdominal Imaging E-Book

A Comprehensive Guide to Pathologic Diagnosis and Management

Ciliopathies

Gynecologic and Urologic Pathology

This book provides clinicians with clear guidance on treatment decision-making in patients with rare kidney cancers. After a brief review on epidemiology, pathology, and biology, each chapter focuses on the multidisciplinary management of a particular tumor subtype using the full range of available cancer therapy modalities, including surgery, radiotherapy, chemotherapy, targeted therapies, and immunotherapy. Emerging therapies and future directions in the management of each cancer subtype are also discussed. The chapters are all written by multidisciplinary teams of international experts comprising at least a urologist, a medical oncologist, and a pathologist. Rare kidney cancers represent 15% of renal cell carcinomas. In comparison with clear cell renal cell carcinomas, little is known about the biology of such cancers, and few trials have reported on the efficacy of targeted therapies in the metastatic setting. Optimal management thus poses significant challenges and often requires a multidisciplinary team. This book will be an ideal reference guide for all clinicians involved in the care of patients with these orphan tumors.

This comprehensive guide to polycystic kidney disease captures the growing knowledge of this common, potentially-fatal and hereditary disease. The first two sections of the book provide an overview of PKD gene structures, mutations and pathophysiologic mechanisms. This is followed by chapters focused on PKD ' s clinical features, including renal and extrarenal manifestations, and appropriate management of patients. The final section covers current clinical trials and emerging therapies in PKD. Authored by experts in the field, this book provides the clinician and researcher with critical information on basic and translational science and clinical approaches in one concise resource.

Renal Disease: New Insights for the Healthcare Professional: 2011 Edition is a ScholarlyBrief™ that delivers timely, authoritative, comprehensive, and specialized information about Renal Disease in a concise format. The editors have built Renal Disease: New Insights for the Healthcare Professional: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Renal Disease in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Renal Disease: New Insights for the Healthcare Professional: 2011 Edition has been produced by the world ' s leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at http://www.ScholarlyEditions.com/.

This book provides a visual approach to the main kidney disorders and diseases in dogs and cats, and includes both gross and microscopic images of the kidneys and of the main imaging techniques, as well as videos and animations of physiological processes and those that can lead to kidney disease. 3D animations are included.

Links between Fibrogenesis and Cancer

Renal Cell Carcinoma

Rosai and Ackerman's Surgical Pathology E-Book

Comprehensive Multidisciplinary Management and Emerging Therapies

Campbell-Walsh Urology

Urologic Surgical Pathology E-Book

For over 60 years, residents and practicing pathologists have turned to Rosai and Ackerman's Surgical Pathology for definitive guidance on every aspect of the field, delivered in a readable, easy-to-digest, and engaging manner. In the 11th Edition, a dynamic new author team ensures that this classic text retains its signature anecdotal style, while revising the content to bring you fully up to date. Widely used for board exam preparation, as well as for everyday reference in practice, this leading resource equips you to effectively and efficiently diagnose the complete range of neoplastic and non-neoplastic entities. Provides comprehensive coverage of the clinical presentation, gross and microscopic features, ultrastructural and immunohistochemical findings, prognosis, and therapy for virtually every pathologic lesion. Presents content now grouped in sections corresponding to organs and systems, making disease entities easier to locate. Includes state-of-the-art coverage of the latest disease classifications, molecular biology and pathology, immunohistochemistry, genetics, prognostic/predictive

markers, and more – all highlighted by more than 3,000 full-color illustrations of commonly seen pathologies. Showcases the knowledge and expertise of an innovative new author team: prolific author John R. Goldblum, MD (GI pathology, soft tissue tumors); Laura Lamps, MD (hepatobiliary, endocrine tumors, infectious disease); Jesse McKenney, MD (GU/GYN, soft tissue tumors); and Jeff Myers, MD (pulmonary, pleural, mediastinum); accompanied by a select list of subspecialty contributors.

Since 1954, Campbell-Walsh Urology has been internationally recognized as the pre-eminent text in its field. Edited by Alan J. Wein, MD, PhD(hon), Louis R. Kavoussi, MD, Alan W. Partin, MD, PhD, Craig A. Peters, MD, FACS, FAAP, and the late Andrew C. Novick, MD, it provides you with everything you need to know at every stage of your career, covering the entire breadth and depth of urology - from anatomy and physiology through the latest diagnostic approaches and medical and surgical treatments. Consult this title on your favorite e-reader with intuitive search tools and adjustable font sizes. Elsevier eBooks provide instant portable access to your entire library, no matter what device you're using or where you're located. Be certain with expert, dependable, accurate answers for every stage of your career from the most comprehensive, definitive text in the field! Required reading for all urology residents, Campbell-Walsh Urology is the predominant reference used by The American Board of Urology for its board examination questions. Visually grasp and better understand critical information with the aid of algorithms, photographs, radiographs, and line drawings to illustrate essential concepts, nuances of clinical presentation and technique, and decision making. Stay on the cutting edge with online updates. Get trusted perspectives and insights from hundreds of well-respected global contributors, all of whom are at the top and the cutting edge of their respective fields. Stay current with the latest knowledge and practices. Brand-new chapters and comprehensive updates throughout include new information on perioperative care in adults and children, premature ejaculation, retroperitoneal tumors, nocturia, and more! Meticulously revised chapters cover the most recent advancements in robotic and laparoscopic bladder surgery, open surgery of the kidney, management of metastic and invasive bladder cancer, and many other hot topics! Reference information quickly thanks to a new, streamlined print format and easily searchable online access to supplemental figures, tables, additional references, and expanded discussions as well as procedural videos and more at www.expertconsult.com.

Nedd4-2 (NEDD4L, neural precursor cell expressed, developmentally down regulated 4-like) belongs to the Nedd4 family of ubiquitin ligases. These ligases aid in maintaining cellular homeostasis by binding to, and ubiquitinating a number of membrane proteins to initiate their internalization and turnover. Previous work from our laboratory has suggested that Nedd4-2 plays an essential role in regulating ion channels, especially the epithelial sodium channel and voltage gated sodium channels. The misregulation of these channels has been implicated in multiple channelopathies, including hypertension and cystic fibrosis like disease. This study characterises a previously unknown function of Nedd4-2 in the kidney. In order to understand this significance of Nedd4-2 in renal homeostasis, the previously generated Nedd4-2−′− (Nedd4-2 knockout) mice (Boase et al., 2011) were characterised. The initial histological examination of postnatal kidneys suggested renal cyst formation in Nedd4-2−′− animals. Further analysis revealed that Nedd4-2 loss results in renal dysplasia. Nedd4-2−′− mice showed variable renal cystic index, onset of cyst formation starting from postnatal day 2 and progressing until the Nedd4-2−′− animals die due to respiratory distress around day 19-21. To investigate the prevalence of the cystic phenotype in other tissues histological analysis was performed in pancreas, liver, spleen, colon, stomach and thymus with no significant pathological differences observed in the knockout mice. The Nedd4-2−′− kidneys showed increased cell proliferation, with no apoptotic differences in the cells lining the cystic epithelia suggesting an imbalance between cell proliferation and apoptosis in cyst formation. The cyst formation and kidney development disorders are associated with malformation in the kidney tissue leading to extracellular matrix modification with enhanced accumulation of collagens causing increased interstitial fibrosis. The Nedd4-2−′− kidneys showed increased interstitial fibrosis, collagen-1 accumulation and expression during progression of the disease. The renal tissue membrane is made up of polysaccharides, glycogen and mucin, the Nedd4-2−′− kidneys were found to have decreased accumulation of polysaccharides. The cysts in the Nedd4-2−′− kidneys originated from different parts within the nephron. The larger cysts originated from loop of Henle and with the smaller cysts from collecting ducts and distal convoluted tubules. The cystic progression is dependent on cAMP flux initiated by fluid secretion within the cyst. The postnatal day 19 cystic kidneys in Nedd4-2−′− animals showed increased cAMP levels suggesting cystic disease progression. As renal cystic disorders may arise from abnormal cilia, ciliary anomalies were found in the Nedd4-2−′− around the cysts suggesting importance of cilia in kidney cyst formation. Polycystins are known to be involved in renal cyst development with polycystin-1 and polycystin-2 together known to form calcium ion channel. To investigate the role of Nedd4-2 in the regulation of these polycystins, in vitro and in vivo studies were conducted. In vitro studies suggested that depletion of Nedd4-2 results in increased expression of polycystin-1 on the cell membrane with a decrease in polycystin-2 levels. Further, polycystin-1 was found to be ubiquitinated by Nedd4-2 in vitro providing the first evidence of Nedd4-2-mediated regulation of polycystins. In vivo Polycystin-1 was up-regulated in the Nedd4-2−′− kidneys suggesting an important role of Nedd4-2 in regulation of polycystins in cyst formation. To analyse the transcriptional signature of the phenotype seen in the knockout kidneys, postnatal day 19 kidneys from wild-type and Nedd4-2−′− mice were subjected to RNA sequencing highlighting 537 genes that were differentially expressed between wild-type and knockout kidneys, with 167 genes down-regulated and 370 genes significantly up-regulated in the absence of Nedd4-2. DAVID and Ingenuity pathway analyses was used to highlight the importance of genes involved in extracellular matrix modification, cell junction formation and cell-cell communication. The work presented in this thesis thus provides new information on the pathophysiological role of Nedd4-2 in kidney and identifies polycystin-1 as a Nedd4-2 target, along with transcriptional changes which may partially explain the cystic phenotype associated with renal dysplasia.

This book comprehensively covers modern soft tissue pathology and includes both tumors and non-neoplastic entities. All methods of diagnosis are covered here, with an emphasis on the newest diagnostic tools. The organization allows the reader to compare didactic, comprehensive panels of illustrations to

formulate a complete understanding of the most common and more unusual diseases.
Molecular Features and Treatment Updates
Atlas of Ultrasonography in Urology, Andrology, and Nephrology
Kidney Disease and Nephrology Index
Techniques and Protocols
Why,How,When
The Core Requisites

Scarring of the glomerular and tubulointerstitial compartments is a hallmark of progressive kidney disease. Renal fibrosis involves a complex interplay between kidney cells, leukocytes and fibroblasts in which transforming growth factor-β (TGF-β) plays a key role. This eBook provides a comprehensive update on TGF-β signalling pathways and introduces a range of cellular and molecular mechanisms involved in renal fibrosis both upstream and downstream of TGF-β. The wide variety of potential new targets described herein bodes well for the future development of effective therapies to tackle the major clinical problem of progressive renal fibrosis.
This book provides the latest recommendations for ultrasound examination of the entire urogenital system, particularly in the male. The coverage encompasses the role of ultrasound in imaging of disorders of the kidneys, urinary tract, prostate, seminal vesicles, bladder, testes, and penis, including male infertility disorders. In addition, detailed consideration is given to intraoperative and interventional ultrasound and recently developed ultrasound techniques. Each chapter defines the purpose of and indications for ultrasound, identifies its benefits and limitations, specifies the technological standards for devices, outlines performance of the investigation, establishes the expected accuracy for differential diagnosis, and indicates the reporting method. Most of the recommendations are based on review of the literature, on previous recommendations, and on the opinions of the experts of the Imaging Working Group of the Italian Society of Urology (SIU) and the Italian Society of Ultrasound in Urology, Andrology, and Nephrology (SIEUN). The book will be of value for all physicians involved in the first-line evaluation of diseases of the renal/urinary system and male genital disorders.
Autosomal Dominant Polycystic Kidney Disease (ADPKD) is a highly prevalent hereditary renal disorder in which fluid-filled cysts are appeared in both kidneys. Main causative genes of ADPKD are PKD1 and PKD2, encoding for polycystin-1 (PC1) and polycystin-2 (PC2) respectively. Those proteins are localized on primary cilia and function as mechanosensor in response to the fluid flow, translating mechanistic stimuli into calcium signaling. With mutations either of PKD1 or PKD2, hyper-activated renal tubular epithelial cell proliferation is observed, followed by disrupted calcium homeostasis and aberrant intracellular cyclic AMP (cAMP) accumulation. Increased cell proliferation with fluid secretion leads to the development of thousands of epithelial-lined, fluid-filled cysts in kidneys. It is also accompanied by interstitial inflammation, fibrosis, and finally reaching end-stage renal disease (ESRD). In human ADPKD, the age at which renal failure typically occurs is later in life, however no specific targeted medications are available to cure ADPKD. Recently, potential therapeutic targets or surrogate diagnostic biomarkers for ADPKD are proposed with the advances in the understanding of ADPKD pathogenesis, and some of them were attempted for clinical trials. Herein, we will summarize genetic and epi-genetic molecular mechanisms in ADPKD progression, and overview the currently available biomarkers or potential therapeutic reagents suggested.
Renal Disease
ScholarlyBrief
Clinical Progress in Renal Cancer
Seldin and Giebisch's The Kidney
Toxicity Bibliography
Clinical MRI of the Abdomen