Clinical Molecular Anatomic Imaging Pet Petct And Spectct

This book is specifically designed to meet the needs of practicing radiologists by offering a practical, unified approach to PET-CT. It details how to effectively apply PET-CT in patient management. Written by radiologists who fully appreciate and understand both PET and CT, the book details an integrated understanding of PET-CT as a combined modality. Clinical topics include PET-CT of thoracic malignancies, melanoma, and breast cancer. In addition, the book reinforces fundamental concepts, such as the role of imaging diagnosis in disease management.

This book offers an overview of the clinical applications of PET/MR imaging through a case-based format. Hybrid PET/MRI provides functional and anatomical information via one setting offering superior imaging quality with lower radiation dose being administered to the patient. The cases in this book focus on the use of this technique in the diagnosis of oncologic, neurologic, cardiovascular, infectious and inflammatory, and pediatric diseases. Each case is presented with the patient history, protocols, interpretation of findings, and pearls and pitfalls accompanied by high quality PET/MR images. The major strength of this book is the discussion of both MRI and PET findings pertinent to each particular case. It expands the discussion of oncologic applications of this modality through a variety of cases that highlight staging, treatment response, and follow up. Illustrating a spectrum of PET/MRI clinical applications, PET/MR Imaging: A Case-Based Approach is a valuable resource for radiologists, nuclear medicine physicians, and residents.

This book covers the discovery of molecular biomarkers, the development of laboratory testing techniques and their clinical applications, focusing on basic research to clinical practice. It introduces new and crucial knowledge and ethics of clinical molecular diagnosis. This book emphasizes the applications of clinical molecular diagnostic test on health management, especially from different diseased organs. It lets readers to understand and realize precision healthcare.

Fusion imaging tomography (FIT, also called "functional anatomic mapping") describes an imaging study that combines radiology (form) and nuclear medicine (function). This is the first book on the subject and includes information on lesion detection, diagnosis, staging, and treatment. The book features experienced contributors from multiple international imaging centers, and four-color images throughout.

With the advent of multidetector-row technology, excitement has returned to computed tomography. Not only can we now image faster and with better resolution than ever before. More importantly, the development of sophisticated image acquisition techniques has enabled us to venture into areas previously considered to be beyond the scope of CT imaging. The knowledge, experience, and vision of a host of renowned international experts in cutting-edge thoracic applications of multidetector-row CT are condensed within this book. The result is a critical, comprehensive review of the novel opportunities, but also the new challenges, brought about by the development of ever-faster CT acquisition techniques. Presents the latest developments in CT imaging of the thorax Comprehensively reviews the literature Offers useful practical guidelines Addresses both opportunities and challenges Written by leading international experts

The book offers a comprehensive and user-oriented description of the theoretical and technical system fundamentals of computed tomography (CT) for a wide readership, from conventional single-slice acquisitions to volume acquisition with multi-slice and cone-beam spiral CT. It covers in detail all characteristic parameters relevant for image quality and all performance features significant for clinical application. Readers will thus be informed how to use a CT system to an optimum depending on the different diagnostic requirements. This includes a detailed discussion about the dose required and about dose measurements as well as how to reduce dose in CT. All considerations pay special attention to spiral CT and to new developments towards advanced multi-slice and cone-beam CT. For the third edition most of the contents have been updated and latest topics like dual source CT, dual energy CT, flat detector CT and interventional CT have been added. The enclosed CD-ROM again offers copies of all figures in the book and attractive case studies, including many examples from the most recent 64-slice acquisitions, and interactive exercises for image viewing and manipulation. This book is intended for all those who work daily, regularly or even only occasionally with CT: physicians, radiographers, engineers, technicians and physicists. A glossary describes all the important technical terms in alphabetical order. The enclosed DVD again offers attractive case studies, including many examples from the most recent 64-slice acquisitions, and interactive exercises for image viewing and manipulation. This book is intended for all those who work daily, regularly or even only occasionally with CT: physicians, radiographers, engineers, technicians and physicists. A glossary describes all the important technical terms in alphabetical order.

The first text to offer complete, diagnosis-centered guidance on the effective use of emerging PET technology, Specialty Imaging: PET is a one-stop resource, expertly tailored to your decision support needs at the point of care. This accessible reference covers everything you need to know about the key role of PET in the complex field of precision medicine in areas including oncology, cardiac, infection and inflammation, vascular, breast, neurological, musculoskeletal, gastrointestinal, neuroendocrine, and many other specialties. With a practical, clinically oriented focus, it brings you fully up-to-date with research-based information on PET and how PET has resulted in radically new treatment approaches based on an immediate and molecular response to therapy. Features 1,600 high-quality images with captions and annotations for interpretive guidance, with illustrations including PET, with correlative CT and MR images depicting radiologic imaging findings Presents all diagnoses consistently, using a highly templated format with bulleted text for quick, easy reference Includes chapters in expert interpretation, artifacts, and common pitfalls Provides a wide range of essential information such as oncologic PET diagnoses with staging tables and reporting tips; cardiac PET indications including stress tests, cardiac viability, and sarcoidosis; CNS PET indications including dementia, epilepsy, and oncology; and educational, illustrated PET cases including correlative CT and MR Covers PET physics and instrumentation and current clinical and emerging PET radiotracers in table format Ideal for clinicians who care for cancer patients (nuclear medicine radiologists, radiation oncologists, oncologists, oncology surgeons, and trainees in nuclear medicine and oncology), as well as those who interpret PET for a wide variety of indications

Cardiovascular Molecular Imaging is based on a groundbreaking NIH symposium sponsored by the American Society of Nuclear Cardiology. The first all-inclusive guide to the targeted molecular imaging of the cardiovascular system, it includes color illustrations throughout and is packaged with a user-friendly CD-ROM with supplemental material.This refe

This atlas showcases cross-sectional anatomy for the proper interpretation of images generated from PET/MRI, PET/CT, and SPECT/CT applications. Hybrid imaging is at the forefront of nuclear and molecular imaging and enhances data acquisition for the purposes of diagnosis and treatment. Simultaneous evaluation of anatomic and metabolic information about normal and abnormal processes addresses complex clinical questions and raises the level of confidence of the scan interpretation. Extensively illustrated with high-resolution PET/MRI, PET/CT and SPECT/CT images, this atlas provides precise morphologic information for the whole body as well as for specific regions such as the head and neck, abdomen, and musculoskeletal system. Atlas and Anatomy of PET/MRI, PET/CT, AND SPECT/CT is a unique resource for physicians and residents in nuclear medicine, radiology, oncology, neurology, and cardiology.

Practical and clinically oriented, the third edition of Clinical Molecular Anatomic Imaging focuses on PET/CT, SPECT/CT, and PET/MR examinations – precisely the information you need to

know. Ideal for clinical hybrid imaging users, it fully integrates all applications, allowing you to easily compare modalities and decide whether to use PET/CT, PET/MR, or SPECT/CT to solve a clinical dilemma. More than 1,600 high-quality illustrations document the use of integrated imaging and provide superb visual references for interpreting integrated imaging studies.

The first comprehensive reference to focus on the molecular development and treatment of the disease, Molecular Oncology of Breast Cancer provides authoritative information across the spectrum of modern breast cancer research and clinical care. Edited by two world-class experts in cancer pathology, drug development, and patient management, with contributions from over 50 experts, this ground-breaking text describes the genes, proteins, and biologic pathways that are being evaluated today and will be tested in the future to derive the molecular signature of each newly diagnosed breast cancer. For the first time, readers can now obtain, in a single volume, up-to-date information on how molecular-based tests are being used to identify predisposition, provide earliest detection, decide classification based on genetic fingerprint and predict therapy-specific outcomes. MOBC includes unique chapters on functional imaging and the impact of targeted therapies on the FDA approval process. This book gives readers vital, up-to-date information on important molecular discoveries that affect the everyday management of the breast cancer patient.

Personalized medicine employing patient-based tailor-made therapeutic drugs is taking over treatment paradigms in a variety of ?elds in oncology and the central nervous system. The success of such therapies is mainly dependent on ef?cacious therapeutic drugs and a selective imaging probe for identi?cation of potential responders as well as therapy monitoring for an early bene?t assessment. Molecular imaging (MI) is based on the selective and speci?c interaction of a molecular probe with a biological target which is visualized through nuclear, magnetic resonance, near infrared or other methods. Therefore it is the method of choice for patient selection and therapy monitoring as well as for speci?c e- point monitoring in modern drug development. PET (positron emitting tomography), a nuclear medical imaging modality, is ideally suited to produce three-dimensional images of various targets or processes. The rapidly increasing demand for highly selective probes for MI strongly pushes the development of new PET tracers and PET chemistry. ‘PET chemistry’ can be de?ned as the study of positron-emitting compounds regarding their synthesis, structure, composition, reactivity, nuclear properties and processes and their properties in natural and - natural environments. In practice PET chemistry is strongly in?uenced by the unique properties of the radioisotopes used (e. g. , half-life, che- cal reactivity, etc.) and integrates scienti?c aspects of nuclear-, organic-, inorganic- and biochemistry.

Richly illustrated and comprehensive in scope, Abdominal Imaging, 2nd Edition, by Drs. Dushyant V. Sahani and Anthony E. Samir, is your up-to-date, one-volume source for evaluating the full range of diagnostic, therapeutic, and interventional challenges in this fast-changing field. Part of the Expert Radiology series, this highly regarded reference covers all modalities and organ systems in a concise, newly streamlined format for quicker access to common and uncommon findings. Detailed, expert guidance, accompanied by thousands of high-quality digital images, helps you make the most of new technologies and advances in abdominal imaging. Offers thorough coverage of all diagnostic modalities for abdominal imaging: radiographs, fluoroscopy, ultrasound, CT, MRI, PET and PET/CT. Helps you select the best imaging approaches and effectively interpret your findings with a highly templated, well-organized, at-a-glance organization. Covers multi-modality imaging of the esophagus, stomach, small bowel, colon, liver, pancreas, gall bladder, bile ducts, spleen, pelvic lymph nodes, kidneys, urinary tract, prostate, and peritoneum. Includes new chapters on esophageal imaging; 5RECIST, WHO, and other response criteria; and a new section on oncologic imaging. Keeps you up to date with the latest developments in image-guided therapies, dual-energy CT, elastography, and much more. Features more than 2,400 high-quality images, including 240 images new to this edition.

This book provides a contemporary reference to the science, technology and clinical applications of PET and PET/CT. The book is designed to be used by residents and fellows training in medical imaging specialties as well as imaging experts in private or academic practice who need to become familiar with this technology and its applications. It is also for use by those whose specialties carry over to PET and PET/CT, referring physicians such as oncologists, cardiologists, neurologists and surgeons. Developed as an offshoot/update of the "clinical practice" portion of the main book, edited by PE Valk et al, published in 2003 (Positron Emission Tomography: basic science and clinical practice), this offshoot covers the second half of the main book only, dealing with mainly the clinical research and practice. Most of the book comprises chapters updated from the "Clinical practice" portion of the main Valk book. It contains 6 brand new chapters and 22 completely revised and updated chapters from the main Valk book.

This book introduces the fundamental aspects of digital imaging and covers four main themes: ultrasound techniques and imaging applications, magnetic resonance and MPJ in hospital, digital imaging with X-rays, and emission tomography (PET and SPECT). Each topic is developed by analyzing the underlying physics principles and their implementation, quality and safety aspects, clinical performance, and recent advancements in the field.

This issue of PET Clinics focuses on Molecular Imaging and Precision Medicine, Part II, and is edited by Dr. Rathan Subramaniam. Articles will include: Precision Medicine in Esophageal Cancer; Precision Medicine and PET/CT in Melanoma; Precision Medicine and PET/CT in Hepatobilliary and Pancreatic Cancer; Precision Medicine and PET/CT in Gastric Cancer; Precision Medicine and PET/CT in Skeletal and Soft Tissue Sarcomas; Precision Medicine and PET/MRI; Precision Medicine and PET/CT in Uterine and Ovarian Cancers; Precision Medicine and PET/CT in Cardiovascular Disorders, and more!

This latest edition is a comprehensive review of radiology that can be used as a first reader by beginning residents, referred to during rotations, and used to study for the American Board of Radiology exams. It covers all ten subspecialties of radiology and includes more than 2,700 illustrations.

FDG PET/CT has rapidly emerged as an invaluable combined imaging modality that provides both anatomic and functional information. This book, comprising a collection of images from oncology cases, is organized according to the role of FDG PET/CT in the evaluation and management of oncology patients, and only secondarily by organ or tumor entity. In this way, it reflects the issues that clinicians actually address, namely: identification of an unknown or unsuspected primary; determination of the extent of disease; evaluation of response to therapy; and surveillance after response, i.e., detection of recurrent disease. In total, 100 cases involving different primary tumors are presented to illustrate findings in these different circumstances. FDG PET/CT in Clinical Oncology will be of great value to all newcomers to this field, whether medical students, radiology, nuclear medicine, or oncology fellows, or practicing physicians.

This handbook will provide updated information on nuclear medicine and molecular imaging techniques as well as its clinical applications, including radionuclide therapy, to trainees and practitioners of nuclear medicine, radiology and general medicine. Updated information on nuclear medicine and molecular imaging are vitally important and useful to both trainees and existing practitioners. Imaging techniques and agents are advancing and changing so rapidly that concise and pertinent information are absolutely necessary and helpful. It is hoped that this handbook will help readers be better equipped for the utilization of new imaging methods and treatments using radiopharmaceuticals. Contents:Basic Sciences:Basic Nuclear Physics and Instrumentation (Jae Sung Lee)Radiopharmaceutical Chemistry (Yun-Sang Lee)Clinical Applications:Unexpected Nuclear Scan Findings Due to Radiopharmaceutical, Technical, or Patient-Related Factors (Usha A Joseph, David Q Wan, Asad Nasir, David Brandon, Isis W Gayed and Bruce J Barron)Nuclear Medicine in Neurological Disorder (Yu-Keong Kim and Dong-Soo Kim)Scintigraphic Imaging of Cerebral Spinal Fluid Flow, Blockage, and Leakage (Franklin C Wong and E Edmund Kim)Nuclear Endocrinology (Ho-Young Lee, June-Key Chung and E Edmund Kim)Nuclear Cardiac Imaging (Jin-Chul Paeng and Dong-Soo Kim)Pulmonary Nuclear Medicine (E Edmund Kim and Franklin Wong)Gastrointestinal Nuclear Medicine (Gi-Jeong Cheon and E Edmund Kim)Nuclear Imaging of Esophageal, Gastric, and Pancreatic Cancers (Hirofumi Shibata, Ukihide Tateishi and Tomio Inoue)Nuclear Urology (Ukihide Tateishi and E Edmund Kim)Bone and Joint Nuclear Imaging (Seok-ki Kim)Lymphoscintigraphy and Nuclear Venography (E Edmund Kim and Franklin Wong)Infection and Inflammation Imaging (So-Won Oh, Ukihide Tateishi,Yu-Kyeong Kim, Jin-Chul Paeng and E Edmund Kim)Tumor Imaging (Ukihide Tateishi and E Edmund Kim)Receptor-Binding Peptide Imaging (E Edmund Kim and Richard Baum)In vivo Molecular Imaging (Keon Wook Kang)In Vitro Nuclear Medicine Tests (E Edmund Kim)Therapeutic Applications of Radiopharmaceuticals (Franklin C Wong and E Edmund Kim) Readership: Trainees and practitioners of nuclear medicine, radiology and general medicine seeking updated information on nuclear medicine and molecular imaging techniques as well as its clinical applications, including radionuclide therapy. Keywords:Nuclear Medicine;Molecular Imaging;PET/CT;SPECT/CT;Radionuclide TherapyKey Features:Written by experienced international experts in the field of nuclear medicine and molecular imagingCombined information on nuclear medicine and molecular imaging in one textbookEmphasis on practical, important and useful imagings and treatments using internal radiationReviews: “The text, highlighting the continuing evolution of imaging techniques and radiopharmaceuticals also used for therapeutic purposes, may certainly be considered a manual of instruction, simple and understandable, user–friendly for the practice of nuclear medicine, and offering interesting insights into current clinical applications and future prospects.” European Journal of Nuclear Medicine and Molecular Imaging

This comprehensive book focuses on multimodality imaging technology, including overviews of the instruments and methods followed by practical case studies that highlight use in the detection and treatment of cardiovascular diseases. Chapters cover PET-CT, SPECT-CT, SPECT-MRI, PET-MRI, PET-optical imaging, SPECT-optical imaging, photoacoustic Imaging, and hybrid intravascular imaging. It also addresses the important issues of multimodality imaging probes and image quantification. Readers from radiology and cardiology as well as medical imaging and biomedical engineering will learn essentials of the field. They will be shown how the field has advanced quantitative analysis of molecularly targeted imaging through improvements in the reliability and reproducibility of imaging data. Moreover, they will be presented with quantification algorithms and case illustrations, including coverage of such topics such as multimodality image fusion and kinetic modeling. Yi-Hwa Liu, PhD is Senior Research Scientist in Cardiovascular Medicine at Yale University School of Medicine and Technical Director of Nuclear Cardiology at Yale New Haven Hospital. He is also an Associate Professor (Adjunct) of Biomedical Imaging and Radiological Sciences at National Yang-Ming University, Taipei, Taiwan, and Professor (Adjunct) of Biomedical Engineering at Chung Yuan Christian University, Taoyuan, Taiwan. He is an elected senior member of Institute of Electrical and Electronic Engineers (IEEE) and a full member of Sigma Xi of The Scientific Research Society of North America. Albert J. Sinusas, M.D., FACC, FAHA is Professor of Medicine (Section of Cardiovascular Medicine) and Radiology and Biomedical Imaging, at Yale University School of Medicine, and Director of the Yale Translational Research Imaging Center (Y-TRIC), and Director of Advanced Cardiovascular Imaging at Yale New Haven Hospital. He is a recipient of the Society of Nuclear Medicine’s Hermann Blumgart Award.

The present book gives an exceptional overview of molecular imaging. Practical approach represents the red thread through the whole book, covering at the same time detailed background information that goes very deep into molecular as well as cellular level. Ideas how molecular imaging will develop in the near future present a special delicacy. This should be of special interest as the contributors are members of leading research groups from all over the world.

The overall goal of this book is to promote research and development of imaging and radioanalytical techniques by publishing high-quality chapters in this rapidly growing interdisciplinary field. This book discusses the principles and applications of imaging and radioanalytical techniques across a wide spectrum of interdisciplinary science, technology and medicine, where these techniques are expected to make significant difference and contribution. It also explores the history of the field, current trends, and future directions. The book focuses mainly on cutting-edge applications, and associated equipments and methods, such as instrumentation systems and computing hardware/software. The primary target audience for this book includes students, researchers, clinicians, and professionals who are interested in medical and ground penetrating radar (GPR) imaging, and radioanalytical techniques.

In recent years there has been recognition of the central role of imaging in the management of patients with cancer. The third edition of this widely acclaimed book builds on the foundations laid down by the first edition, the 1998 winner of the Royal Society's award for the Multi-author Textbook of the Year, and the second (2004). The core of the

Perfect for residents and fellows to use during rotations, or as a quick review for practicing radiologists and nuclear medicine physicians, Nuclear Medicine: The Essentials is a complete, concise overview of the most important knowledge in this challenging and evolving field. Each chapter begins with learning objectives and ends with board-style questions that help you focus your learning. A self-assessment examination in print and additional self-assessment material online test your mastery of the content and prepare you for exams.

This handbook, written in a clear and precise style, describes the principles of positron emission tomography (PET) and provides detailed information on its application in clinical practice. The first part of the book explains the physical and biochemical basis for PET and covers such topics as instrumentation, image reconstruction, and the production and diagnostic properties of radiopharmaceuticals. The focus then turns to the use of PET in clinical practice, including its role in hybrid imaging (PET-CT). A wide range of oncological applications in different body systems and organs are discussed, and uses of PET in cardiology, neurology, and psychiatry are also addressed. Characteristic

findings are described and illustrated by numerous images, many of them in color. This book will be of value not only for nuclear medicine physicians and radiologists but also for oncologists, surgeons, cardiologists, neurologists, psychiatrists, and residents with an interest in molecular imaging.

The Atlas of PET/CT Imaging in Oncology serves an educational purpose and is designed to teach radiologists and nuclear medicine specialists about important aspects of molecular imaging and nuclear medicine specialists about the benefits of anatomic imaging. It consists of a brief didactic portion and an extensive selection of interesting and challenging case examples. A special feature of the atlas is an interactive CD-ROM that provides the original PET and CT images of each case in selected planes enabling the users to manually adjust the blending intensity of each modality in a fused image. In addition, users can display the clinical history, imaging techniques and diagnostic findings of each case as well as the corresponding specific teaching point.

This important volume is the first to address the use of neuroimaging in civil and criminal forensic contexts and to include discussion of prior precedents and court decisions. Equally useful for practicing psychiatrists and psychologists, it reviews both the legal and ethical consideraitons of neuroimaging.

? SPECT/CT cameras have considerably improved diagnostic accuracy in recent years based in large part on the better localization and definition of scintigraphic findings. This book covers the full spectrum of clinical applications of SPECT/CT in diagnosis and therapy planning of benign and malignant diseases. Opening chapters discuss the technology and physics of SPECT/CT and its use for dosimetry. The role of SPECT/CT in the imaging of a range of pathologic conditions is then addressed in detail. Applications covered include, among others, imaging of the thyroid, bone, and lungs, imaging of neuroendocrine tumors, cardiac scintigraphy, and sentinel node scintigraphy. Individual chapters are also devoted to therapy planning in selective internal radiation therapy of liver tumors and bremsstrahlung SPECT/CT. Readers will find this book to be an essential and up-to-date source of information on this invaluable hybrid imaging technique.

Returning in a second edition, this practical book presents oncological and nononcological applications for PET and PET/CT for the full range of scenarios frequently encountered in the professional setting. Placing special emphasis on PET/CT correlation and FDG oncological imaging, it opens with a thorough introduction to fundamental science and clinical basics. Each chapter in the Oncological Applications section of the book describes the role of PET and PET/CT in the management of specific diseases, providing succinct descriptions of indications and comparisons with other imaging modalities.

The horizons of sophisticated imaging have expanded with the use of combined positron emission tomography (PET) and computed tomography (CT). PET-CT has revolutionized medical imaging by adding anatomic localization to functional imaging, thus providing physicians with information that is vital for the accurate diagnosis and treatment of pathologies. Since the integration of PET and CT several years ago, PET/CT procedures are now routine at leading medical centers throughout the world. This has increased the importance of nuclear medicine physicians acquiring a broad knowledge in sectional anatomy for image interpretation. The Atlas of Sectional Radiological Anatomy for PET/CT is a user-friendly guide presenting high-resolution, full-color images of anatomical detail and focuses solely on normal FDG distribution throughout the head & neck, thorax, abdomen, and pelvis, the primary sites for cancer detection and treatment through PET/CT.

In compiling this textbook on the exciting novel imaging modality of PET/MRI, the editors have brought together a truly international group of experts in the field. The book is divided into two parts. The first part covers methodology and equipment and includes chapters on basic molecular medicine, contrast agents, MR attenuation and validation, and quantitative MRI and PET motion correction. The second part of the book focuses on clinical applications in oncology, cardiology, and neurology. Imaging of major neoplasms is covered in a series of individual chapters. Further chapters address functional and metabolic cardiovascular examinations and major central nervous system applications such as brain tumors and dementias. This book will be of interest to all radiologists and nuclear medicine physicians who wish to learn more about the latest developments in this important emerging imaging modality and its applications.

This fully updated Second Edition focuses sharply on clinical PET-CT and SPECT-CT examinations, omitting lengthy physics discussions. The book is now strictly disease oriented and integrates PET-CT and SPECT-CT applications completely. When both techniques are relevant for a disease, they are discussed together; when only one is relevant, it is discussed alone. More than 1,200 illustrations are included. A bound-in DVD contains over 80 cases to be viewed in three orthogonal planes and different CT windows organized as reference and self-assessment files. The cases provide excellent training and allow readers to test their abilities in making diagnoses on their own.

Bringing together leading experts, this volume reviews cutting-edge applications of neuroimaging techniques in the study of brain injury, brain disease, and normal aging. It provides up-to-date descriptions of EEG, MEG, PET, and fMRI; discusses salient methodological issues; and presents significant clinical advances that have been brought about through the use of these procedures. Specific disorders addressed include epilepsy, aphasia, traumatic brain injury, multiple sclerosis, alcoholism, autism, schizophrenia, and stroke. Analyzing what functional imaging has revealed about the causes and mechanisms of sensory, motor, and cognitive disturbances associated with these conditions, the book also explores implications for improving cognitive rehabilitation. More than 60 illustrations, including 24 in full color.

This book deals with neuroimaging of the brain, head, neck, and spine. During the last few years, there have been considerable advances in this subject, driven by clinical as well as technological developments. The authors, internationally renowned experts in their field, have contributed chapters that are disease-oriented and cover all relevant imaging modalities, including magnetic resonance imaging, computed tomography, and positron emission tomography. As a result, this book offers a comprehensive review of the state of

the art in neuroimaging. It is particularly relevant for general radiologists, radiology residents, neurologists, neurosurgeons, and other clinicians wishing to update their knowledge in this discipline.

Abdominal Imaging, a title in the Expert Radiology Series, edited by Drs. Dushyant Sahani and Anthony Samir, is a comprehensive 2-volume reference that encompasses both GI and GU radiology. It provides richly illustrated, advanced guidance to help you overcome the full range of diagnostic, therapeutic, and interventional challenges in abdominal imaging and combines an image-rich, easy-to-use format with the greater depth that experienced practitioners need. Online access at expertconsult.com allows you to rapidly search for images and quickly locate the answers to any questions. Select the best imaging approaches and effectively interpret your findings by comparing them to thousands of images that represent every modality and every type of abdominal imaging. Find detailed, expert guidance on all diagnostic, therapeutic, and interventional aspects of abdominal imaging in one authoritative source, including challenging topics such as Oncologic Assessment of Tumor Response and How to Scan a Difficult Patient. Efficiently locate the information you need with a highly templated, well-organized, at-a-glance organization. Access and rapidly search the complete contents online at expertconsult.com. Better evaluate GI/GU conditions with thousands of high-quality digital images

Based on the experience gained by PET/CT experts with more than 10,000 patients, this manual impressively demonstrates the advantages of combined PET/CT. It also refers to publications from Europe, the USA and Asia as well as numerous studies.

This issue of PET Clinics is Part II of a two-part issue, and focuses on PET-CT-MRI Applications of Musculoskeletal Disorders. It is edited by Drs. Abass Alavi (the Consulting Editor of PET Clinics), Ali Salavati, Ali Gholamrezanezhad and Ali Guermazi. Articles will include:Applications of PET-CT-MR in the management of benign musculoskeletal disorders; Diagnostic management of primary and secondary spinal neoplastic disease: The role of PET-CT-MRI; Skeletal Metastasis Evaluation: Value and impact of PET/CT on Diagnosis, Management and Prognosis; Hybrid imaging (PET CT/PET MRI) of bone metastases; Diffusion-weighted MR Imaging in Evaluating Bone Metastases; Imaging of Osteoarthritis by Conventional Radiography, MRI, PET-CT and PET-MRI; Evolving Role of MRI and PET in Assessing Osteoporosis; Evolving Role of Novel PET-CT-MRI based quantitative technique for Assessing Muscle Disorders; Pediatric musculoskeletal applications of PET-CT-MRI; In vivo molecular imaging of inflammation and infection; Future perspective of the application of PET-CT-MRI in musculoskeletal disorders; and more!

This lavishly illustrated handbook presents an evidence-based look at the most up-to-date PET/CT image-fusion technology in clinical use today.