Ophthalmologists are often the first clinicians to evaluate a patient harboring an underlying intraorbital or intracranial structural lesion. This unique position makes it particularly important for them to understand the basic mechanics, indications, and contraindications for the available orbital and neuroimaging studies (e.g., CT and MR imaging), as well as any special studies that may be necessary to fully evaluate the suspected pathology. It is equally important for them to be able to communicate their imaging questions and provide relevant clinical information to the interpreting radiologist. Since the publication of the original edition of this American Academy of Ophthalmology Monograph in 1992, new techniques and special sequences have improved our ability to detect pathology in the orbit and brain that are significant for the ophthalmologist. In this second edition of Monograph 6, Johnson, Policeni, Lee, and Smoker have updated the original content and summarized the recent neuroradiologic literature on the various modalities applicable to CT and MR imaging for ophthalmology. They emphasize vascular imaging advances (e.g., MR angiography (MRA), CT angiography (CTA), MR venography (MRV), and CT venography (CTV) and specific MR sequences (e.g., fat suppression, fluid attenuation inversion recovery (FLAIR), gradient recall echo imaging (GRE), diffusion weighted imaging (DWI), perfusion weighted imaging (PWI), and dynamic perfusion CT (PCT)). They have also included tables that outline the indications, best imaging recommendations for specific ophthalmic entities, and examples of specific radiographic pathology that illustrate the relevant entities. The goal of this Monograph is to reinforce the critical importance of accurate, complete, and timely communication—from the prescribing ophthalmologist to the interpreting radiologist—of the clinical findings, differential diagnosis, and presumed topographical location of the suspected lesion in order for the radiologist to perform the optimal imaging study, and ultimately, to receive the best interpretation.

The revised and updated second edition of this comprehensive text continues to offer careful critical evaluation and authoritative advice on stroke, the most complicated disease affecting the nervous system of children and young adults. New chapters, the latest guidelines from the American Heart Association, tips for preventing misdiagnoses, and more provide you with the knowledge you need to make the best clinical and management decisions of both common and rare cerebrovascular disorders in the young population. Tightly focused, this fully referenced textbook fills the void in the literature by including detailed discussions on topics such as stroke in neonates, atherosclerotic cerebral infarction in young adults, strokes caused by migraines, stroke during pregnancy, and a myriad of others. Up-to-date tables containing rich troves of data along with the careful selection of multiple references further enhances your acumen. Offers practical, clinical guidance on stroke and stroke related issues, such as atherosclerotic cerebral infarction, non-atherosclerotic cerebral vasculopathies, cardiac disorders, and disorders of hemostasis to broaden your knowledge base. Includes an overview of stroke types, risk factors, prognosis, and diagnostic strategies in neonates, children, and young adults to help you better manage every condition you see. Discusses the diverse etiologies of stroke in children and young adults to increase awareness in the differences of presenting signs between children and adults. Features new chapters on Applied Anatomy, Pediatric CNS Vascular Malformation, and Vascular Disorders of the Spinal Cord to keep you on the cusp of this challenging and burgeoning field. Presents data from the latest American Heart Association guidelines for stroke in children and young adults—authored by Dr. Biller—to help you make better informed evaluation and management decisions. Provides tips on how to prevent misdiagnosis. Offers the latest knowledge on therapy and rehabilitation to help you chose the best treatment options. Includes more images to enhance visual guidance.

Medical Imaging has been revised and updated to reflect the current role and responsibilities of the radiographer, a role that continues to extend as the 21st century progresses. This comprehensive book covers the full range of medical imaging methods/techniques which all students and professionals must understand, and discusses them related to imaging principles, radiation dose, patient condition, body area and pathologies. There is comprehensive, up-to-date, referencing for all chapters, with full image evaluation criteria and a systematic approach to fault recognition for all radiographic projections. Highly respected editors, Elizabeth and Barry Carver, have brought together an impressive team of contributing authors, comprising academic, radiographer and radiologist clinical experts. NEW TO THIS EDITION Full colour, including approximately 200 new colour photographs All techniques have been updated to reflect the use of digital image receptors All chapters have been updated to reflect current practice, eg CT colonoscopy is now included as part of GI imaging; the nuclear medicine chapter now introduces hybrid imaging; the genitourinary chapter now reflects the use of ultrasound and CT ‘The authors have been comprehensive, thorough and innovative. This well-presented book should be adopted by Schools of Diagnostic Imaging in Europe and elsewhere and be a constant companion to the reflective radiographic practitioner.’ From the foreword to the first edition by Patrick Brennan. Medical Imaging has been revised and updated to reflect the current role and responsibilities of the radiographer, a role that continues to extend as the 21st century progresses. This comprehensive book covers the full range of medical imaging methods/techniques which all students and professionals must understand, and discusses them related to imaging principles, radiation dose, patient condition, body area and pathologies. There is comprehensive, up-to-date, referencing for all chapters, with full image evaluation criteria and a systematic approach to fault recognition for all radiographic projections. Highly respected editors, Elizabeth and Barry Carver, have brought together an impressive team of contributing authors, comprising academic, radiographer and radiologist clinical experts. Full colour, including approximately 200 new colour photographs All techniques have been updated to reflect the use of digital image receptors. All chapters have been updated to reflect current practice, eg CT colonoscopy is now included as part of GI imaging; the nuclear medicine chapter now introduces hybrid imaging; the genitourinary chapter now reflects the use of ultrasound and CT. Over 5,200 high quality CT, MR, and hybrid technology images in one definitive reference. For the radiologist who needs information on the latest cutting-edge techniques in rapidly changing imaging technologies, such as CT, MRI, and PET/CT, and for the resident who needs a comprehensive resource that gives a broad overview of CT and MRI capabilities. Brand-new team of new international associate editors provides a unique global perspective on the use of CT and MRI across the world. Completely revised in a new, more succinct presentation without redundancies for faster access to critical content. Vastly expanded section on new MRI and CT technology keeps you current with continuously evolving innovations. This book is a comprehensive and richly-illustrated guide to cardiac CT, its current state, applications, and future directions. While the first edition of this text focused on what was then a novel instrument looking for application, this edition comes at a time where a wealth of guideline-driven, robust, and beneficial clinical applications have evolved that are enabled by an enormous and ever growing field of technology. Accordingly, the focus of the text has shifted from a technology-centric to a more patient-centric appraisal. While the specifications and capabilities of the CT system itself remain front and center as the basis for diagnostic success, much of the benefit derived from cardiac CT today comes from avant-garde technologies enabling enhanced visualization, quantitative imaging, and functional assessment, along with exciting deep learning, and artificial intelligence applications. Cardiac CT is no longer a mere tool for non-invasive coronary artery stenosis detection in the chest pain diagnostic algorithms; cardiac CT has proven its value for uses as diverse as personalized cardiovascular risk stratification, prediction, and management, diagnosing lesion-specific ischemia, guiding minimally invasive structural heart disease therapy, and planning cardiovascular surgery, among many others. This second edition is an authoritative guide and reference for both novices and experts in the medical imaging sciences who have an interest in cardiac CT.
perspectives and skills you need to succeed. Comprehensive without being encyclopedic, this new edition familiarizes you with the latest advances in the field—neuroimaging, the medical and surgical treatment of epilepsy, minimally invasive techniques, and new techniques in position and incisions—and shows you how to perform key procedures via an online library of surgical videos at www.expertconsult.com. No other source does such an effective job of preparing you for this challenging field! Get comprehensive coverage of neuroimaging, including pre- and post-operative patient care, neuroradiology, pediatric neuroimaging, neurovascular surgery, trauma surgery, spine surgery, oncology, pituitary adenomas, cranial base neurosurgery, image-guided neurosurgery, treatment of pain, epilepsy surgery, and much more. Gain a clear visual understanding from over 1,200 outstanding illustrations—half in full color—including many superb clinical and operative photographs, surgical line drawings, and at-a-glance tables. Apply best practices in neuroimaging techniques, minimally invasive surgery, epilepsy surgery, and pediatric neurosurgery. Master key procedures by watching experts perform them in a video library online at www.expertconsult.com, where you can also access the freely searchable text, an image gallery, and links to PubMed. Keep up with recent advances in neurosurgery with fully revised content covering neuroimaging, the medical and surgical treatment of epilepsy, minimally invasive techniques, new techniques in position and incisions, deep brain stimulation, cerebral revascularization, and treatment strategies for traumatic brain injury in soldiers. Apply the latest guidance from new chapters on Cerebral Revascularization, Principles of Modern Neuroimaging, Principles of Operative Positioning, Pediatric Stroke and Moya-Moya, Anomalies of Craniovertebral Junction, and Degenerative Spine Disease. Tap into truly global perspectives with an international team of contributors led by Drs. Richard G. Ellenbogen and Saleem I. Abdulrauf. Find information quickly and easily thanks to a full-color layout and numerous detailed illustrations. Make sure you're prepared for the ARRT CT exam for computed tomography exam. The thoroughly updated Mosby's Exam Review for Computed Tomography, 3rd Edition serves as both a study guide and an in-depth review. Written in outline format this easy-to-follow text covers the four content areas on the exam: patient care, safety, imaging procedures, and CT image production. Mock exams in the book and on the Evolve website prepare students for the ARRT exam, with three 160-question mock exams in the book and 700 questions on Evolve that may be randomly accessed for an unlimited number of exam variations. Online study aids allow students to bookmark questions for later study, see rationales for correct and incorrect answers, get test tips for different questions, and record and date-stamp your test scores Review questions with answers help students prepare for the ARRT exam and identify what you need to study. Rationales for correct and incorrect answers provide students with the information they need to make the most out of the Q&A sections. NEW! Technological focus on reducing patient radiation exposure includes the latest dose-related guidelines. NEW! Updated content reflects the latest ARRT CT exam specifications. NEW! 50 new CT images demonstrate need-to-know pathologies in detail. NEW! Thoroughly revised and updated information detail the major technological advances in the field of Computed Tomography. Problem Solving in Neuroradiology, by Meng Law, MD, Peter M. Som, MD and Thomas P. Naidich, MD, is your survival guide to solving diagnostic challenges that are particularly problematic in neuroimaging. With a concise, practical, and instructional approach, it helps you apply basic principles of problem solving to imaging of the head and interventional neck, brain, and spine. Inside, you'll find expert guidance on how to accurately read what you see, and how to perform critical techniques including biopsy, percutaneous drainage, and tumor ablation. User-friendly features, such as tables and boxes, tips, pitfalls, and rules of thumb, place today's best practices at your fingertips, including protocols for optimizing the most state-of-the-art imaging modalities. A full-color design, including more than 700 high-quality images, highlights critical elements to enhance your understanding. Apply expert tricks of the trade and protocols for optimizing the most state-of-the-art imaging modalities and their clinical applications used for the brain and spine—with general indications for use and special situations. Make the most efficient use of modern imaging modalities including multidetector CT, PET, advanced MR imaging/MR spectroscopy (MRS), diffusion-weighted imaging (DWI), diffusion tensor imaging (DTI), and perfusion weighted imaging (PWI). Successfully perform difficult interventional techniques such as biopsies of the spine and interventional angiography—key techniques for more accurately diagnosing cerebral vascular disease, aneurysm, and blood vessel malformations—as well as percutaneous drainage and tumor ablation. Know what to expect. A dedicated section is organized by the clinical scenarios most likely to be encountered in daily practice, such as neurodegenerative disease, vascular disease, and cancer. Avoid common problems that can lead to an incorrect diagnosis. Tables and boxes with tips, pitfalls, and other teaching points show you what to look for, while problem-solving advice helps you accurately identify what you see—especially those images that could suggest several possible diagnoses. See conditions as they appear in practice thanks to an abundance of case examples and specially designed full-color, high-quality images which complement the text and highlight important elements. Quickly find the information you need thanks to a well-organized, user-friendly format with templated headings, detailed illustrations, and at-a-glance tables. 2014 BMA Medical Book Awards Highly Commended in Cardiology category! Apply the latest percutaneous techniques with the practical, highly illustrated Interventional Procedures for Structural Heart Disease. This brand-new medical reference book presents full-color images, numerous tables, and invaluable clinical pearls to help you utilize today's hottest techniques and technologies for each disease, so you can offer your patients the most desirable outcomes possible. Master today's hottest percutaneous procedures for structural heart disease as perfected by experts around the world, including transcatheter aortic valve replacement (TAVR), percutaneous paravalvular leak closure, transcatheter mitral valve interventions, a wide variety of adult congenital cardiovascular defect interventions, and more. Grasp the specific knowledge you will need for success in a variety of clinical scenarios, as well as the patient selection criteria for each invasive procedure. Make informed, evidence-based decisions with the latest clinical trial results and evidence integrated into each chapter. Visualize the newest techniques and technologies more clearly through a full-color design featuring illustrations, tables, clinical pearls, complications, and current evidence boxes. Seamlessly search the full text online at Expert Consult. Mr & Ct Perfusion ImagingClinical Applications and Theoretical Principles LWW The first book-length reference to thoroughly describe diagnostic and therapeutic advances in the development of vascular radiology over the last decade The last ten years has seen vascular imaging of the central nervous system (CNS) evolve from fairly crude, invasive procedures to more advanced imaging methods that are safer, faster, and more precise—with computed tomographic (CT) and magnetic resonance (MR) imaging methods playing a special role in these advances. Vascular Imaging of the Central Nervous System is the first full-length reference text that shows radiologists—especially neuroradiologists—how to optimize the use of the many techniques available in order to increase the sensitivity and specificity of vascular imaging, thereby improving the diagnosis and treatment of individual patients. Each chapter is formatted carefully and divided into two essential parts: The first part describes the physical principles underlying each imaging technique, along potential associated artifacts and pitfalls; the second part addresses clinical applications and novel applications of each method. With a strong focus on the clinical application of each modality or technique in CNS radiology, this book provides in-depth chapter coverage of: Ultrasound Vascular Imaging (UVI) • Computed Tomography Angiography (CTA) • Magnetic Resonance Vascular imaging (MRV) • Digital subtraction angiography (DSA) • Brain perfusion techniques: CT and MRI • Plaque imaging • Intravascular imaging • Pediatric vascular imaging Along with numerous illustrations and case studies, Vascular Imaging of the Central Nervous System: Physical Principles, Clinical Applications, and Emerging Techniques is an important book for those faced with choosing from the wide range of choices available for
clinical practice.

Ideal for both trainees and experienced practitioners, Textbook of Gastrointestinal Radiology, 5th Edition, provides detailed, concise, well-illustrated information on all aspects of GI imaging—now in a single volume for convenient point-of-care reference. Drs. Richard M. Gore and Marc S. Levine lead a team of world-renowned experts to provide unparalleled coverage of all major gastrointestinal disorders as well as the complete scope of abdominal imaging modalities. Every chapter has been thoroughly updated, and new authors provide fresh perspectives on complex imaging topics. Offers streamlined, actionable content in a new single-volume format for quicker access at the point of care. Highlights the complete scope of imaging modalities including the latest in MDCT, MRI, diffusion weighted and perfusion imaging, ultrasound, PET/CT, PET/MR, plain radiographs, MRCP, angiography, barium studies, and CT and MR texture analysis of abdominal and pelvic malignancies. Features more than 1,100 state-of-the-art images, with many in full color. Discusses the imaging features of abdominal and pelvic malignancies that are key in an era of personalized medicine, as well as the relationship of abdominal and pelvic malignancies to cancer genomics and oncologic mutations that guide novel molecular, targeted and immunotherapies. Provides a diagnostic approach to incidentally discovered hepatic, pancreatic, and splenic lesions now commonly found on cross-sectional imaging. Enhanced eBook version included with purchase. Your enhanced eBook allows you to access all of the text, figures, and references from the book on a variety of devices.

An image-rich neuroradiology reference and board prep from renowned experts Neuroradiology: The Essentials with MR and CT, Second Edition, written by world-renowned neuroradiologist and MRI pioneer Val Runge, builds on the acclaimed prior edition. The splendidly illustrated compendium features in-depth discussion of important imaging findings, focused primarily on common disease processes. An impressive cadre of international experts contribute to the text, which is written from a clinical radiology perspective and draws from firsthand experiences. MRI physics pearls and tips throughout the book will help radiologists avoid common pitfalls. Designed as a practical educational resource for clinical neuroradiology, the text is divided into three sections: the brain, head and neck, and spine. The brain and spine chapters are divided into subsections covering normal anatomy and major disease categories such as congenital, traumatic, degenerative, vascular, infectious, and neoplastic. Head and neck chapters are organized by major anatomic region. Clinical cases encompass the use of advanced imaging techniques such as perfusion, high-resolution imaging, and spectroscopy. Key Features About 1,300 high-quality MR and CT images illustrate relevant findings and cases, including those often not well-described in more traditional academic textbooks New figures, updates on ultra-high-field 7T MRI, and additional in-depth text on cerebrovascular disease - especially brain aneurysms and AVMs Covers a wide array of diseases - from stroke and multiple sclerosis to cases one might see once a year, such as glumatic acediaemia type 1 and CADASIL This excellent clinical resource provides a robust study prep for the boards and is a must-read for radiology residents prior to neuroradiology rotation. A quick reference for diagnosing challenging cases encountered in daily practice, it will also benefit neuroradiology fellows and general radiologists. This book includes complimentary access to a digital copy on https://medone.thieme.com. Neuroradiology: The Essentials with MR and CT is the top-selling book in the Requisites in Radiology series by Dr. David Yousem et al., efficiently presents everything you need to know about diagnostic imaging of the most commonly encountered neurological conditions. The authors address the conceptual, technical, and interpretive core knowledge needed for imaging the brain, spine, head, and neck, and discuss all the high-tech imaging modalities used, including diffusion weighted imaging, CT angiography, and MR spectroscopy. Compact yet authoritative, this work is a great reference book for board preparation and practice. Focus on the essentials needed to pass the boards and the Certificate of Added Qualification exam. Easily review and visualize important facts with more than 1,000 high-quality pictures, charts, lists, boxes, tables, differential diagnoses and suggested readings. Get all you need for daily reference with a concise, yet comprehensive format. Interpret the findings generated from each high-tech imaging modality used to study the brain, spine, head, and neck, including diffusion weighted imaging, perfusion weighted imaging, CT angiography, MR angiography, and MR spectroscopy. Carry and consult this resource easily with its new, more compact book size.

Cerebral Revascularization: Techniques in Extracranial-to-Intracranial Bypass Surgery, by Saleem I. Abdulrauf, MD, FACS, offers unmatched expert guidance. Through a series of dynamic, step-by-step instructional videos of the most common and uncommon procedures, you will deepen your understanding of these techniques and be able to confidently perform them. Edited and written by international leaders in neurosurgery, this definitive reference - with a foreword written by M. Gazi Yasargil, MD creator of the procedure - is the first and only text entirely dedicated to this surgery and provides you with exclusive, authoritative information. Access the full text, video library, and reference links to PubMed at www.expertconsult.com. Sharpen your skills in Extracranial-to-Intracranial (EC-IC) Bypass Surgery with help from the first and only text entirely dedicated to this quickly evolving procedure. Get exclusive, first-hand expert knowledge from a an internationally renowned team of editors and contributors, all leaders in cerebrovascular care. See key EC-IC bypass procedures performed in detailed, step-by-step instructional video clips. Access the full text online including the complete video library, reference lists, and additional online-only information at www.expertconsult.com. Designed to be of benefit to both cardiologists and radiologists, CT and MR in Cardiology covers all aspects of this fast-growing subspecialty, providing a current, comprehensive resource for physicians at the point of care. Cardiologists will find authoritative guidance on the performance and interpretation of CT angiography and MR to complement echocardiography and angiography, and radiologists will find practical, highly illustrated information on specific cardiac CT and MR diagnostic procedures. Offers detailed, cross-sectional CT and MR normal anatomy of the coronary arteries and the heart and arterial and venous vascular systems Features more than 200 generously illustrated imaging diagnoses focused on practical review of their pertinent MR and CT imaging findings Covers key topics such as imaging of coronary heart disease and its complications, diagnosis and evaluation of ischemic and nonischemic cardiomyopathies, imaging and evaluation of pericardial disorders, cardiac oncology, diagnosis of patients with acute chest pain, and the use of imaging in congenital heart disease. Covering the entire spectrum of this fast-changing field, Diagnostic Imaging: Brain, fourth edition, is an invaluable resource for neuroradiologists, general radiologists, and trainees—anyone who requires an easily accessible, highly visual reference on today's neuroimaging of both common and rare conditions. World-renowned authorities provide updated information on more than 300 diagnoses, all lavishly illustrated, delineated, and referenced, making this edition a useful learning tool as well as a handy reference for daily practice. Provides authoritative, comprehensive guidance on both pathology-based and anatomy-based diagnoses to help you diagnose the full range of brain and CNS conditions Features thousands of extensively annotated images, including a large number of full-color illustrations—greatly expanded since the previous edition Details 31 new diagnoses, covering key topics such as critical illness-associated microbleeds, autoimmune encephalitis, multinodular and vaculating tumor of cerebrum, calciﬁng pseudoneuroplesm of neuraxis (CAPN), tumor encephalopathy, gadolinium deposition and associated controversies, ataxia-telangiectasia, and Zika virus infection Reflects updates from the most recent WHO Classification of Tumors of the CNS, which presents major restructuring of brain tumor categories and incorporates new entities that are defined by both histology and molecular.
features Includes updates to the 2016 WHO Classification of Tumors of the CNS by cIMPACT-NOW based on recent and ongoing advances in molecular pathogenesis Covers recent neuroimaging advances, such as 7T MRI scanners and dual-energy/dual-source CT imaging Uses bulleted, succinct text and highly templated chapters for quick comprehension of essential information at the point of care

This book brings the recent dramatic changes in the field of cardiovascular imaging into the clinical setting to enable the clinician to best use the technology at hand. Novel Techniques for Imaging the Heart opens with threechapters reviewing the general considerations and fundamentals of imaging, followed by a series of chapters that address clinical applications of CT and CMR, including critical review of imaging approaches for diagnosis and prognosis of CAD evaluating the patient with new onset heart failure evaluating the patient before non-cardiac surgery evaluating the patient before interventional electrophysiology novel assessment of vascular flow and valvular disease relative merits of CTA and MRA for coronary artery imaging The final section deals with advanced applications of CT and MR imaging, considers technical advances and future prospects of highfield MRI, and concludes with a chapter on image-guided cardiac interventions. The book includes a companion CD-ROM with a searchable database of figures from the book and 40 video clips fully referenced in the text.

MR perfusion imaging is an area of major research interest and rapid clinical growth. Clinical Perfusion MRI: Techniques and Applications provides a concise and comprehensive review of the principles and applications of the field, covering dynamic susceptibility contrast, dynamic contrast enhancement, and arterial spin labeling imaging techniques. Principles of blood-volume and oxygenation imaging are included. The clinical applications of perfusion imaging in neurological disease and neuroscience are discussed—major topics including its use in imaging cerebrovascular disease and brain tumors and other neurological and neurodegenerative disorders. Non-neurologic applications are also covered with chapters on cardiac disease, breast cancer and other organ systems. Use of MR perfusion imaging in pediatrics is also discussed. Throughout the book case reports are included illustrating representative clinical examples. This book will be of interest to any clinician who uses MR perfusion imaging in their clinical practice, as well as researchers in the field of MRI.

This book describes the role of advanced neuroimaging techniques in characterizing the changes in tissue structure in patients with brain metastases. On a large number of newly recognized CT, MRI, and PET characteristics of brain metastases from different primary tumors are highlighted, thereby elucidating the potential differential diagnostic role of CT perfusion imaging, MR spectroscopy, MR diffusion-weighted imaging, MR susceptibility-weighted imaging, and PET with different radiopharmaceuticals. For example, the different manifestations of metastases of melanoma, renal cell carcinoma, and ovarian cancer on MRI and CT perfusion imaging are described, and the role of MR susceptibility-weighted imaging in the differential diagnosis of glioblastoma multiforme and metastatic tumors is clarified. Metastases of colon cancer have shown a special manifestation on T2 weighted images. The book also presents novel findings regarding pathogenesis and tumor biology and describes qualitative and quantitative changes in tumor tissue and alterations in brain white matter due to surrounding tumor growth. Neuroradiologists and others, including neurosurgeons, neurologists, and nuclear medicine physicians, will find that this book offers a fascinating insight into the ways in which newly available data on structural, hemodynamic, and metabolic changes are enriching the neuroimaging of brain metastases.

A practical, dynamic resource for practicing neurologists, clinicians and trainees, Bradley and Daroff's Neurology in Clinical Practice, Eighth Edition, offers a straightforward style, evidence-based information, and robust interactive content supplemented by treatment algorithms and images to keep you up to date with all that's current in this fast-changing field. This two-volume set is ideal for daily reference, featuring a unique organization by presenting symptom/sign and by specific disease entities—allowing you to access content in ways that mirror how you practice. More than 150 expert contributors, led by Drs. Joseph Jankovic, John C. Mazzotta, Scott L. Pomeroy, and Nancy J. Newman, provide up-to-date guidance that equips you to effectively diagnose and manage the full range of neurological disorders. Covers all aspects of today's neurology in an easy-to-read, clinically relevant manner. Allows for easy searches through an intuitive organization by both symptom and grouping of diseases. Features new and expanded content on movement disorders, genetic and immunologic disorders, tropical neurology, neuro-ophthalmology and neuro-otology, palliative care, pediatric neurology, and new and emerging therapies. Offers even more detailed videos that depict how neurological disorders manifest, including EEG and seizures, deep brain stimulation for PD and tremor, sleep disorders, movement disorders, ocular oscillations, EMG evaluation, cranial neuropathies, and disorders of upper and lower motor neurons, as well as other neurologic signs.

For more than 70 years, Caffey's Pediatric Diagnostic Imaging has been the comprehensive, go-to reference that radiologists have relied upon for dependable coverage of all aspects of pediatric imaging. In the 13th Edition, Dr. Brian Coley leads a team of experts to bring you up to date with today's practice standards in radiation effects and safety and head and neck, neurologic, thoracic, cardiac, gastrointestinal, genitourinary, and musculoskeletal pediatric imaging. This bestselling reference is a must-have resource for pediatric radiologists, general radiologists, pediatric subspecialists, pediatricians, hospitals, and more—anywhere clinicians need to ensure safe, effective, and up-to-date imaging of children. Includes separate chapters on radiation effects and safety, pre-natal imaging, neoplasms, trauma, techniques, embryology, genetic anomalies, and common acquired conditions. Takes an updated, contemporary approach with more focused and consistently formatted content throughout. Clinical content includes Overview; Etiologies, Pathophysiology, and Clinical Presentation; Imaging, including pros and cons, costs, evidence-based data, findings, and differential diagnostic considerations; and Treatment, including follow-up. Features 8,500 high-quality images – 1,000 new or updated. Provides expanded coverage of advanced imaging and diagnostics, including genetics and fetal imaging, MRI...
and advanced MR techniques, low-dose CT, ultrasound, nuclear medicine, and molecular imaging, as well as the latest quality standards, evidence-based data, and practice guidelines. Features new Key Points boxes and more tables and flowcharts that make reference faster and easier. Focuses on safety, particularly in radiation dosing, as part of the Image Gently® campaign to improve pediatric imaging while limiting radiation exposure and unneeded studies. Written by two renowned leaders in neuroradiology and neurology, this unique reference is a high-level imaging resource ideal for today’s clinical neuroradiologist or neuroscientist. Using straightforward, jargon-free prose, this book provides an overview of neurologic disorders coupled with typical imaging findings — all designed for use at the point of care. You will be expertly guided throughout, from radiologic appearance and the significance of the imaging findings to the next appropriate steps in effective patient care. Discusses radiologic appearances of common neurologic diseases, their significance, and the next steps in patient care in a clear manner perfectly suited for neurologists or neuroscientists. Provides high-level information from both a neuroradiologist and a neurologist, making it a balanced and appropriate clinical reference for day-to-day neurology practice. Covers imaging in stroke, infectious disease, brain malformations, tumors, and more. Keeps you up-to-date with unusual emerging neurologic disorders, such as Susac syndrome, West Nile virus, and IRIS. Now in its 4th Edition, this bestselling volume in the popular Requisites series, by Drs. Rohini Nadgir and David M. Yousem, thoroughly covers the extensive field of neuroradiology in an efficient and practical manner. Ideal for both clinical practice and ABR exam study, it presents everything you need to know about diagnostic imaging of the most commonly encountered neurologic conditions. The authors address the conceptual, technical, and interpretive core knowledge needed for imaging the brain, spine, and head and neck, and discuss all the latest imaging modalities used, including diffusion weighted imaging, perfusion imaging, MR and CT angiography, and MR spectroscopy. Features 1,200 high-quality images throughout. Makes it easy to locate any topic of interest thanks to a logical organization by diseases and locations. Summarizes differential diagnoses in quick reference tables to reinforce important characteristics of diseases and aid in interpretation. Focuses on essentials to pass the boards and the Certificate of Added Qualification exam. Contains 50% new, updated, or improved illustrations. Covers new techniques such as diffusion tensor imaging tractography to identify white matter tracts. Offers new understandings of demyelination diseases such as neuromyelitis optica (NMO), reversible cerebral vasospasm syndrome (RCVS), immune reconstitution inflammatory syndrome (IRIS), and IgG4 related inflammatory disease. Provides updated World Health Organization classification of brain tumors and the recent American Joint Commission on Cancer TNM staging of head and neck cancers. Part of the successful Requisites series, this best-selling title presents everything you need to know about diagnostic imaging of the most commonly encountered neurologic and head and neck conditions......one book that covers brain, spine, head and neck with an engaging approach. --

“A practical example of the increasingly important role of perfusion in clinical practice is the identification of infarct core and ischemic penumbra in acute stroke patients. In early 2015, several clinical trials that focused on endovascular treatment of large vessel occlusion in stroke patients demonstrated remarkable outcomes. The most successful trials used perfusion metrics for patient selection, specifically to identify patients with a small core, sufficient salvageable tissue, and ample collateral flow”--Provided by publisher.

Practical and clinically focused, Brain and Spine Imaging - a title in the Teaching Files Series - provides you with over 300 interesting and well-presented cases to help you better diagnose any disease of the brain and spine. Expert in the field, Dr. Girish Fatterpekar, MD uses a logical organization throughout, making referencing difficult diagnoses easier than ever before. Detailed discussions of today's modalities and technologies keep you up to date, and challenging diagnostic questions probe your knowledge of the material. This unique, case-based resource offers you an ideal way to sharpen your diagnostic skills and study for board exams. Get expert, practical guidance from over 300 cases, and brief but thorough descriptions of findings that help you make review easier than ever before. Stay current with the most up-to-date radiologic modalities and technologies. Provides brief but thorough descriptions of findings putting the information you need at your fingertips. Expand your knowledge with references to the most important sources on specific topics of interest. Find key information quickly and easily thanks to consistently formatted chapters that include Demographics/Clinical History; Findings; Discussion; Characteristic/Clinical Features; Radiologic Findings; Primary Differential Diagnosis; and Suggested Readings. See how to resolve challenging diagnostic questions by reviewing discussions of similar cases. This issue of Neurologic Clinics, guest edited by Drs. Joseph D. Burns and Anna M. Cervantes-Arslanian, will focus on Neurologic Emergencies. This issue is one of four selected each year by series consulting editor, Dr. Randolph W. Evans. Topics include—but are not limited to—Coma and depressed level of alertness; Post-arrest Neuroprotection; Headache Emergencies; Acute dizziness, vertigo, and unsteadiness; Neuro-ophthalmologic emergencies; Intracranial hemorrhage; Acute ischemic stroke; Seizures and status epilepticus; Movement disorders emergencies; Neuromuscular respiratory failure; Neuroinfectious disease emergencies; Severe traumatic brain injury; Acute myelopathy; Neuro-oncologic emergencies; Autoimmune neurologic emergencies; Brain herniation and intracranial hypertension; Aneurysmal subarachnoid hemorrhage; Anesthesiology considerations in neurological emergencies; Neurological emergencies during the COVID pandemic; Neurocritical care and the COVID pandemic; and Neurologic Emergencies during Pregnancy. Get the essential tools you need to make an accurate diagnosis in the emergency department! Part of the popular Requisites series, Emergency Radiology: The Requisites delivers the conceptual, factual, and interpretive information you need for effective clinical practice in emergency radiology, as well certification and recertification review. Master core knowledge the easy and affordable way with clear, concise text enhanced by at-a-glance illustrations, boxes, and tables—
all revised and enhanced with digital content to bring you up to date with today's state of the art knowledge. Presents emergent findings and differential diagnosis tables so that important content is identified clearly within the text. Divides the contents of the book into two sections — trauma and non-trauma — to mirror the way you practice. Organizes the material in structured, consistent chapter layouts for efficient and effective review. Provides clinical material on radiology procedures that define your role in managing a patient with an emergent condition. Prepare for written exams or clinical practice with critical information on CTA in the ED on coronary, aorta, brain, and visceral arteries, plus new protocols for trauma and non-traumatic injuries. Stay up to date on what's new in the field with thoroughly revised content and new, high-quality images obtained with today's best technology. Get optimal results from today's most often-used approaches, including the increase in routine use of "panscan" for trauma patients. Gain a practical, visual understanding of emergency radiology thanks to more than 900 multi-modality images. Study and review in the most efficient way, with structured, consistent chapter layouts for time-saving and effective exam preparation. Ideal for both trainees and experienced practitioners, textbook of Gastrointestinal Radiology, 5th Edition, provides detailed, concise, well-illustrated information on all aspects of GI imaging — now in a single volume for convenient point-of-care reference. Drs. Richard M. Gore and Marc S. Levine lead a team of world-renowned experts to provide unparalleled coverage of all major gastrointestinal disorders as well as the complete scope of abdominal imaging modalities. Every chapter has been thoroughly updated, and new authors provide fresh perspectives on complex imaging topics. Offers streamlined, actionable content in a new single-volume format for quicker access at the point of care. Highlights the complete scope of imaging modalities including the latest in MDCT, MRI, diffusion weighted and perfusion imaging, ultrasound, PET/CT, PET/MR, plain radiographs, MRCP, angiography, barium studies, and CT and MR texture analysis of abdominal and pelvic malignancies. Features more than 1,100 state-of-the-art images, with many in full color. Discusses the imaging features of abdominal and pelvic malignancies that are key in an era of personalized medicine, as well as the relationship of abdominal and pelvic malignancies to cancer genomics and oncologic mutations that guide novel molecular, targeted and immunotherapies. Provides a diagnostic approach to incidentally discovered hepatic, pancreatic, and splenic lesions now commonly found on cross-sectional imaging. The standard procedure for defining the anatomic extent and severity of coronary artery disease is catheter-based selective coronary angiography. While there are advantages to coronary angiography, it is invasive with some risk of complications and requires a brief period of hospitalization, making it relatively expensive. Cardiac CT, PET and MR is a complete technique-oriented reference, offering real alternatives to the "standard procedure". Non-invasive techniques of coronary artery lumen imaging, such as multislice computed tomography (MSCT) and magnetic resonance imaging (CMR) as well as complementary and at times more useful physiologic and/or metabolic imaging techniques provided by positron emission tomography (PET) are clearly detailed throughout this book. Cardiac CT, PET and MR therefore provides an excellent reference for all cardiologists, radiologists, and nuclear medicine physicians involved in the diagnosis and risk assessment of patients with known or suspected coronary artery disease. With the advent of these non-invasive techniques, the future of invasive coronary angiography will be reserved primarily for therapeutic rather than diagnostic purposes. Accordingly, this book provides a unique and essential contribution to the developing field for both physicians and students. Imaging of the Brain provides the advanced expertise you need to overcome the toughest diagnostic challenges in neuroradiology. Combining the rich visual guidance of an atlas with the comprehensive, in-depth coverage of a definitive reference, this significant new work in the Expert Radiology series covers every aspect of brain imaging, equipping you to make optimal use of the latest diagnostic modalities. This issue of Neurologic Clinics, guest edited by Laszlo L. Mechtler, will cover key topics in Neuroimaging. This issue is one of four selected each year by our series consulting editor, Dr. Randolph W. Evans. Topics discussed in this issue will include: Future of Neuroimaging, Neuroimaging for the Neurologist, Imaging in Pregnancy, Multiple Sclerosis Mimic, Diseases that cause Dementia, Acute Stroke, DBS, NPH and Hydrocephalus, Venous Disease of the Brain, Cranial Nerve Imaging, and Neuro-ultrasonography, among others. Approach any critical care challenge using a practical, consistent strategy based on best practices with Evidence-Based Practice of Critical Care, 3rd Edition. Unique, question-based chapters cover the wide variety of clinical options in critical care, examine the relevant research, and provide recommendations based on a thorough analysis of available evidence. Drs. Clifford S. Deutschman and Patrick J. Nelligan, along with nearly 200 critical-care experts, provide a comprehensive framework for translating evidence into practice, helping both residents and practitioners obtain the best possible outcomes for critically ill patients. Covers a full range of critical care challenges, from routine care to complicated and special situations. Helps you think through each question in a logical, efficient manner, using a practical, consistent approach to available management options and guidelines. Features revised and updated information based on current research, and includes all-new cases on key topics and controversies such as the use/overuse of antibiotics, drug resistance in the ICU, non-invasive mechanical ventilation, frequency of transfusions, and duration of renal replacement therapies. Provides numerous quick-reference tables that summarize the available literature and recommended clinical approaches. The newest title in the popular Case Review Series, Duke Review of MRI Principles, by Wells Mangrum, MD; Kimball Christianson, MD; Scott Duncan, MD; Phil Hoang, MD; Allen W. Song, PhD; and Elmar Merkle, MD, uses a case-based approach to provide you with a concise overview of the physics behind magnetic resonance imaging (MRI). Written by radiology residents, practicing radiologists, and radiology physicists, this multidisciplinary text introduces you to the basic physics of MRI and how they apply to successful and accurate imaging, interpretation, and diagnosis. Clinically relevant cases with associated questions and images reinforce your understanding of essential principles needed to confidently
interpret a wide range of MRI images for all organ systems. Review the basic physics of MRI in a concise, high-yield manner and learn how to apply them for successful and accurate imaging, interpretation, and diagnosis. Master 17 essential MRI principles you need to know through clinically relevant cases accompanied by associated questions and 600 images that reinforce your understanding and help you confidently interpret a wide range of MRI images. Effectively diagnose disease in all organ systems. Authors are fellowship-trained in each body system – neuro, breast, body, vascular and MSK, providing you with practical guidance in every area Focus on the information that's most relevant to your needs from a multidisciplinary author team comprised of radiology residents, practicing radiologists and radiology physicists. See the underlying simplicity behind MRI physics. Despite employing the same MRI principles, similar imaging systems use slightly different names. A simplified explanation of these principles and how they are applied to each body system deepens your understanding and helps avoid any confusion.

Effectively apply the latest techniques and approaches with complete updates throughout including 4 new sections (Abdominal Imaging, The Spine, Oncological Imaging, and Interventional Radiology) and 28 brand new chapters. Gain the fresh perspective of two new editors—Jonathan Gillard and Cornelia Schaefer-Prokop -- eight new section editors -- Michael Maher, Andrew Grainger, Philip O'Connor, Rolf Jager, Vicky Goh, Catherine Owens, Anna Maria Belli, Michael Lee -- and 135 new contributors. Stay current with the latest developments in imaging techniques such as CT, MR, ultrasound, and coverage of hot topics such as: Image guided biopsy and ablation techniques and Functional and molecular imaging. Solve even your toughest diagnostic challenges with guidance from nearly 4,000 outstanding illustrations. Quickly grasp the fundamentals you need to know through a more concise, streamlined format.

Textbook of Gastrointestinal Radiology remains your indispensable source for definitive, state-of-the-art guidance on all the latest and emerging GI and abdominal imaging technologies. Drs. Richard M. Gore and Marc S. Levine lead a team of world-renowned experts to provide unparalleled comprehensive coverage of all major abdominal disorders as well as the complete scope of abdominal imaging modalities, including the latest in MDCT, MRI, diffusion weighted and perfusion imaging, ultrasound, PET/CT, PET/MR, plain radiographs, MRCP, angiography, and barium studies. This edition is the perfect "go-to" reference for today's radiologist. Consult this title on your favorite e-reader, conduct rapid searches, and adjust font sizes for optimal readability. Characterize abdominal masses and adenopathy with the aid of diffusion-weighted MR imaging. See how gastrointestinal conditions present with more than 2,500 multi-modality, high-quality digital images that mirror the findings you're likely to encounter in practice. Make optimal use of the latest abdominal and gastrointestinal imaging techniques with new chapters on diffusion weighted MRI, perfusion MDCT and MRI, CT colonography, CT enterography and MR enterography—sophisticated cross-sectional imaging techniques that have dramatically improved the utility of CT and MR for detecting a host of pathologic conditions in the gastrointestinal tract. Expert guidance is right at your fingertips. Now optimized for use on mobile devices, this edition is perfect as an on-the-go resource for all abdominal imaging needs. Effectively apply MR and CT perfusion, diffusion weighted imaging, PET/CT and PET/MR in evaluating tumor response to therapy.

Now more streamlined and focused than ever before, the 6th edition of CT and MRI of the Whole Body is a definitive reference that provides you with an enhanced understanding of advances in CT and MR imaging, delivered by a new team of international associate editors. Perfect for radiologists who need a comprehensive reference while working on difficult cases, it presents a complete yet concise overview of imaging applications, findings, and interpretation in every anatomic area. The new edition of this classic reference — released in its 40th year in print — is a must-have resource, now brought fully up to date for today's radiology practice. Includes both MR and CT imaging applications, allowing you to view correlated images for all areas of the body. Coverage of interventional procedures helps you apply image-guided techniques. Includes clinical manifestations of each disease with cancer staging integrated throughout. Over 5,200 high quality CT, MR, and hybrid technology images in one definitive reference. For the radiologist who needs information on the latest cutting-edge techniques in rapidly changing imaging technologies, such as CT, MRI, and PET/CT, and for the resident who needs a comprehensive resource that gives a broad overview of CT and MRI capabilities. Brand-new team of new international associate editors provides a unique global perspective on the use of CT and MRI across the world. Completely revised in a new, more succinct presentation without redundancies for faster access to critical content. Vastly expanded section on new MRI and CT technology keeps you current with continuously evolving innovations.