

Atlas Of Neurosurgical Techniques Brain

Photo Atlas of Skull Base DissectionAtlas of Neurosurgery7.0 Tesla MRI Brain White Matter AtlasComprehensive Overview of Modern Surgical Approaches to Intrinsic Brain TumorsMagnetic Resonance Scanning and EpilepsyAdvanced Techniques in Image-Guided Brain and Spine SurgeryMagnetic Resonance Imaging of the Brain and SpineAtlas of Neurosurgical TechniquesOperative Cranial Neurosurgical AnatomyNeurosurgical Operative Atlas: Vascular NeurosurgeryAtlas of Morphology and Functional Anatomy of the BrainAtlas of Neurosurgical TechniquesVideo Atlas of Neurosurgery E-BookAtlas of Neurosurgical TechniquesAtlas of Topographical Anatomy of the Brain and Surrounding Structures for Neurosurgeons, Neuroradiologists, and NeuropathologistsAtlas of Postsurgical NeuroradiologyAtlas of Pediatric NeurosurgeryAtlas of Normal Imaging Variations of the Brain, Skull, and Craniocervical VasculatureColor Atlas of Cerebral RevascularizationColor Atlas of NeurologyOperative Techniques in Epilepsy SurgeryNeurosurgical Operative Atlas: Functional NeurosurgeryOperative Neurosurgical AnatomyAtlas of the Human BrainRhoton's Cranial Anatomy and Surgical ApproachesSeven AneurysmsVideo Atlas of Neuroendovascular ProceduresColor Atlas of Brainstem SurgeryNeurology Image-Based Clinical ReviewSchmidek and Sweet: Operative Neurosurgical Techniques E-BookAtlas of Infections in Neurosurgery and Spinal SurgeryVideo Atlas of Intracranial Aneurysm SurgerySchmidek and Sweet: Operative Neurosurgical Techniques 2-Volume Set, Indications, Methods and Results (Expert Consult - Online and Print), 6 Pediatric NeurosurgerySurgery of the BrainstemCranial Neuroimaging and Clinical NeuroanatomyAtlas of Brain FunctionAtlas of Emergency NeurosurgeryAtlas of the Facial Nerve and Related StructuresRhoton's Atlas of Head, Neck, and Brain

Photo Atlas of Skull Base Dissection

A highly-anticipated addition to Thieme's classic color atlas collection, Color Atlas of Cerebral Revascularization focuses on cerebral bypass techniques pioneered by leading surgeons at the world-renowned Barrow Neurological Institute in Phoenix, Arizona. Each procedure is presented with intraoperative photographs and exquisite anatomical illustrations to help surgeons master the complex microsurgical anatomy and subtle surgical technique used in managing the potential onset and condition of stroke and other causes of cerebral ischemia. Key Features: Side-by-side photo and illustration format aids in interpretation of intricate surgical procedures More than 1300 figures elucidate clinical cases from the Barrow Neurological Institute and other centers of neurosurgical excellence A DVD, featuring more than 30 related surgical cases and narrated by the authors, is included with the book Cases illustrate how to successfully achieve revascularization for conditions such as moyamoya disease, recurrent aneurysms after endovascular treatment, giant aneurysms, vertebral artery insufficiency, and severe stenosis The vascular anatomy related to each bypass technique is illustrated and described in the sections showcasing the clinical cases treated by the technique This comprehensive atlas is an ideal reference for practicing neurosurgeons, neurosurgical residents, and interventional neuroradiologists, and it will be a

relevant volume in their medical library for years to come.

Atlas of Neurosurgery

It was only in 1980 that the first recognisable magnetic resonance images of the human brain were published, by Moore and Holland from Nottingham University in England. There then followed a number of clinical trials of brain imaging, the most notable from the Hammersmith Hospital in London using a system designed by EMI, the original manufacturers of the first CT machines. A true revolution in medicine has ensued; in only a few years there are thousands of scanning units, and magnetic resonance imaging (MRI) has assumed a central importance in medical investigation. It is an extraordinary fact that within a few years of development, the esoteric physics of nuclear spin, angular momentum, and magnetic vector precession were harnessed to provide exquisite images of living anatomy; modern science has no greater tribute. That indisputable king of neurology and the oldest of recorded conditions, epilepsy, has not been untouched by the new technology; indeed, it is our view that the introduction of MRI of electroencephalography (EEG) in the late has been as important to epilepsy as was that 1930s. Now, for the first time, the structural and aetiological basis of the condition is susceptible to thorough investigation, and MRI can provide structural detail to parallel the functional detail of EEG. MRI has the same potential as had EEG over 50 years ago, to provide a new level of understanding of the basic mechanisms, the clinical features and the treatment of epilepsy.

7.0 Tesla MRI Brain White Matter Atlas

A state-of-the-art neurovascular surgery atlas from internationally renowned neurosurgeon R. Loch Macdonald *Neurosurgical Operative Atlas: Vascular Neurosurgery*, Third Edition, by R. Loch Macdonald and expert contributors, reflects the latest advances in endoscopic, endovascular, microsurgical, and bypass techniques used in the treatment of cerebrovascular disease. The entire atlas has been streamlined and updated with new content, including 38 videos that complement the concise step-by-step guidance in the text. The book begins with five chapters on vascular and microsurgical instrumentation and equipment, clipping versus coiling, aneurysm surgery techniques, the pterional approach, and minimally invasive approaches. Disease and procedure-specific chapters are organized by three sections: aneurysms and subarachnoid hemorrhage, vascular malformations, and ischemic and other cerebrovascular disease. Every chapter includes salient tips on patient selection and procedural indications, preoperative information and tests, patient positioning, operative nuances, and postoperative complications. Key Highlights Nearly 300 high-quality color illustrations detail impacted anatomy and procedures The latest techniques for treating a full spectrum of aneurysms, such as ophthalmic segment, supraclinoid internal carotid artery, middle and anterior cerebral artery, basilar and posterior cerebral artery, and others Treatment of vascular abnormalities including arteriovenous malformations, superficial and brainstem

cavernous malformations, arteriovenous fistulae, Moyamoya disease, and more Neurosurgical residents will benefit from the firsthand knowledge shared by international masters, while veteran neurosurgeons will glean invaluable insights on cutting-edge endovascular techniques to enhance clinical practice.

Comprehensive Overview of Modern Surgical Approaches to Intrinsic Brain Tumors

This book presents neurosurgical anatomy by detailing approaches on cadavers in the same position patients would be placed in during a real operative procedure. Anatomy is described in: all commonly used cranial and cranial base approaches anterior, posterior, anterolateral and posterolateral approaches to all segments of the spine all commonly performed procedures on peripheral nerves endoscopic approaches to cranial and spinal neurosurgery Stresses the understanding of the anatomy rather than the performance of the procedure.

Magnetic Resonance Scanning and Epilepsy

A state-of-the-art guide to evolving functional neurosurgery approaches from world-renowned innovators Functional neurosurgery focuses on improving the lives of patients with epilepsy, movement disorders, pain, and psychiatric illnesses. In recent years, approaches ranging from open surgery to minimally invasive techniques have been leveraged to improve daily functioning and quality of life in people struggling with painful, highly disruptive, and/or treatment-resistant symptoms. These approaches focus on reducing or eliminating seizures, alleviating pain, decreasing abnormal movements or lessening debilitating symptoms associated with specific psychiatric disorders. Neurosurgical Operative Atlas: Functional Neurosurgery, Third Edition, by renowned functional neurosurgeons Robert Gross, Nicholas Boulis, and esteemed contributors reflects the latest advances in functional and stereotactic neurosurgical approaches. The entire atlas has been streamlined and updated with new content, including the use of stereotactic surgery to treat obsessive compulsive disorder, Tourette syndrome, and major depression. Key Highlights A full spectrum of epilepsy treatment techniques, including intracranial monitoring with stereo-electroencephalography, selective amygdalohippocampectomy, MRI-guided stereotactic laser ablation, vagus nerve stimulation, and more Deep brain stimulation (DBS) for Parkinson's disease, tremor, dystonia, epilepsy and medically intractable pain syndromes, with in-depth implantation guidance The use of neurosurgical and interventional techniques to treat pain including percutaneous ablation, peripheral nerve stimulation, spinal cord and motor cortex stimulators, and pumps More than 300 high quality color illustrations detail anatomy and surgical procedures This is the ultimate guide on functional neurosurgery for managing a wide range of incapacitating neurological conditions. Neurosurgical residents, fellows, and veteran neurosurgeons specializing in this rapidly evolving subspecialty will find this state-of-the-art book invaluable — reading it cover to cover will ultimately benefit patients. Series description The American Association of Neurological Surgeons and Thieme have collaborated to produce the third edition of the acclaimed

Neurosurgical Operative Atlas series. Edited by leading experts in the field, the series covers the entire spectrum of neurosurgery in five volumes. In addition to Functional Neurosurgery, the series also features: Spine and Peripheral Nerves, edited by Christopher E. Wolfa and Daniel K. Resnick Vascular Neurosurgery, edited by R. Loch Macdonald Neuro-Oncology, edited by Behnam Badie and Mike Y. Chen Pediatric Neurosurgery, edited by James Tait Goodrich and Robert F. Keating

Advanced Techniques in Image-Guided Brain and Spine Surgery

The go-to guide on safely performing state-of-the-art neuroendovascular procedures from top experts! Unlike traditional textbooks that detail natural history, physiology, and morphology, Video Atlas of Neuroendovascular Procedures presents basic and complex neuroendovascular procedures and cases with concise text and videos. Renowned neuroendovascular surgeons Leonardo Rangel-Castilla, Adnan Siddiqui, Elad Levy, and an impressive group of contributors have compiled the quintessential neuroendovascular resource. Organized into eight major subtopic sections, this superb video atlas covers a full spectrum of endovascular approaches to diagnose and treat intra- and extracranial neurovascular disease. The book starts with a section on vascular access and concludes with endovascular complications and management. Forty chapters includes succinct summaries, scientific procedural evidence, the rationale for endovascular intervention, anatomy, required medications, device selection, avoiding complications, and managing potential problems that can arise during procedures. The image-rich clinical cases feature insightful firsthand knowledge and pearls. Key Features More than 1,000 relevant, high quality neuroimaging findings and artist illustrations enhance understanding of impacted anatomy and approaches Specific techniques and key steps are brought to life through more than 140 outstanding videos narrated by highly experienced endovascular neurosurgeons — conveniently accessible via smart phones or tablets using QR technology Essential diagnostic procedures such as cerebral and spinal angiography, cerebral venogram, and balloon test occlusion Complex neuroendovascular procedures including various angioplasty and stenting approaches for extracranial vessel disease, carotid and vertebral arteries, and venous sinus; thrombectomy procedures to treat acute ischemic stroke; and coiling, flow diversion, and embolization techniques for intracranial aneurysms, brain/spinal AVMs and fistulas, and select CNS and extracranial tumors The content-rich reference is a must-have for all resident and veteran neurosurgeons, interventional radiologists, and neurologists. Learn to safely perform a wide array of cutting-edge neuroendovascular procedures — from access to closure — and achieve improved outcomes for your patients.

Magnetic Resonance Imaging of the Brain and Spine

A new edition of the lavishly illustrated guide to brain structure and function This atlas is an outstanding single-volume resource of information on the structure and function of specific areas of the brain. Updated to reflect the latest technology using 3 Tesla MR images, this edition has been enhanced with new functional MRI studies as well as a new section on

diffusion tensor imaging with three-dimensional reconstructions of fiber tracts using color coding to demonstrate neural pathways. Highlights: Glossary of neuroanatomic structures and definitions provides the reader with a foundation in structures, function, and functional relationships High-quality images are divided into five sections, including Sagittal MRI views, Axial MRI views, Coronal MRI views, Fiber-Tracking Diffusion Tensor Imaging, and Three-Dimensional MRI views Icons rapidly orient the reader with the location of each view or the diffusion pathway This book eliminates the need to sift through multiple books for the current information on the structure and function of the brain. It is invaluable for clinicians in radiology, neuroradiology, neurology, neurosurgery, psychiatry, psychology, neuropsychology, and neuroanatomy. The atlas is also ideal for medical students, nursing students, and individuals seeking to gain a firm understanding of human brain anatomy and function.

Atlas of Neurosurgical Techniques

Wherever, whenever, or however you need it, unmatched procedural guidance is at your fingertips with the new edition of Schmidek & Sweet: Operative Neurosurgical Techniques! Completely revised under the auspices of new editor-chief Dr. Alfredo Quiñones-Hinojosa, this comprehensive medical reference examines indications, operative techniques, complications, and results for nearly every neurosurgical procedure. Full-color illustrations, 21 new chapters, internationally-acclaimed contributors, surgical videos, and online access make it a "must have" for today's practitioner. Hone your skills for Master virtually every routine and specialized procedure for brain, spinal, and peripheral nerve problems in adult patients. Review clinical information on image-guided technologies and infections. Easily understand and apply techniques with guidance from more than 1,600 full-color illustrations. Rely on the knowledge and experience of new editor-in-chief Dr. Alfredo Quiñones-Hinojosa and leading international authorities, who offer multiple perspectives on neurosurgical challenges, from tried-and-true methods to the most current techniques. See exactly how to proceed with online surgical videos that guide you through each technique and procedure to ensure the best possible outcomes and results. Apply the latest techniques and knowledge in deep brain stimulation for epilepsy, movement disorders, dystonia, and psychiatric disorders; surgical management of blast injuries; invasive electrophysiology in functional neurosurgery; and interventional management of cerebral aneurysms and arterio-venous malformations. Take it with you anywhere! Access the full text, downloadable image library, video clips, and more at www.expertconsult.com.

Operative Cranial Neurosurgical Anatomy

This atlas presents normal imaging variations of the brain, skull, and craniocervical vasculature. Magnetic resonance (MR) imaging and computed tomography (CT) have advanced dramatically in the past 10 years, particularly in regard to new techniques and 3D imaging. One of the major problems experienced by radiologists and clinicians is the interpretation of

normal variants as compared with the abnormalities that the variants mimic. Through an extensive collection of images, this book offers a spectrum of appearances for each variant with accompanying 3D imaging for confirmation; explores common artifacts on MR and CT that simulate disease; discusses each variant in terms of the relevant anatomy; and presents comparison cases for the purpose of distinguishing normal findings from abnormalities. It includes both common variants as well as newly identified variants that are visualized by recently developed techniques such as diffusion-weighted imaging and multidetector/multislice CT. The book also highlights normal imaging variants in pediatric cases. Atlas of Normal Imaging Variations of the Brain, Skull, and Craniocervical Vasculature is a valuable resource for neuroradiologists, neurologists, neurosurgeons, and radiologists in interpreting the most common and identifiable variants and using the best methods to classify them expediently.

Neurosurgical Operative Atlas: Vascular Neurosurgery

Atlas of Emergency Neurosurgery , part of the Neurosurgical Operative Atlas Series co-published by Thieme and the AANS, is a step-by-step visual guide to performing surgical procedures used in neurotrauma as well as non-traumatic emergency cases. The chapters address such topics as cerebral trauma and stroke, shunt failure, central nervous system infection, pituitary apoplexy, and reconstructive procedures. Special sections on pediatrics as well military-related injuries are also included. Key Features: More than 500 beautiful, full-color illustrations help clarify each procedure Contains the most current information on how to perform emergency neurosurgical procedures Concise presentation of procedures gives readers quick, easy access to key information This atlas is an ideal guide for neurosurgery residents who are participating in emergency procedures while on call and need to deal with operative trauma situations. It is also an excellent practical reference for neurosurgeons performing emergency neurosurgical interventions on a regular basis. Thieme eNeurosurgery is the worlds most comprehensive neurosurgical resource online. For a free trial, go to: <http://thieme.com/eneurotrial>

Atlas of Morphology and Functional Anatomy of the Brain

Praise for this book:[Four stars] Populated with superb pictures of anatomical dissections highly recommend[ed]to any clinician dealing with skull base conditions.--Doody's Review A richly illustrated, step-by-step guide to the full range of approaches in skull base surgery, this book is designed to enable the surgeon to gain not only the technical expertise for common procedures, but to be able to confidently modify standard approaches when necessary. Full-color images of cadavers orient the surgeon to the clinical setting by presenting in precise detail the perspective encountered in the operating room. The images demonstrate surgical anatomy and the relevant structures adjacent to the exposures. Special emphasis on the relationship between the operative corridor and the surrounding anatomy helps the surgeon develop a clear understanding of whether tissues adjacent to the dissection can be exposed without complications. Features: More

than 1,000 high-quality images demonstrate key concepts Brief lists of Key Steps guide the surgeon through each step of the dissection Concise text supplements each photograph, providing descriptions of technical maneuvers and clinical pearls Coverage of the latest innovative approaches enables surgeons to optimize clinical techniques Through detailed coverage of surgical anatomy and relevant adjacent structures, this book enables clinicians to develop a solid understanding of the entire operative region as well as the limits and possibilities of each skull base approach. It is an indispensable reference for neurosurgeons, head and neck surgeons, and otolaryngologists, and residents in these specialties.

Atlas of Neurosurgical Techniques

Video Atlas of Neurosurgery E-Book

Wherever, whenever, or however you need it, unmatched procedural guidance is at your fingertips with the new edition of Schmidek & Sweet: Operative Neurosurgical Techniques! Completely revised under the auspices of new editor-chief Dr. Alfredo Quiñones-Hinojosa, this comprehensive medical reference examines indications, operative techniques, complications, and results for nearly every neurosurgical procedure. Full-color illustrations, 21 new chapters, internationally-acclaimed contributors, surgical videos, and online access make it a "must have" for today's practitioner. Hone your skills for virtually every routine and specialized procedure for brain, spinal, and peripheral nerve problems in adult patients. Review clinical information on image-guided technologies and infections. Easily understand and apply techniques with guidance from more than 1,600 full-color illustrations. Rely on the knowledge and experience of new editor-in-chief Dr. Alfredo Quiñones-Hinojosa and leading international authorities, who offer multiple perspectives on neurosurgical challenges, from tried-and-true methods to the most current techniques. See exactly how to proceed with online surgical videos that guide you through each technique and procedure to ensure the best possible outcomes and results. Apply the latest techniques and knowledge in deep brain stimulation for epilepsy, movement disorders, dystonia, and psychiatric disorders; surgical management of blast injuries; invasive electrophysiology in functional neurosurgery; and interventional management of cerebral aneurysms and arterio-venous malformations. Take it with you anywhere! Access the full text, downloadable image library, video clips, and more at www.expertconsult.com. With 337 additional expert contributors. Get procedural guidance on the latest neurosurgical operative techniques from Schmidek & Sweet on your shelf, laptop and mobile device.

Atlas of Neurosurgical Techniques

Established as the leading textbook on imaging diagnosis of brain and spine disorders, Magnetic Resonance Imaging of the

Brain and Spine is now in its Fourth Edition. This thoroughly updated two-volume reference delivers cutting-edge information on nearly every aspect of clinical neuroradiology. Expert neuroradiologists, innovative renowned MRI physicists, and experienced leading clinical neurospecialists from all over the world show how to generate state-of-the-art images and define diagnoses from crucial clinical/pathologic MR imaging correlations for neurologic, neurosurgical, and psychiatric diseases spanning fetal CNS anomalies to disorders of the aging brain. Highlights of this edition include over 6,800 images of remarkable quality, more color images, and new information using advanced techniques, including perfusion and diffusion MRI and functional MRI. A companion Website will offer the fully searchable text and an image bank.

Atlas of Topographical Anatomy of the Brain and Surrounding Structures for Neurosurgeons, Neuroradiologists, and Neuropathologists

Originally published in 2006, the second edition of this award-winning neurosurgical atlas is written by a notable cadre of world-renowned spine surgeons. Reflecting the enormous depth and breadth of spine surgery, this volume has been completely updated with current, state-of-the-art surgical methodologies and minimally invasive options. Pathologies include degenerative changes, congenital abnormalities, rheumatic diseases, tumors, and trauma. The authors have divided the book into six consistent sections: occipital-cervical, midcervical spine, cervicothoracic junction, thoracic and thoracolumbar spine, lumbar and lumbosacral spine, and peripheral nerve. Within each section, the opening chapters cover comprehensive discussion of pathology, etiology, and differential diagnosis. Succeeding chapters present step-by-step surgical techniques encompassing anterior, anterolateral, posterior, and posterolateral approaches, separately and in sequence. Minimally invasive techniques and peripheral nerve procedures, including the brachial plexus, lumbosacral plexus, and individual nerves are covered independently, following the same organization. Key Highlights: Clearly delineated indications, contraindications, advantages, and disadvantages provided for each surgery Operations with same opening and closing technique covered just once, thereby minimizing redundancy Beautifully illustrated with more than 1,000 images Video compendium created by master surgeons provides up-close guidance on a wide array of surgical procedures Ideal for both the busy practitioner seeking review and resident looking for robust study materials This book is an incomparable learning tool for residents, who will likely read it several times during the course of residency. A precisely edited, didactic atlas, neurosurgeons and orthopaedic surgeons will also find it an invaluable resource.

Atlas of Postsurgical Neuroradiology

The highly complex specialty of brainstem surgery requires many years of study, a focus on precision, and a passionate dedication to excellence to prepare the neurosurgeon for navigating significant anatomic challenges. Although the brainstem is technically surgically accessible, its highly eloquent structure demands rigorous surgical decision-making. An

in-depth understanding of brainstem and thalamic anatomy and the safe entry zones used to access critical areas of the brainstem is essential to traversing the brainstem safely and successfully. This remarkable, one-of-a-kind atlas draws on the senior author's decades of experience performing more than 1,000 surgeries on the brainstem, thalamus, basal ganglia, and surrounding areas. Its content is organized by anatomic region, enabling readers to study separate subdivisions of the brainstem, each of which has its own unique anatomic and surgical considerations. From cover to cover, the atlas provides readers with technical guidance on approach selection, the timing of surgery, and optimization of outcomes-elucidated by more than 1700 remarkable color illustrations, dissections, clinical images, and line drawings. Key Highlights Beautifully detailed, highly sophisticated brain slices and dissections by Kaan Yagmurlu, who trained under the internationally renowned neuroanatomist and neurosurgeon Albert Rhoton Jr. Color illustrations clearly labeled with callouts and other indicators of foci of interest delineate multiple safe entry zones to the brainstem More than 50 detailed patient cases highlight each patient's history of previous neurological disorders, presenting symptoms, preoperative imaging, diagnosis, the planned surgical approach, patient positioning, intraoperative and postoperative imaging, and outcome Seven animations and more than 50 surgical videos elucidate approach selection, anatomy, and surgical outcomes of thalamic region and brainstem lesions This illuminating atlas provides insights into the complexities of the hallowed halls of the brainstem. Neurosurgeons and neurosurgical residents alike who glean knowledge from the clinical pearls throughout each section will no doubt become more adept surgeons, to the ultimate benefit of their patients.

Atlas of Pediatric Neurosurgery

Here's a tool that is useful when preparing to perform common intracranial procedures. The operations chosen for review in this text were based on a list created by determining the frequency of each procedure performed by the author. The atlas is organized from the perspective of a surgical approach. The intent of the atlas is to provide the surgeon a framework to review ways of accessing a region and performing a particular surgical procedure. Discussions on anatomy are purposely brief to focus on information that should be immediately helpful when performing an operation. The surgical procedures that were chosen for discussion were based on the frequency done by the authors. All illustrations were drawn by the same artist. All illustrations are in colour

Atlas of Normal Imaging Variations of the Brain, Skull, and Craniocervical Vasculature

This Atlas is the first reference Atlas covering exclusively all aspects of this multifaceted topic. It is designed to serve as a succinct appropriate resource for neurosurgeons, spinal surgeons, radiologists, neurologists, microbiologists, researchers and infectious disease specialists with an interest in cranio-cerebral and vertebro-medullary infections especially encountered in neurosurgery and spinal surgery. This Atlas is designed to deliver more information in less space than

traditional texts, allowing for quick review of the essential facts of this complex infectious topic through pictures. Pertinent imaging and laboratory information are combined with intraoperative photographs and illustrations to help readers visualize variable presentations and enhance their perioperative management. The comprehensive content of this richly-illustrated book covers different infectious diseases seen on neurosurgical and spinal practices. The Atlas is divided into five sections, after a general introduction, the second section focuses on infections of the brain and its coverings. The third section focuses on vertebromedullary infections. The fourth section includes infections following cranial and spinal surgery, and the fifth section provides a description of the most important specific pathogens and other particular conditions. The format makes it easily accessible and includes a definition of each infection and its epidemiology, main clinical presentations, imaging features and laboratory findings, treatment options, and prognosis information. It will help the reader in choosing the most appropriate way to manage this multipart problem. In addition, the book supplies clinicians and investigators with both basic and more sophisticated information and procedures relating to the complications associated with neurosurgical and spinal infections.

Color Atlas of Cerebral Revascularization

[Four stars] Could not be published at a better time superb illustrations, well-referenced text technique insights not only a superb book, but also one with historical significance unparalleled in the book literature on aneurysm clipping. Doodys Review Seven Aneurysms: Tenets and Techniques for Clipping, a Finalist in the 2012 IBPA Benjamin Franklin Awards, combines the instructive nature of a textbook with the visual aspects of an atlas to guide readers through the surgical principles, approaches, and techniques they need to dissect and clip cerebral aneurysms. Comprised of three concise sections, the book distills the distinguished author's vast experience into a series of easily accessible tutorials presented through clear, systematic descriptions and stunning, full-color illustrations. The first section explains the critical concepts and basic tenets of aneurysm microsurgery followed by a section on the various craniotomies and exposures necessary for successful clipping. The final section covers microsurgical anatomy, dissection strategies, and clipping techniques for each of the seven most common aneurysm types that are the focus of this book. Features: Strategies for handling the seven aneurysms most often seen by neurosurgeons: PCoA, MCA, ACoA, OphA, PcaA, basilar bifurcation, and PICA 383 full-color surgical photographs demonstrate operative techniques; 77 high-quality drawings display anatomy and spatial relationships Succinct text facilitates quick reading and easy reference Clipping remains an essential treatment method for the most frequently encountered aneurysms. This must-have guide will enable neurosurgery residents, fellows, or practicing neurosurgeons to handle the majority of the aneurysms they will encounter with confidence and poise.

Color Atlas of Neurology

The nervous system and musculature are affected in nearly all diseases, making accurate diagnosis of specific neurologic conditions especially challenging. Now in a long awaited second edition, this acclaimed Thieme Flexibook elucidates even the most difficult concepts through its clear, compact text and lavish illustrations. Logically organized, packed with essential information and marked by an unparalleled art program, *Color Atlas of Neurology, Second Edition* is indispensable in the classroom or clinic. Key features: Covers the entire scope of the field, from anatomy, physiology and structural basics to normal and abnormal nervous system function, neurologic syndromes (e.g., cerebral and spinal disorders, peripheral neuropathies, myopathies) and state-of-the-art diagnostic techniques Creates didactic, two-page teaching units by placing lucid text opposite exquisite, fully labeled illustrations ideal for learning and retention Includes new sections on the limbic system, vasculature of the cerebellum, spinal fluid, neuroimmunology, neurodegeneration, neurotransmitters, botulism and more Highlights all signs, symptoms, and neurologic disease patterns for quick recognition and identification of disorders Provides a comprehensive section of tables for easy access to the most important facts needed in the clinic Perfect as a current review, refresher or clinical reference, *Color Atlas of Neurology, Second Edition* makes a major contribution to the field. Medical students and residents will be pleased with its clear, instructive presentation of sophisticated topics, while neurologists, neurosurgeons, primary care physicians, nurses and other medical personnel will find this stunning visual guide essential in daily practice.

Operative Techniques in Epilepsy Surgery

This unique atlas of the human brain correlates studies of post mortem tissue with the in situ, cross-sectional brain and MRIs of the same brain in situ with in vivo images from normal volunteers. This atlas contains a series of maps, each featuring different aspects of brain morphology and topography. The atlas is divided into two sections: the Topographic and Topometric Atlas and the Myeloarchitectonic Atlas. The Topographic and Topometric atlas presents the surface anatomy of the brain over a topometric grid, together with corresponding in situ sections of the entire head, placed on stereotaxic grids in order to emphasize the brain. The part of the atlas is further divided into three sections: the Horizontal, the Coronal, and the Sagittal. The Myeloarchitectonic atlas presents 69 myelin-stained sections cut perpendicular to the intercommissural line depicting mainly subcortical structures. Each plate has corresponding schematic diagrams defining position, extent, and relationship of nuclei and pathways of the forebrain and mesencephalon. Topographic and Topometric Atlas Benefits: * Sections are cut at regular, 1-cm thick intervals in all planes of section * Both sides of section are shown, due to unprecedented thickness of the sections, providing additional information * Includes corresponding x-rays and MRIs of the same head and an in vivo MRI from a healthy volunteer Myeloarchitectonic Atlas Benefits: * Presents the most comprehensive delineations available; suitable for mapping of neurotransmitters, neuropeptides, and receptors * Tissue sections are from a reference brain used by preeminent neuroanatomists: Vogts, Brockhaus, Hassler, Wahren, Hopf, and Sanides * Includes four pages of 36 reduced figures showing gyrification and subcortical detail

Neurosurgical Operative Atlas: Functional Neurosurgery

As minimally invasive surgery becomes the standard of care in neurosurgery, it is imperative that surgeons become skilled in the use of image-guided techniques. This outstanding new book provides an in-depth analysis of current and developing applications in this rapidly growing field. A highly acclaimed team of authors share their experience with this exciting technology, outlining benefits and limitations of each technique. The book begins with an overview of image-guided neurosurgery, and then continues with specific cranial and spinal procedures. You'll get full coverage of clinical applications for topics such as: videotactic neurosurgery, needle biopsy, cranial and spinal navigation, and much more! Key features of the book: * Full analysis of current and future applications of image-guided procedures * Detailed descriptions of procedures, from basic to the most advanced * An international who's who of contributors, all of whom have significantly advanced contributions to the field of image-guided surgery * Valuable information that leads to more effective results and optimal patient care

Increasing evidence shows there are many advantages to using image-guided techniques. It can make procedures more efficient, minimize exposure and invasiveness, define resection boundaries, and optimize hardware placement. Here is the clinical reference that neurosurgeons, orthopaedic surgeons, and residents need to get the most up-to-date assessment of this vital field. Stay on the cutting-edge of an exciting new technology; order your copy of **ADVANCED TECHNIQUES IN IMAGE-GUIDED BRAIN AND SPINE SURGERY** today!

Operative Neurosurgical Anatomy

Video Atlas of Neurosurgery: Contemporary Tumor and Skull Base Surgery is a unique resource that consists of 40 procedural videos and a concise companion book to reinforce your understanding of the material. Dr. Alfredo Quiñones-Hinojosa brings together a group of outstanding faculty, residents, and fellows lead by Dr. Jordina Rincon-Torroella, who carefully designed, assembled, and edited each chapter. The videos are enhanced through the inclusion of intraoperative photos, anatomical dissections, outstanding anatomical drawings, and animations that detail key steps and provide the experience of viewing a real-time surgery. Whether consulted together or independently of each other, the video and print content deliver all of the expert knowledge you need for effectively planning and understanding tumor and skull base surgeries. Step-by-step, state-of-the-art videos - 40 in total - are accessible through Expert Consult and narrated by Dr. Quiñones-Hinojosa. Each video is around 10 minutes with a total running time of over 6 hours. Videos highlight key surgical anatomy, focusing special attention on the relationship between lesions and important landmarks. Procedures are broken down step-by-step for easy overview and comprehension. Covers advanced techniques such as: intraoperative brain mapping; intraoperative assessment of resection through iMRI; fluorescence imaging; brain stem mapping techniques; combined open-and-endoscopic approaches, cortical-subcortical stimulation in awake surgery; and more. Dedicated neurosurgical artwork by Devon Stuart includes superb figures that depict the surgical neuroanatomy and approaches in a

step-wise fashion. Chapters are presented from the less complex, more common surgeries to the most complex and cutting-edge procedures that may require multidisciplinary approaches.

Atlas of the Human Brain

This wonderfully illustrated atlas serves as a companion to the 3rd edition of Cheek's PEDIATRIC NEUROSURGERY. It describes many technologically important procedures, and includes chapters on scalp flaps and injuries, surgery for subdural and epidural hematomas, skull tumor resection, dorsal rhizotomy, resection, approach to the skull base, ventriculostomy, shunting, brachial plexus and peripheral nerve repair, and more.

Rhoton's Cranial Anatomy and Surgical Approaches

Nobutaka Yoshioka, MD, PhD and Albert L. Rhoton Jr., MD have created an anatomical atlas of astounding precision. An unparalleled teaching tool, this atlas opens a unique window into the anatomical intricacies of complex facial nerves and related structures. An internationally renowned author, educator, brain anatomist, and neurosurgeon, Dr. Rhoton is regarded by colleagues as one of the fathers of modern microscopic neurosurgery. Dr. Yoshioka, an esteemed craniofacial reconstructive surgeon in Japan, mastered this precise dissection technique while undertaking a fellowship at Dr. Rhoton's microanatomy lab, writing in the preface that within such precision images lies potential for surgical innovation. Organized by region, each layered dissection elucidates specific nerves and structures with pinpoint accuracy, providing the clinician with in-depth anatomical insights. Precise clinical explanations accompany each photograph. In tandem, the images and text provide an excellent foundation for understanding the nerves and structures impacted by neurosurgical-related pathologies as well as other conditions and injuries. An exceptionally stunning anatomical reference, this book is a must-have reference for residents, and advanced clinicians specializing in neurosurgery, facial plastic surgery, otolaryngology, maxillofacial surgery, and craniofacial surgery.

Seven Aneurysms

Pediatric Neurosurgery identifies and describes the theoretic concepts of clinical and operative neurosurgery in the different ages of childhood, emphasizing both clinical and surgical principles. It presents a comprehensive body of pediatric clinicopathologic entities, elaborating upon the anatomical and physiological criteria which distinguish individual age categories. This book is unique in that it establishes an holistic approach to perceiving spatially the dimensions of the child vis-a-vis the surgeon and his team, the disarticulation of individual states of operative procedures and the grouping of procedures common to the treatment of different clinicopathological entities, the presentation of clinical parameters

indicative of surgical treatment and essential to determining which techniques are preferable. The extensive use of artwork and operative photographs highlights the systematic description of general and specific surgical techniques as it integrates the clinical principles into guidelines for therapy.

Video Atlas of Neuroendovascular Procedures

Neuroimaging has become an integral part of clinical neurology practice in tandem with good history taking and physical examination. This is the first all-in-one guide, presenting illustrative examples of signature neuroimaging findings in clinical context specifically for neurologists. With more than 1,500 images, the authors have assembled an accessible resource and review that presents over 170 core topics using the imaging findings as a platform to discuss pathophysiology, clinical presentation, and disease management. Written with the practitioner or student of neurology in mind, Neurology Image-based Clinical Review profiles each condition in an easy-to-read format, alongside a wealth of images designed to help develop proficiency in recognizing and treating both common and rare neurologic conditions. This unique book is organized into fifteen chapters covering all major areas of neurology including stroke, hemorrhage, neoplasms, epilepsy, trauma, neurodegenerative conditions, infectious diseases, pediatric syndromes, and much more. Each topic is introduced with a brief case scenario and image-based diagnosis, followed by bulleted introduction, clinical presentation, radiographic appearance and diagnostic hallmarks, differential diagnosis, and treatment. Numerous examples throughout foster familiarity with key imaging findings and confidence interpreting MRI, CT, MRA, angiography, EEG, gross, and microscopic neuropathology images. Selected references for further study follow each topic. Neurology Image-Based Clinical Review is an essential reference for medical students, practicing neurologists, residents looking to hone their knowledge, or anyone sharpening clinical and interpretive skills for board or MOC review. Key Features: Comes with free access to the fully-searchable downloadable e-book, including an image gallery Covers the full spectrum of neurologic disease with over 170 topics and more than 1500 images Includes chapters on commonly encountered problems and rare syndromes that may be missed in the clinic Presents the latest information on clinical presentation, diagnosis, treatment, and differential diagnoses of various neurological disorders Consistent format for easy readability and targeted review

Color Atlas of Brainstem Surgery

The ultimate guide to navigating and treating brainstem pathologies from master neurosurgeon Robert Spetzler The brainstem is one of the last bastions of surgical prohibition because of its densely packed ascending and descending tracts and nuclei carrying information to and from the brain. Although 10% of all pediatric tumors and 5% of all vascular anomalies occur in the brainstem, neurosurgeons have traditionally resisted dissecting lesions in this area. Recent advances in imaging, microscopy, anesthesia, and operative techniques have expanded the treatment paradigm for this

most eloquent region of the brain. *Surgery of the Brainstem*, by internationally renowned neurosurgeons Robert F. Spetzler, M. Yashar S. Kalani, and Michael T. Lawton, along with an impressive cadre of global experts, is a comprehensive guide to managing disorders of the brainstem, thalamic region, and basal ganglia. Organized in seven sections with 33 chapters, the text opens with four sections covering a variety of topics. Section I presents the history of brainstem surgery; Section II examines anatomy, development, and pathology; Section III reviews patient examination, imaging, and monitoring; and Section IV provides a succinct overview of surgical approaches. Sections V-VII cover a wide range of adult and pediatric tumors, ischemia, stroke, aneurysms, arteriovenous malformations, and cerebral cavernous malformations. More than 300 high-quality clinical images and medical illustrations enhance the text. **Key Highlights** A full spectrum of treatment modalities and outcomes, including open surgery, endoscopic approaches, stereotactic radiosurgery, radiotherapy, endovascular techniques, and revascularization An anatomy chapter featuring stunning Rhoton-style anatomical dissections delineates critical landmarks in the brainstem, thalamus, pineal region, and cranial nerves Detailed discussion of patient positioning and exposure of various brainstem domains Pearls on overcoming psychological, pathological, and anatomical barriers and managing complications Understanding the basic anatomy, pathology, and clinical complexities of the brainstem and thalamic regions is essential for safe navigation and treatment. This remarkable book will provide neurosurgeons with additional insights on performing resections and achieving the best possible outcomes for patients with pathologic conditions in this delicate region.

Neurology Image-Based Clinical Review

As a result of the increasing number of surgical procedures on the brain, head, neck, and spine, postoperative changes are being encountered more frequently on neuroradiological examinations. However, these findings are often unfamiliar to neuroradiologists and neurosurgeons and can be difficult to interpret. This book, which contains numerous images and to-the-point case descriptions, is a comprehensive yet concise reference guide to postsurgical neuroradiology. It will enable the reader to identify the type of surgery performed and the hardware implanted and to differentiate expected sequelae from complications. Topics reviewed include trauma, tumors, vascular disorders, and infections of the head, neck, and spine; cerebrospinal fluid abnormalities; and degenerative diseases of the spine. This book will serve as a unique and convenient resource for both neuroradiologists and neurosurgeons.

Schmidek and Sweet: Operative Neurosurgical Techniques E-Book

Comprehensive Overview of Modern Surgical Approaches to Intrinsic Brain Tumors addresses limitations in the scientific literature by focusing primarily on surgical approaches to various intrinsic neoplasms using diagrams and step-by-step instructions. It provides the advantages and disadvantages of these approaches, controversies, and technical

considerations and discusses topics such as anatomy, pathology and animal models, imaging, open brain tumor approaches and minimally invasive approaches. Additionally, it discusses controversial treatments and the pros and cons of each. This book is a valuable source for medical students, neurosurgeons and any healthcare provider who has an interest in brain tumors and techniques to treat them. Provides a comprehensive review of different approaches, explaining them step-by-step Includes diagrams that show surgical approaches Presents the advantages and disadvantages of each approach to aid in decision-making

Atlas of Infections in Neurosurgery and Spinal Surgery

One-of-kind textbook provides comprehensive tutorial on cranial anatomy with step-by-step text and visuals Dissection in the anatomical laboratory is a mandatory component of training for neurosurgeons. Acquisition of highly technical skills is a long and arduous task, requiring knowledge of complex surgical anatomy and basic steps for single surgical approaches. Unlike dense textbooks, Operative Cranial Neurosurgical Anatomy by Filippo Gagliardi, Cristian Gragnaniello, Pietro Mortini, and Anthony Caputy provides readers with a user-friendly tutorial on cranial approaches, clearly delineated through concise written instructions and serial images. Essential procedural aspects are discussed in 53 chapters, starting with sections on pre-surgical training and planning, patient positioning, and basic techniques. Subsequent sections detail cranial approaches; transpetrosal approaches; endonasal, transoral, and transmaxillary procedures; vascular procedures; and ventricular shunts procedures. Surgical technique fundamentals and basic variants, including surgical anatomy and landmarks, are highlighted in 500 figures and illustrations. Key Features Summaries, graphics, and schematic drawings provide immediate access to salient information to utilize during surgical dissections and for surgical preparation A wide spectrum of cranial procedures covered in 23 chapters - from the precaruncular approach to the medial orbit and central skull base - to surgical anatomy of the petrous bone Diverse endonasal procedures including sublabial, transphenoidal, modified lothrop, odontoidectomy, and endoscopic endonasal transmaxillary Vascular procedures such as middle cerebral artery bypass and internal maxillary artery bypass This reader-friendly handbook is a must-have resource for every neurosurgical resident and an excellent refresher for all neurosurgeons. It will help residents and fellows optimize the time and quality of practical training in the cadaver lab, learn fundamental surgical techniques in cranial neurosurgery, and thoroughly prepare for cranial neurosurgical cases.

Video Atlas of Intracranial Aneurysm Surgery

An indispensable, single-volume resource on state-of-the-art epilepsy procedures from renowned international experts! Epilepsy is a common neurological disorder affecting an estimated 1% of the population, about 20 to 30% of which experience seizures inadequately controlled by medical therapy alone. Advances in anatomic and functional imaging

modalities, stereotaxy, and the integration of neuronavigation during surgery have led to cutting-edge treatment options for patients with medically refractory epilepsy. Operative Techniques in Epilepsy Surgery, Second Edition by Gordon Baltuch, Arthur Cukiert, and an impressive international group of contributors has been updated and expanded, reflecting the newest treatments for pediatric and adult epilepsy. Seven sections with 30 chapters encompass surgical planning, invasive EEG studies, cortical resection, intraoperative mapping, disconnection, neuromodulation, and further topics. Twelve cortical resection chapters cover surgical approaches such as amygdalohippocampectomy; hippocampal transection; frontal lobe, central region, and posterior quadrant resections; and microsurgery versus endoscopy for hypothalamic hamartomas. Disconnection procedures discussed in section five include corpus callosotomy, hemispherectomy, and endoscopic-assisted approaches. Well-established procedures such as vagus nerve and deep brain stimulation are covered in the neuromodulation section, while the last section discusses radiosurgery for medically intractable cases. Key Highlights Chapters new to this edition include endoscopic callosotomy, laser-induced thermal therapy (LITT), and focused ultrasound High-quality illustrations, superb operative and cadaver photographs, radiologic images, and tables enhance understanding of impacted anatomy and specific techniques The addition of videos provides insightful step-by-step procedural guidance This is an essential reference for fellows and residents interested in epilepsy and functional neurosurgery, and an ideal overview for neurosurgeons, neurologists, and neuroradiologists in early career stages who wish to pursue this subspecialty.

Schmidek and Sweet: Operative Neurosurgical Techniques 2-Volume Set, Indications, Methods and Results (Expert Consult - Online and Print), 6

Masterful 2D and 3D head, neck, and brain dissections provide unsurpassed insights into head, neck, and brain anatomy An internationally renowned and beloved author, educator, brain anatomist, and neurosurgeon, Professor Albert Rhoton has a special place in medical history. He was revered by students and colleagues and is regarded as one of the fathers of modern microscopic neurosurgery. A driving principle in his anatomy lab was the simple phrase, "Every Second." This was embraced in his philosophy that every second of every day, a patient's life was improved by a surgeon assisted by the anatomic knowledge his lab helped elucidate and distribute. Rhoton's Atlas of Head, Neck, and Brain is the visually exquisite crowning achievement of Dr. Rhoton's brilliant career and unwavering dedication to the intertwined pursuits of surgical anatomy and neurosurgery. The atlas reflects the unparalleled contributions Dr. Rhoton made to the contemporary understanding of neurosurgical anatomy. Dr. Peris-Celda, with the collaboration of an impressive cadre of international multidisciplinary experts, worked closely under Dr. Rhoton's tutelage on this project. This book is the culmination of 5 years of work and experience gleaned from more than 40 years of surgical anatomy research and exquisite dissection techniques performed in Dr. Rhoton's laboratory. Special Features Each anatomic dissection meticulously labeled with English and Latin descriptors for easy cross referencing with other resources. Multiple views of the most complex regions of the head, neck,

and brain provide a deeper understanding of anatomy. More than 600 anatomical images systematically organized in four major sections: Osteology of the Head and Neck; Face and Neck; Ear, Nose, Pharynx, Larynx, and Orbit; and Neuroanatomy and Cranial Base. Superb 2D images presented in a large printed format to optimize the viewing experience. 3D digital images fully realize the beauty of the dissections and enhance the learning process. Specimens injected with colored silicone provide better visualization of arteries and veins. Breathtakingly stunning, this atlas is certain to be a treasured reference for medical students, residents, and clinicians specializing in neurosurgery, facial plastic surgery, otolaryngology, maxillofacial surgery, and craniofacial surgery for many years to come.

Pediatric Neurosurgery

The traditional education of the neurosurgeon and duce simultaneous contrast preparations of the ar the clinician working in related specialties is based teries and veins and thus obtain a complex photo on their presumed knowledge of the macroscopic graphic representation of the structures of the prep anatomy of the brain as traditionally taught. Most aration. neurosurgical textbooks, therefore, provide macro The manuscript and drawings were completed in the scopic views of sections of the operative site. The years 1974-1976 after almost two decades of neu literature that has accumulated in recent years on rosurgical work. The data worked out in the early the subject of microneurosurgical operations also stages (Chapter 1 in particular) were used by the follows this principle. author as the basis for teaching programmes at the For some years, however, the customary macro University of Giessen. Chapters 2-7, dealing with scopic representation of the anatomy of the brain the operative technical aspects, were produced after has been inadequate for the needs of the neurosur mid-1975 and used by the author as the basis for geon using refined modern operative techniques. microneurosurgical teaching of his colleagues at the Furthermore, despite their detailed presentation, University of Freiburg. stereotactic atlases are also insufficient for neuro My thanks are due to Doz. Dr. E.

Surgery of the Brainstem

THE DEFINING WORK IN NEUROSURGERY, REISSUED FOR A NEW GENERATION OF TECHNICAL EXCELLENCE Cranial Anatomy and Surgical Approaches is the master work of the legendary neurosurgeon Albert L. Rhoton, Jr. -- a distillation of 40 years of work to improve safety, accuracy, and gentleness in the medical specialty the author helped shape. Newly reissued and featuring more than 2000 full-color illustrations, this definitive text on the microsurgical anatomy of the brain remains an essential tool for the education and enrichment of neurosurgeons at any career stage. It fulfils its author's hopes to make, in his words, the "delicate, fateful, and awesome" procedures of neurosurgery more gentle, accurate, and safe. Across three sections, Cranial Anatomy and Surgical Approaches details the safest approaches to brain surgery, including:

- Micro-operative techniques and instrument selection
- Microsurgical anatomy and approaches to the supratentorial area and

anterior cranial base, including chapters on aneurysms, the lateral and third ventricles, cavernous sinus and sella. · Anatomy and approaches to the posterior cranial fossa and posterior cranial base, including chapters on the fourth ventricle, tentorial incisura, foramen magnum, temporal bone, and jugular foramen · Supra- and infratentorial areas, including chapters on the cerebrum and cerebellum and their arteries and veins

Cranial Neuroimaging and Clinical Neuroanatomy

Written by experts in the field, this beautifully illustrated text/atlas provides the tools you need to directly visualize and interpret cranial CT and MR images. It reviews with exacting detail the normal anatomic brain structures identified on sagittal, coronal, and axial imaging planes. Use this book to make accurate and complete neurological assessments at the earliest possible stages - before reaching the sectioning or operating table. This revised and expanded third edition contains nearly 600 illustrations - most in color - that provide graphic representations of brain structures, arteries, arterial territories, veins, nerves and neurofunctional systems. The illustrations depict anatomic structures in shades of gray similar to the way they are seen in CT and MR images. Highlights of the third edition:- Content and illustrations expanded by more than 20%- High resolution T1 and T2 weighted MR images- Improved anatomic terminology for more accurate descriptions of findings Clinically relevant, easily readable, and clearly organized, this well-illustrated book is an essential introduction to the field for medical students and residents in neurology, neurosurgery, neuroradiology, and radiology. Practicing specialists will also benefit from this practical day-to-day tool.

Atlas of Brain Function

Atlas of Neurosurgical Techniques: Brain presents the current information on how to manage diseases and disorders of the brain. Ideal as a reference for review in preparation for surgery, this atlas features succinct discussion of pathology and etiology that helps the reader gain a firm understanding of the underlying disease and conditions. The authors provide step-by-step descriptions of surgical techniques, clearly delineating the indications and contraindications, the goals, the operative preparation and anesthesia, and postoperative management. Common complications of techniques are also emphasized. Over 900 illustrations aid the rapid comprehension of the surgical procedures described in the text. Highlights: Clear descriptions of the surgical management of aneurysms, arteriovenous malformations, occlusive and hemorrhagic vascular diseases, tumors, lesions, pain disorders, trauma, infections, and more Detailed discussion of disease pathology, etiology, and differential diagnosis Concise outlines of indications, contraindications, as well as advantages and disadvantages of each technique illuminate the rationale behind surgical management More than 900 illustrations, including 684 in full-color, demonstrate key concepts Sections on the latest techniques in stereotactic and minimally invasive surgery This companion volume to Atlas of Neurosurgical Techniques: Spine and Peripheral Nerves is an essential

reference for all neurosurgeons and residents seeking the current information on state-of-the-art techniques in brain surgery.

Atlas of Emergency Neurosurgery

The recent advances in neuroimaging techniques, particularly magnetic resonance (MR), have greatly improved our knowledge of brain anatomy and related brain function. Morphological and functional investigations of the brain using high-definition MR have made detailed study of the brain possible and provided new data on anatomic-functional correlations. These studies have fuelled the interest in central nervous system imaging by clinicians (neuro-radiologists, neurosurgeons, neurologists, neurophysiologists, and psychiatrists) as well as biophysicists and bioengineers, who are at work on new and ever more sophisticated acquisition and processing techniques to continue to improve the potential of brain imaging methods. The possibility of obtaining high-definition MR images using a 3.0-T magnet prompted us, despite the broad existing literature, to conceive an atlas illustrating in a simple and effective way the anatomy of the brain and correlated functions. Following an introductory chapter by Prof. Pierre Rabischong, the atlas is divided into a morphological and a functional imaging section. The morphological atlas includes 3D surface images, axial, coronal, and sagittal scans acquired with high-definition T2 fast spin echo (FSE) sequences, and standard and inverted-contrast images. The MR scans are shown side by side with the corresponding anatomical brain sections, provided by Prof. Henri Duvernoy, for more effective comparison. The anatomical nomenclature adopted for both the MR and the anatomical images is listed in an inset flap for easier consultation.

Atlas of the Facial Nerve and Related Structures

The introduction of techniques that permit visualization of the human nervous system is one of the foremost advances in neuroscience and brain-related research. Among the most recent significant developments in this respect are ultra-high field MRI and the image post-processing technique known as track density imaging (TDI). It is these techniques (including super-resolution TDI) which represent the two major components of 7.0 Tesla MRI – Brain White Matter Atlas. This second edition of the atlas has been revised and updated to fully reflect current application of these technological advancements in order to visualize the nervous system and the brain with the finest resolution and sensitivity. Exquisitely detailed color images offer neuroscientists, neurologists, and neurosurgeons a superb resource that will be of value both for the purpose of research and for the treatment of common brain diseases such as Alzheimer's disease and multiple sclerosis.

Rhoton's Atlas of Head, Neck, and Brain

Video Atlas of Intracranial Aneurysm Surgery is a content-rich reference that focuses on how to safely perform the full spectrum of surgical procedures for intracranial aneurysms. The work provides guidance on avoiding complications as well as anticipating and managing problems that may arise during surgery. Access to concise, high-quality videos that bring to life the tips and techniques described in the book is included on Thieme's MediaCenter. This atlas is informed with the experience of Dr. Nussbaum, a seasoned neurosurgeon at The National Brain Aneurysm Center who has performed over 2,000 aneurysm surgeries. Video Atlas of Intracranial Aneurysm Surgery brings the spectrum of microsurgical procedures for intracranial aneurysms to residents, fellows, and younger neurosurgeons in an increasingly endovascular-focused field.

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