Surgical Atlas Of Spinal Operations 1st Edition

This video atlas covers a broad range of spinal surgical procedures. The volume includes a collection of high quality 3-to-8 minute videos of some of the most critical spine operations performed by internationally renowned expert surgeons. Key features of the book contents include: o Downloadable high quality video content with subtitles suitable for viewing on any display (A brief preview of the book content can be viewed at https://www.youtube.com/watch?v=SxMi4UF7HA ) o Detailed descriptions of surgical indications, preoperative planning, patient positioning, surgical technique, complications, postoperative care and outcomes for each procedure o Full color images and illustrations highlighting different key stages of each surgical technique The video format allows skill development of its intended audience by conveying temporal and spatial details which often go unnoticed in photograph format. This volume will be of immense interest to both the novice and the experienced spinal surgeon as they can benefit from the visual guides presented in the book. It also serves as an ideal teaching tool for spine surgery units in medical schools.

This volume, part of the second edition of the classic Neurosurgical Operative Atlas series, presents the latest techniques for managing the full range of spinal and peripheral nerve problems. Each chapter addresses a different surgical procedure, guiding the reader through patient selection, preoperative preparation, anesthetic techniques, patient monitoring, and surgical techniques and outcomes. The authors also discuss common complications and offer tips for how to avoid and manage them. Spine and Peripheral Nerves is ideal for residents to study and for established surgeons seeking a quick refresher in preparation for surgery. Neurosurgeons, orthopedists, and plastic surgeons will benefit from the wealth of information provided in this up-to-date clinical reference. Highlights: Renowned experts in the field share their clinical insights and extensive experience Concise, step-by-step descriptions enable the reader to rapidly review techniques More than 750 illustrations and images demonstrate key concepts Organized by anatomical location to aid quick reference Series description:The American Association of Neurological Surgeons and Thieme have collaborated to produce the second 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 Spine and Peripheral Nerves, the series also features:Neuro-Oncology, edited by Behnam Badie Vascular Neurosurgery, edited by R. Loch MacdonaldFunctional Neurosurgery, edited by Philip Starr, Nicholas M. Barbaro, and Paul LarsonPediatric Neurosurgery, edited by James Tait Goodrich

The term “minimally invasive spinal surgery” was coined in early 1990 following pub- cation of the first edition of this text entitled Arthroscopic Microdiscectomy: Minimal Intervention in Spinal Surgery, and subsequent establishment of the International Society for Minimal Intervention in Spinal Surgery (ISMISS) under the auspices of the International Society of Orthopaedic Surgery and Traumatology (SICOT) in April l990. The orthopedic and neurological surgeons who participated in lectures and hands-on wo- shops both in Philadelphia and abroad have witnessed the evolution of minimally invasive spinal surgery from blind nucleotomy to endoscopic fragmentectomy, decompression of l- eral recess stenosis, foraminoplasty, and spinal stabilization. In Arthroscopic and Endoscopic Spinal Surgery: Text and Atlas, Second Edition, experts describe and illustrate various techniques and approaches that are currently used in this field. In addition, the ongoing research for the betterment of spine care via minimally invasive approaches is briefly reviewed. I would like to express my sincere appreciation to so many of my colleagues who s- ported my efforts in the field of minimally invasive spinal surgery throughout the years. Many of them participated in our teaching symposiums and have provided valuable cont- butions to this text. Now in its second edition and featuring a brand-new layout, Atlas of Peripheral Nerve Surgery continues to be the surgical atlas dedicated to the field of peripheral nerves. This neurosurgery reference presents surgical steps laid out step by step in a highly readable and accessible format, making it an ideal resource for trainees and busy surgeons alike. Gain a well-rounded understanding of today’s latest knowledge concerning the various types of nerve lesions and their management. Grasp exactly how to proceed through brand-new cadaver dissection photos, full-color illustrations with step-by-step operation notes, and self-explanatory bullet points. Apply the newest advances in nerve transfer surgery with a full section that discusses the transfer of the radial to axillary nerve, the median and ulnar nerve to the musculocutaneous nerve, the femoral branch to the obturator nerve, and more. Access the fully searchable text and downloadable image library online at www.expertconsult.com. With an emphasis on set-up and execution and lessons learned from expert practitioners, this concise, practical guide for residents and fellows presents the essentials for both common and complex spine surgery. Proceeding anatomically from the cervical to the sacroiliac, and including chapters on spinal tumors, infection and revision surgery, nearly 40 different procedures are highlighted, from corpectomy, arthroplasty and laminectomy to percutaneous screws, decompression and fusion. Chapters include all the information a resident will need to know: indications and contraindications, imaging and diagnosis, OR set-up and instrumentation selection, the specific operative technique, post-operative protocols, and clinical pearls and pitfalls. Radiographs and full-color intraoperative photographs accompany each procedure. Whether suturing dura or performing a lateral interbody fusion, spinal surgery is a technical pursuit, and having a firm grasp of the details can ultimately determine the procedure's success. Written and edited by veterans in orthopedic surgery and neurosurgery, The Resident's Guide to Spine Surgery is just the detailed, user-friendly resource for up-and-coming clinicians looking to develop and expand their surgical expertise. Pocket Atlas of Spine Surgery, 2nd Edition by Kern Singh and Alexander Vaccaro is unique in its presentation, utilizing multilayered visuals to delineate the most commonly performed spine procedures. High-definition intraoperative photographs are juxtaposed with translucent anatomic drawings. This facilitates visualization of both the entire surgical
field and complex anatomy never "seen" during surgery. It also provides greater insights into the subtleties of both open
technically demanding minimally invasive spine surgery techniques. Unlike many large spine surgery atlases, this is
the perfect, on-the-go, pocket-size resource for busy spine surgeons who work in any clinical setting. From the cervical to
lumbar spine, 21 concise chapters reflect the collective technical expertise of internationally renowned spine surgeons.
Easy-to-follow guidance is provided on fundamental open and minimally invasive techniques, including pedicle screw
placement, fusion, discectomy, corpectomy, foraminotomy, laminoplasty, and laminectomy. Each procedural chapter
focuses on the importance of accurate visualization, adequate homeostasis, and impacted anatomical structures.
Insightful tips, pearls, and potential pitfalls throughout the book expedite acquisition of knowledge Nearly 200 detailed,
clearly labeled images of common spine procedures provide invaluable anatomical and clinical guidance.
Expanded insights on positioning in spine surgery. Added discussion of surgical challenges, including warnings and descriptions of
innervous planes. Orthopaedic surgeons, neurosurgeons, and surgical trainees will discover an indispensable and
friendly white coat reference for everyday practice. The visually rich atlas will also benefit physician assistants, surgical
nurses, and all practitioners involved in the operative care of spine surgery patients.
This book is a practical guide for the use of simulation in neurosurgery, with chapters covering high fidelity simulation,
animal models simulation, cadaveric simulation, and virtual reality simulation. Readers are introduced to the different
simulation modalities and technologies and are guided on the use of simulation for a variety of learners, including medical
students, residents, practicing pediatricians, and health-related professionals. Comprehensive Healthcare Simulation:
Neurosurgery is written and edited by leaders in the field and includes dozens of high-quality color surgical illustrations
and photographs as well as videos. This book is part of the Comprehensive Healthcare Simulation Series which provides
focused volumes on the use of simulation in a single specialty or on a specific simulation topic, and emphasizing practical
considerations and guidance.
Praise for this book: [Four stars] This book is required reading for orthopedic and neurosurgical fellows and
residents...very highly recommend[ed]...outstanding.--Doody's Review This best-selling book returns in a second edition
covering the major procedures in spine surgery and the latest technical innovations in the field. Retaining the
comprehensive scope and accessible presentation of the previous edition, the book distills the basic elements of each
procedure using concise descriptions and simple line drawings. New sections of the book cover minimally invasive
exposure methods, motion-sparing techniques, and the latest fixation techniques. Highlights: Each chapter outlines the
essentials of the procedure in just a few pages. Consistent presentation throughout the book enhances ease of use. Tips,
pearls, lessons learned, special considerations, pitfalls, and bailout, rescue, and salvage procedures emphasize critical
points to help ensure a safe and effective procedure. Nearly 500 illustrations demonstrate key technical points. Concise
and up-to-date, this book serves as an invaluable quick reference prior to surgery. It is ideal for clinicians and residents in
spine surgery, orthopedics, and neurosurgery.
This book Surgical Atlas of Spine Operations is divided into several sections in an attempt to provide the reader the best
understanding of complex topics as well as to facilitate the search for specific information on any of these topics. The first
section provides a comprehensive review of surgical anatomy through a step-by-step description of the most common
surgical approaches to the spine. Each of these chapters consists of a discussion of the indications for using the
approach, a review of the pertinent anatomy, a well-illustrated description of the surgical approach, a discussion of th.
"Fifty-six American and Canadian specialists in spinal surgery contribute to a text providing residents with the information
needed during spine surgery rotations. Thirty-four chapters are organized into sections covering examination and
diagnostics, trauma, infection, tumors, degenerative disorders, spinal deformity, and inflammatory disorders, and
surgical approaches. Illustrated with photographs and diagrams, algorithms, lists, charts, and tables throughout the
text, this resource can be read cover to cover during a rotation or used as a quick reference before a patient work-up or
A high-yield and comprehensive text-and-video resource for managing commonly encountered spinal conditions. Spine
surgery has experienced several paradigm shifts during the past few decades, with highly complex techniques introduced
at an astounding pace. In order for new generations of spine surgeons to stay current and thrive in this innovative
era of spine surgery, access to diverse multimedia learning tools is imperative. Video Atlas of Spine Surgery by
renowned spine surgeon and educator Howard An and Rush University Medical Center colleagues Philip Louie, Bryce
Basques, and Gregory Lopez, is a cutting-edge resource for non-operative and operative management of a diverse
spectrum of cervical, thoracic, and lumbar spine conditions. Consisting of 19 chapters, the text is streamlined to facilitate
learning the most important steps for each procedure. The book begins with discussion of physical exam maneuvers used
to accurately diagnose specific spinal pathologies. Subsequent chapters detail extensive spine surgery techniques for
managing degenerative cervical and lumbar conditions. The remaining chapters cover spinal cord, cervical, and
thoracolumbar injuries; idiopathic, degenerative, and early-onset scoliosis; kyphosis; spondylolisthesis; spinal infections
and inflammatory disorders; and thoracic disc disorders. Key Features Concise, bulleted text and consistent chapter
outlines feature epidemiology and prevalence, pathogenesis, clinical presentation, image findings, classification,
conservative and surgical management, techniques, postoperative care, and more. A myriad of meticulous diagrams and
illustrations, spinal imaging and photographs, and 50 high-quality spine surgery videos maximize learning. Technical
pearls, case examples, and board-style orthopaedic surgery questions at the end of each section optimize
comprehension and retention of information. This remarkable resource is a must-have for orthopaedic and neurosurgery
residents and fellows, as well as practicing spine surgeons.
This comprehensive, up-to-date textbook of modern cervical spine surgery describes the standard and advanced
techniques recommended by the Cervical Spine Research Society – European Section (CSRS-E) with a view to enabling
both young and experienced surgeons to further develop their skills and improve their surgical outcomes. Success in cervical spine surgery depends on the surgeon’s awareness of the main challenges posed by distinct cervical spine diseases, theoretical understanding of treatment concepts, and knowledge of technical options and the related potential for complications. It is the surgeon who has to merge theory and practice to achieve the desired outcome, in each case appraising the details of surgical anatomy and weighing the challenges and complications associated with a surgical technique against the skills that he or she possesses. This excellently illustrated book, written by key opinion makers from the CSRS-E with affiliated surgeons as co-authors, presents the full range of approaches and techniques and clearly identifies indications, precautions, and pitfalls. It will be a superb technical reference for all cervical spine surgeons, whether orthopaedic surgeons or neurosurgeons.

Learn state-of-the-art MIS techniques from master spine surgeons! Significant advances have been made in minimally invasive spine (MIS) surgery approaches, techniques, and innovative technologies. By preserving normal anatomic integrity during spine surgery, MIS approaches enable spine surgeons to achieve improved patient outcomes, including faster return to normal active lifestyles and reduced revision rates. Exposing only the small portion of the spine responsible for symptoms via small ports or channels, requires a deep understanding of spinal anatomy and spinal pathophysiology. Building on the widely acclaimed first edition, An Anatomic Approach to Minimally Invasive Spine Surgery, Second Edition, provides an expanded foundation of knowledge to master minimally invasive spine surgery. World-renowned spine neurosurgeons Mick Perez-Cruet, Richard Fessler, Michael Wang, and a cadre of highly regarded spine surgery experts provide masterful tutorials on an impressive array of cutting-edge technologies. Organized by seven sections and 51 chapters, the book presents a diverse spectrum of current safe and efficacious MIS procedures and future innovations. Nonsurgical approaches include injection-based spine procedures and stereotactic radiosurgery. Surgical technique chapters discuss MIS anterior, posterior, and lateral approaches to the cervical, thoracic, and lumbar spine, with procedures such as endoscopic microdiscectomy, vertebroplasty and kyphoplasty, percutaneous instrumentation, and robotic spine surgery. Key Features Step-by-step illustrations, including more than 400 depictions by master surgical and anatomic illustrator Anthony Pazos portray the surgeon’s-eye-view of anatomy, intraoperative images, and surgical instruments, thereby aiding in the understanding of anatomy and procedures 20 online videos feature real-time operative fluoroscopy, pertinent anatomy, operative set-up, and common cervical, thoracic, and lumbar approaches Discussion of novel MIS techniques reflected in 16 new or expanded chapters, including Robotic Assisted Thoracic Spine Surgery and Stem-Cell Based Intervertebral Disc Restoration There is truly no better clinical reward for spine surgeons than giving patients suffering from debilitating spinal disorders their life back. This quintessential MIS spine surgery resource will help surgeons and clinicians accomplish that goal.

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Minimally Invasive Spine Surgery combines up-to-date research on surgical techniques with high-definition surgical video and concise algorithmic evidence. Each of its sixteen chapters begins with a brief summary followed by imaging indications, instrumentation, a step-by-step surgical technique (and video guide), as well as the potential complications and adverse outcomes that may develop. Techniques discussed in the text include: Posterior Cervical Foraminotomy; Percutaneous Posterior Pedicle Screw Placement; Lumbar Discectomy; Transforaminal Lumbar Interbody Fusion (TLIF); Lateral Lumbar Interbody Fusion (LLIF). Also included is a discussion on the types of implants and instrumentation available today and the potential advantages they offer, making Minimally Invasive Spine Surgery an essential and relevant book for orthopaedic and neurosurgeons. Key Points Authored by experts from Rush University Medical Centre and Thomas Jefferson University Hospital in the United States Includes DVD to enhance clinical instruction 273 full colour illustrations Handbook of Spine Surgery, Second Edition, is a completely updated and comprehensive reference that distills the basic principles of contemporary spine surgery. Its coverage of both principles and techniques makes it an excellent refresher before surgery or a valuable daily companion for residents and surgeons caring for patients with spinal disorders. Key Features of the Second Edition: New chapters on adult degenerative deformity, pediatric scoliosis and radiographic principles of deformity Expanded spinal trauma section now includes separate chapters on cervical, thoracolumbar, and sacropelvic injuries Common clinical questions (with answers) at the end of each chapter highlight topics frequently encountered in the operating room and on board exams Easy-to-read bulleted format The second edition of this handbook is the go-to guide for all those involved in spine surgery. This book offers essential guidance on selecting the most appropriate surgical management option for a variety of spinal conditions, including idiopathic problems, and degenerative disease. While the first part of the book discusses the neuroanatomy and biomechanics of the spine, pain mechanisms, and imaging techniques, the second guides the reader through the diagnostic process and treatment selection for disorders of the different regions of the spine, based on the principles of evidence-based medicine. i.e., it clearly explains why a particular technique should be selected for a specific patient on the basis of the available evidence, which is carefully reviewed. The book identifies potential complications and highlights technical pearls, describing newer surgical techniques and illustrating them with the help of images and accompanying videos. Though primarily intended for neurosurgeons, the book will also be of interest to orthopaedic surgeons, specialists in physical medicine, and pain specialists. Unique resource provides spine surgeons with the right tools and mindset to perform minimally invasive surgery Minimally Invasive Spine Surgery: A Primer by Luis Manuel Tumialán is the ideal introduction to minimally invasive spine approaches, especially for neurosurgery and orthopedic residents, fellows, and spine surgeons who want to incorporate minimally invasive approaches into their practice. The Primer offers a treasure trove of 3D illustrations and animations that virtually brings the aspiring minimally invasive spine surgeon into the operating room alongside their professor. The
text starts with a discussion of open spine surgery versus minimally invasive procedures and the optimal mindset required to convert from one to the other. The book is divided into lumbar, cervical, and thoracic spine sections, and a fourth section dedicated to the fundamentals of fluoroscopy and radiation exposure. The text begins with an overview, history, and evolution of each procedure, followed by a discussion of the anatomical basis for using a minimally invasive approach. Each anatomical section starts with the least complicated surgeries, thereby laying the foundation for more complex procedures discussed in subsequent chapters. The third section focuses on thoracic decompression, nerve sheath tumors in the lumbar and thoracic spine, and management of metastatic disease and intradural extramedullary lesions. Key Features Single-authored text provides uniform readability and philosophy—cover to cover Lumbar approaches include microdiscectomy, laminectomy, transforaminal interbody fusions, and the transposas approach. Cervical procedures encompass posterior foraminotomy, laminectomy, and anterior disectomy. Superb illustrations, high-fidelity anatomical animations based on computer modeling, and procedural videos enhance understanding of minimally invasive spine principles. This unique, single-author Primer is a must-have resource for early-career spine surgeons who wish to learn minimally invasive principles, as well as veteran surgeons who have a desire to incorporate minimally invasive spine surgery into clinical practice. Revised, updated, and expanded for its Third Edition, Anatomic Exposures in Vascular Surgery, is an indispensable guide for the vascular surgeon planning an operation. This classic anatomic reference contains over 550 drawings by a renowned surgeon and illustrator depicting the complex anatomy of the vasculature and surrounding structures, and demonstrating the ideal exposure techniques. The original illustrations will be presented in full color to fully convey three-dimensional concepts of anatomic relationships of the blood vessels and their surrounding structures, which will help to guide surgical decision-making in vascular surgery. Concise legends and text describe the anatomy in relation to the surgical approach. The book is organized by body region, and chapters are divided into anatomic overview and surgical approach sections, which allows the book to be used for extensive study or quick review, depending on the needs of the reader. New sections to this edition include forearm compartment syndrome, forearm fasciotomy, and vascular exposure of the lumbar spine. New concepts regarding surgical approaches to the blood vessels are updated in each chapter along with up-to-date references. 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. 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. Get comprehensive, practical coverage of both surgical and non-surgical treatment approaches of the world’s most trusted authorities in spine surgery and care. Rothman-Simeone and Herkowitz’s The Spine, 7th Edition, edited by Drs. Steven R. Garfin, Frank J. Eismont, Gordon R. Bell, Jeffrey S. Fischgrund, and Christopher M. Bono, presents state-of-the-art techniques helping you apply today’s newest developments in your practice. Highlights critical information through the use of pearls, pitfalls, and key points throughout the text, as well as more than 2,300 full-color photographs and illustrations. Offers a newly revised, streamlined format that makes it easier than ever to find the information you need. Contains new chapters on the clinical relevance of finite element modeling and SI joint surgery. Includes an expanded section on minimally invasive spine surgery, including recent developments and future directions. Provides the latest evidence-based research from high-quality studies, including new randomized controlled trials for lumbar stenosis, surgery, fusion, and injections. Presents the knowledge and expertise of new international contributors, as well as new editorial leadership from Dr. Steven Garfin. This new edition has been fully revised to provide spine surgeons with the latest advances in their field. Beginning with an overview of surgical anatomy of the spine, the following chapters describe numerous surgical techniques for each section of the spine—cervical, thoracic, and lumbosacral. The text covers both traditional and new procedures, and includes discussion on recent technologies such as disk arthroplasty and minimally invasive techniques. The final section of this comprehensive volume focuses on associated practices including graft harvesting, discography, and cement augmentation. Authored by renowned experts in the field, this guide is enhanced by clinical photographs and diagrams. A list of “key points” summarizes the most important aspects in each chapter. Previous edition (9789350903261) published in 2013. Key points Fully revised, new edition presenting latest advances in spinal surgery Covers techniques for each section of the spine. Authored by internationally recognised, US-based experts in the field. Previous edition (9789350903261) published in 2013. Endoscopic technology has advanced to the point where practitioners can now access, visualize, and treat spine pathologies previously only accessible through open surgical approaches. Endoscopic Spine Surgery 2nd Edition provides a comprehensive background on endoscopic spine surgery and covers an unparalleled number of minimally invasive spine procedures that have revolutionized the spine treatment paradigm. Readers will greatly benefit from many years of expertise and wisdom shared by master spine surgeons Daniel Kim, Gun Choi, Sang-Ho Lee, and Richard Fessler, and their expert contributors. Due to the narrow endoscopic view, subtle microanatomical differences in the lumbar, thoracic, and cervical regions are not always easy to visually discern. To address this challenge, the book contains detailed procedural descriptions and images mirroring endoscopic views spine surgeons encounter in the OR. Organized anatomically, 53 chapters guide readers systematically through lumbar, thoracic, cervical, and craniocevical junction procedures for pathologies ranging from low back pain and deformities to tumors, lesions, infections, and trauma. Key Features More than 1000 high-quality images including color procedural photos and line drawings. Endoscopic spine pathologies and procedures delineated in 75 videos accessible via the Media Center. From case studies to step-by-step technique tutorials. Covers the full spectrum of spine endoscopy, including percutaneous approaches, microdiscectomy, laminectomy, discectomy foraminotomy, hemilaminectomy, thoracic decompressions, fusion, fixation, and thoracoscopic procedures. The use of state-of-the-art technology such as ultrasonic bone dissectors, endoscopic radiofrequency denervation, the video telescope operating monitor (VITOM), minimally invasive tubular retractors, and 3D stereotubular endoscopic systems. Neurosurgical and orthopaedic residents, spine fellows, and seasoned spine surgeons will all greatly benefit from the significant knowledge and insights revealed in this remarkable multimedia resource. This book may also be of interest to neurosurgeons and orthopaedic nurses, physical therapists, chiropractors, and medical device professionals. A comprehensive guide to anesthesia specifically for spine surgery, explaining procedures from the point of view of both anesthesiologists and surgeons.
Endoscopic spine surgery essentials from expert spine surgeons Atlas of Full-Endoscopic Spine Surgery by internationally renowned spine surgeons Christoph Hofstetter, Sebastian Ruettten, Yue Zhou, and Michael Wang provides concise, step-by-step guidance on the latest full endoscopic spine procedures. The book is targeted at practicing spine surgeons, fellows, and residents currently not trained in endoscopic spine surgery who have the desire to learn and incorporate these techniques into clinical practice. It is also an excellent curriculum resource for cadaveric training courses taught at the national and international level. The book lays a solid foundation with opening chapters on anesthesia, OR setup and endoscopic tools, applied anatomy, basic endoscopic surgical tasks, and preoperative diagnostics. Additional sections include step-by-step descriptions of the full spectrum of cervical, thoracic, and lumbar endoscopic approaches. The last section provides invaluable pearls on overcoming challenges, avoiding pitfalls, and optimizing postoperative care. Key Features Transforaminal endoscopic lumbar and thoracic discectomy approaches Trans-SAP endoscopic approach for foraminal and lateral recess decompression Interlaminar endoscopic lumbar discectomy Cervical/thoracic and lumbar unilateral laminotomy for bilateral decompression Special topics including endoscopic management of challenging cases, endoscopic revision surgery, and management of complications. Neurosurgery residents, fellows, young practicing neurosurgeons, and all healthcare practitioners involved in the care of endoscopic spine surgery patients will gain invaluable insights from this book. The desire to expose the spine for surgery by anterior approaches at any level between the head and the sacrum is not new. Spinal pathology is often located anterior to the spinal cord and nerve roots in the cervical and thoracic spine, and anterior to the peripheral nerves that emerge from the lumbosacral spine below the first lumbar vertebra. To treat such pathology one prefers to expose the front of the spine directly and widely enough to eradicate the pathology and to have full control of bleeding throughout the procedure. The posterior elements of the spine are important for mechanical stability of the spine, and therefore for the protection of the neural and vascular structures in the spine that would be threatened by instability. Extensive eradication of pathology posterior to the spinal canal and the intervertebral foraminae, including the transverse processes, may leave no adequate bony bed for the surgical creation of a stabilizing osseous fusion. In such a situation, an anterior fusion procedure is the only viable alternative to a posterior or posterolateral fusion. In situations where it is critically important to obtain a stable fusion, as in tuberculosis of the spine, both an anterior and a posterior fusion operation at the same motion segments is, in almost every instance, a guarantee of a stable osseous fusion. One should know both approaches. This book accentuates the anatomy involved in spine surgery techniques, from the base of the skull down to the sacrum and the sacroiliac joint. It includes extensive illustrations that cover all major spine surgeries. It also discusses the instrumentations used with different operative approaches. The book features high-resolution pictures of operative dissection, cadaveric specimens, and intraoperative imaging that clearly illustrate the relevant anatomy of various spine surgery procedures, allowing surgeons to “reconstruct” a three-dimensional anatomical view when performing the surgery. As such, it is a valuable reference resource for spine surgeons. Prepared by the Cervical Spine Research Society, this comprehensive surgical atlas demonstrates the full range of operative techniques for treating cervical spine disorders. Internationally renowned experts provide thoroughly illustrated step-by-step instructions on patient preparation, approaches to the cervical spine, and all current decompression, graft, fixation, and stereotactic techniques. The consistent chapter organization allows easy access to information. Chapters on approaches cover limits of exposure; anatomy; dangers; perioperative considerations; operating room setup; instruments; positioning; skin incisions; deep dissection; closure; and postoperative management. Chapters on techniques cover indications/contraindications; benefits/limitations; recommended approach; perioperative considerations; operating room setup; instruments; biomechanical considerations; technique; and postoperative management. This book is an invaluable surgical guide giving readers the essential tools needed to successfully perform spine surgery. It provides a distinctive view of complex spinal anatomy that facilitates a better understanding of the subtleties of both open and technically demanding minimally invasive spine procedures. Key Features: An introductory chapter on patient positioning covers the basics for common cervical, thoracic, and lumbar procedures Detailed illustrations with unique anatomical overlays are provided for each step in a surgical procedure The procedures included represent most of those encountered in a typical spine surgery practice Tips and Pearls before you begin, key
steps with visuals, and Potential Pitfalls are included for each procedure. This atlas will serve as a valuable resource to orthopedic surgeons, neurosurgeons, and surgical trainees as well as physician assistants, surgical nurses, and all those involved in the operative care of patients undergoing spine surgery.

Part of the popular Tips and Tricks series, Emory Spine: Illustrated Tips and Tricks in Spine Surgery provides succinct and practical advice acquired from years of expert practice in spine surgery. Led by John M. Rhee, MD from the Emory University Department of Orthopaedic Surgery and Emory University Spine Fellowship, this visually stunning reference focuses exclusively on detailed descriptions of technical tips and tricks for all aspects of spine surgery. This unique approach will be highly useful to everyone from orthopaedic and neurosurgery spine fellows and residents, to practicing spinal surgeons—anyone who would benefit from exposure to the wisdom that experienced attending surgeons pass on to those who are training or working in this complex field.

The author, a number of acclaimed, best-selling surgical atlases has collaborated again with an award-winning artist to produce another invaluable surgical resource. This highly regarded team provide a master-class in the demonstration of surgically relevant anatomy. Masquelet has attained world-renown for his innovative flaps for reconstructive plastic surgery of the limbs, in this book he displays his unrivalled knowledge of surgery of the trunk, head, and neck. Every point of entry in required surgical procedures is described, and every procedure is illustrated with a sequence of drawings, displayed as the surgeon would see them, together with anatomical cross-sections.

This atlas is a comprehensive review of spine surgery, discussing traditional and new techniques. Divided into sections, the first part introduces surgical anatomy. The following sections focus on procedures for different parts of the spine—cervical, thoracic and lumbar spine; adult and pediatric; degenerative, deformity, tumors, fractures, infections and more. It also discusses indications, conditions, surgical technique, pre- and postoperative care and possible complications. Highly visual, this text contains 700 new illustrations.

There has been an exponential increase in the volume and quality of published research relating to spine care over the last several decades. Among thousands of articles, a small fraction has been shown to be truly “game changing,” forcing the entire field to pause and take notice. These landmark studies may describe a new procedure or surgical approach, evaluate the relative effects of known treatments or techniques, introduce a new classification system, or provide new insights into natural history or disease prognosis. Such studies form the foundations of spine surgery today. This book will be a useful reference not only to the established spine surgeon, but also to neurosurgery and orthopedic residents, as well as to spine surgery fellows as they continue to fortify their knowledge surrounding spinal disorders. Further, this will no doubt serve as a useful evidence-based resource for trainees studying for professional examinations and perhaps most importantly challenge and inspire clinicians to produce high-quality impactful research.

In the latest edition of Benzel’s Spine Surgery, renowned neurosurgery authority Dr. Edward C. Benzel, along with new editor Michael P. Steinmetz, deliver the most up-to-date information available on every aspect of spine surgery. Improved visuals and over 100 brand-new illustrations enhance your understanding of the text, while 26 new chapters cover today's hot topics in the field. A must-have resource for every neurosurgeon and orthopedic spine surgeon, Benzel's Spine Surgery provides the expert, step-by-step guidance required for successful surgical outcomes. Glean essential, up-to-date information in one comprehensive reference that explores the full spectrum of techniques used in spine surgery. Covers today’s hot topics in spine surgery, such as pelvic parameters in planning for lumbar fusion; minimally invasive strategies for the treatment of tumors and trauma of the spine; and biologics and stem cells. A total of 18 intraoperative videos allow you to hone your skills and techniques. New editor Michael P. Steinmetz brings fresh insights and improvements to the text. Features the addition of 26 chapters, including: -Biologics in Spine Fusion Surgery -Endoscopic and Transnasal Approaches to the Craniovertebral Junction -Cellular Injection Techniques for Discogenic Pain -Minimally Invasive Techniques for Thoracolumbar Deformity -Spinal Cord Herniation and Spontaneous Cerebrospinal Fluid Leak -MIS Versus Open Spine Surgery Extensive revisions to many of the existing chapters present all of the most up-to-date information available on every aspect of spine surgery. Improved visuals and over 100 brand-new illustrations enhance learning and retention.

Spinal surgeons treat spinal trauma patients on a regular basis in their hospital emergency rooms. This well-illustrated, hands-on guide to the many surgical techniques required in these situations provides a solid basis for the management of spinal trauma. A high-yield and comprehensive text-and-video resource for managing commonly encountered spinal conditions, Spine surgery has experienced several paradigm shifts during the past few decades, with highly complex techniques introduced at an astounding rapid pace. In order for new generations of spine surgeons to stay current and thrive in this innovative era of spine surgery, access to diverse multimedia learning tools is imperative. Video Atlas of Spine Surgery by renowned spine surgeon and educator Howard An and Rush University Medical Center colleagues Philip Louie, Bryce Basques, and Gregory Lopez, is a cutting-edge resource for non-operative and operative management of a diverse spectrum of cervical, thoracic, and lumbar spine conditions. Consisting of 19 chapters, the text is streamlined to facilitate learning the most important steps for each procedure. The book begins with discussion of physical exam maneuvers...
used to accurately diagnose specific spinal pathologies. Subsequent chapters detail extensive spine surgery techniques for managing degenerative cervical and lumbar conditions. The remaining chapters cover spinal cord, cervical, and thoracolumbar injuries; idiopathic, degenerative, and early-onset scoliosis; kyphosis; spondylolisthesis; spinal infections and inflammatory disorders; and thoracic disc disorders. Key Features Concise, bulleted text and consistent chapter outlines feature epidemiology and prevalence, pathogenesis, clinical presentation, image findings, classification, conservative and surgical management, techniques, postoperative care, and more. A myriad of meticulous diagrams and illustrations, spinal imaging and photographs, and 50 high-quality spine surgery videos maximize learning. Technical pearls, case examples, and board-style orthopaedic surgery questions at the end of each section optimize comprehension and retention of information. This remarkable resource is a must-have for orthopaedic and neurosurgery residents and fellows, as well as practicing spine surgeons. This book includes complimentary access to a digital copy on https://medone.thieme.com.

Give your patients the non-surgical spine pain relief they need with help from the Atlas of Image-Guided Spinal Procedures by Dr. Michael Bruce Furman. This medical reference book features a highly visual atlas format that shows you exactly how to safely and efficiently perform each technique step-by-step. A unique, systematic, safe, and efficient approach makes Atlas of Image-Guided Spinal Procedures your go-to resource for spine pain relief for your patients. The highly visual format shows you exactly how to perform each technique, highlighting imaging pearls and emphasizing optimal and suboptimal imaging. Updated content includes ultrasound techniques and procedures for “spine mimickers,” including hip and shoulder image-guided procedures, keeping you on the cutting edge of contemporary spine pain-relief methods. Safely and efficiently relieve your patients’ pain with consistent, easy-to-follow chapters that guide you through each technique. Highly visual atlas presentation of an algorithmic, image-guided approach for each technique: trajectory view (demonstrates fluoroscopic “set up”); multi-planar confirmation views (AP, lateral, oblique); and safety view (what should be avoided during injection), along with optimal and suboptimal contrast patterns. Special chapters on Needle Techniques, Procedural Safety, Fluoroscopic and Ultrasound Imaging Pearls, Radiation Safety, and L5-S1 Disc Access provide additional visual instruction. View drawings of radiopaque landmarks and key radiolucent anatomy that cannot be viewed fluoroscopically. Includes new and unique diagrams demonstrating cervical, thoracic, and lumbar radiofrequency probe placement and treatment zones on multi-planar views. Features new coverage of ultrasound techniques, as well as image-guided procedures for “spine mimickers,” such as hip and shoulder.