

Sciences Basic To Orthopaedics

Accompanying CD-ROM contains exactly the same information as the book.

This volume of the Orthopaedic Study Guide Series provides the foundation of general orthopedic and basic science. Chapters of this book cohere around three aspects of the musculoskeletal system, anatomy, physiology, and pathology. Next to basic principles, case reports underline key information relating to disorders, diagnosis, and treatment options. Written by leading experts, this volume is a concise guide designed as quick reference, thereby it presents a useful resource for orthopedic residents and fellows.

Articular Cartilage Injury of the Knee is a comprehensive reference that combines the basic scientific knowledge of articular cartilage as it relates to patient health and disease with patient-focused diagnosis and treatment options. This book emphasizes the importance of bridging the divide between basic science and clinical applications in order to select the best possible treatment when injuries occur. Key Features: Provides clinically-relevant information on each topic that can easily be applied in practice Showcases the latest techniques in transplantation and scaffolds for cartilage repair Includes a focused chapter on assessment outcomes after cartilage repair of the knee Written and edited by leading orthopedic surgeons and basic science experts who represent the most current philosophy of effective management of articular cartilage injury of the knee Orthopedic surgeons specializing in the lower extremity will find this book to be an excellent resource that they can consult to guide them in the treatment of patients with articular cartilage injury of the knee.

Get your hands on this concise, visual guide to orthopaedics packed with the absolutely essential facts!. --Book Jacket.

"This edition represents the scientific basis of orthopaedic surgery as of 2020. It is intended to inform clinical decision making by providing the basic sciences in a clinically relevant context. The production of the fifth edition of Orthopaedic Basic Science was a substantial undertaking contributed to by each of the authors. The author list is comprised of senior scientists and clinicians, and rising stars, a healthy mixture that reflects well on both sustained personal commitments and expectations for the future. Reflecting the growth in orthopaedic scientific information, all the previously included chapters have been revised and many new chapters have been added. Molecular biology has been refocused to emphasize the role of epigenetics. Biomaterials, repair, and tissue engineering are also emphasized. The significance of articular crosstalk is presented together with new chapters on joint biology and osteoarthritis. Consideration of gender differences in preclinical and clinical studies recognizes the spectrum of biological responses and the presentation of metabolic bone diseases acknowledges the importance of secondary fracture prevention. A completely redone section on the generation of clinical information recognizes advances in methodology, the assessment of large databases and the growth of registries, and best-practice guidelines"--

Netter's Concise Orthopaedic Anatomy is a best-selling, portable, full-color resource excellent to have on hand during your orthopaedic rotation, residency, or as a quick look-up in practice. Jon C. Thompson presents the latest data in thoroughly updated diagnostic and treatment algorithms for all conditions while preserving the popular at-a-glance table format from the previous edition. You'll get even more art from the Netter Collection as well as new radiologic images that visually demonstrate the key clinical correlations and applications of anatomical imaging. For a fast, memorable review of orthopaedic anatomy, this is a must-have. Maintains the popular at-a-glance table format that makes finding essential information quick and convenient. Contains useful clinical information on disorders, trauma, history, physical exam, radiology, surgical approaches, and minor procedures in every chapter. Lists key information on bones, joints, muscles, and nerves in tables correlate to each Netter image. Highlights key material in different colors—pearls in green and warnings in red—for easy reference. Features both plain film and advanced radiographic (CT and MRI) images, along with cross-sectional anatomic plates for an even more thorough visual representation of the material. This "updated" second edition includes test-yourself images and notes. All other content is the same as the 2010 2nd edition.

This book is designed to meet the needs of both novice and senior researchers in Orthopaedics by providing the essential, clinically relevant knowledge on research methodology that is sometimes overlooked during training. Readers will find a wealth of easy-to-understand information on all relevant aspects, from protocol design, the fundamentals of statistics, and the use of computer-based tools through to the performance of clinical studies with different levels of evidence, multicenter studies, systematic reviews, meta-analyses, and economic health care studies. A key feature is a series of typical case examples that will facilitate use of the volume as a handbook for most common research approaches and study types. Younger researchers will also appreciate the guidance on preparation of abstracts, poster and paper presentations, grant applications, and publications. The authors are internationally renowned orthopaedic surgeons with extensive research experience and the book is published in collaboration with ISAKOS.

Revision of: Brinker, Piermattei, and Flo's handbook of small animal orthopedics and fracture repair / Donald L. Piermattei, Gretchen L. Flo, Charles E. DeCamp. c2006. 4th ed.

This volume in the Core Knowledge in Orthopaedics Series equips you with the key concepts and clinical skills needed to excel in the subspecialty of adult reconstruction and arthroplasty. Inside you'll find concise, clinically focused coverage of the surgical techniques you need to know to obtain optimal patient management outcomes, along with relevant anatomy, biomechanics, limb salvage techniques, imaging, arthroscopy, and more. It's a perfect resource for training...board certification or recertification review...or everyday clinical reference! Apply the guidance in a logical fashion with coverage that progresses from describing commonly seen clinical problems to reviewing less frequently encountered conditions. Follow the most appropriate surgical management approaches. Assimilate the information easily through bulleted text, crisp artwork, clinical charts, tables, algorithms, and annotated key references.

One of the hallmarks of a master surgeon is the ability to navigate a wide variety of inevitable difficult situations in surgery, whether errors in judgment, technical mistakes, or unavoidable outcomes. Complications in Orthopaedic Surgery is a new series designed to provide real-world guidance on recognizing and avoiding errors, as well as how to "course-correct during surgery. In this inaugural volume dedicated to sports medicine surgery, series editor Dr. Stephen R. Thompson and Dr. Matthew Schmitz describe and demonstrate practical solutions that are integral to improving patient outcomes. Covers a wide variety of procedures, including meniscus repair and transplantation, revision ACL reconstruction, pediatric ACL surgery, cartilage surgery in adults and children, knee osteotomies, acromioclavicular surgery, hip arthroscopy, and much more. Describes and offers solutions to the most common or most devastating errors and complications in the practice of sports medicine surgery, combining the breadth of knowledge of academic surgeons with the in-the-trenches skills of community surgeons. Uses an easy-to-follow, standardized chapter format that covers preoperative errors, intraoperative issues, and postoperative complications. Includes procedural video clips to reinforce discussions in the text. Features a full-color design with numerous photographs, radiographs, and illustrations. Heterotopic Ossification: Basic Science, General Principles, and Clinical Correlates in Orthopedic Surgery is a comprehensive, informative approach to understanding the basics through the detailed complexities of heterotopic ossification (HO). The chapters in this book are structured into three main sections: (1) general principles of heterotopic ossification; (2) heterotopic ossification in major anatomic joints; and (3) additional topics and specifics of heterotopic ossification. Each individual chapter is a contribution from a leading expert in the respective subtopic of HO. As a cohesive unit, this book provides a complete reference for students,

scientists, clinicians and orthopedic surgeons who find interest in HO or encounter it in the course of patient care.

Noted authority Mark D. Miller, MD, together with a stellar editorial team and numerous contributors representing a breadth of specialty areas within orthopaedics and primary care, offers you the comprehensive, multidisciplinary insight you need to confidently diagnose and treat sprains, fractures, arthritis and bursitis pain, and other musculoskeletal problems, or refer them when appropriate. Videos on DVD demonstrate how to perform 29 joint injections, 7 common physical examinations, a variety of tests, and 6 splinting and casting procedures. Presents multidisciplinary coverage that provides authoritative orthopaedic guidance oriented towards the practical realities of primary care practice.

This book provides an introduction to the basic sciences pertaining to the musculoskeletal tissues as well as to the clinical practice, i.e., diagnosis and treatment of the wide variety of disorders and injuries from which these tissues may suffer. Its scope includes the "surgical" subjects of orthopaedics and fractures as well as the "medical" subjects of rheumatology, metabolic bone disease and rehabilitation. Compatibility: BlackBerry® OS 4.1 or Higher / iPhone/iPod Touch 2.0 or Higher / Palm OS 3.5 or higher / Palm Pre Classic / Symbian S60, 3rd edition (Nokia) / Windows Mobile™ Pocket PC (all versions) / Windows Mobile Smartphone / Windows 98SE/2000/ME/XP/Vista/Tablet PC

The vast majority of orthopaedic care takes place not in the orthopaedic surgeon's office or operating room but in various primary care settings. Essential Orthopaedics, 2nd Edition, provides concise, practical guidance from noted authority Dr. Mark D. Miller, along with a stellar editorial team and numerous contributors from both orthopaedics and primary care. Using a templated, bulleted format, it delivers the information you need on diagnosis, management, and appropriate referrals for adult and pediatric patients. It's the perfect, everyday orthopaedic reference for primary care physicians, physician assistants, nurse practitioners, physical therapists, and athletic trainers in the clinic or training room. Offers expert insight to help you confidently diagnose and treat sprains, fractures, arthritis and bursitis pain, and other musculoskeletal problems, or refer them when appropriate. Covers topics of high importance in orthopaedic care: anatomy and terminology, radiologic evaluation of orthopaedic conditions, principles of fracture management, and special considerations for the obese, the elderly, athletes, those with comorbidities, and other patient populations. Features 40 videos covering injections, physical examinations, common procedures, and more. Includes 12 new chapters with current information on physical exam of the hip and pelvis, femoroacetabular impingement (FAI), athletic pubalgia, state-of-the-art surgical techniques, and new imaging information, particularly in the area of musculoskeletal ultrasound. Provides new ICD-10 codes for common orthopaedic conditions. Features diagnostic algorithms, specific steps for treatment, and full-color illustrations throughout.

Obtain the best outcomes from the latest techniques with help from a "who's who" of orthopaedic trauma experts! In print and online, you'll find the in-depth knowledge you need to manage any type of traumatic injury in adults. Major updates keep you up to speed on current trends such as the management of osteoporotic and fragility fractures, locked plating technology, post-traumatic reconstruction, biology of fracture repair, biomechanics of fractures and fixation, disaster management, occupational hazards of radiation and blood-borne infection, effective use of orthotics, and more. A DVD of operative video clips shows you how to perform 25 key procedures step by step. A new, full-color page layout makes it easier to locate the answers you need quickly. And now, for the first time, you can access the complete contents online, for enhanced ease and speed of reference! Complete, absolutely current coverage of relevant anatomy and biomechanics, mechanisms of injury, diagnostic approaches, treatment options, and associated complications equips you to confidently approach every form of traumatic injury.

This new compilation of Dr. Netter's famous drawings includes the work of his talented successors, who faithfully uphold the Netter tradition in their skillful depiction of the latest techniques and procedures. This new atlas-quality reference provides an essential overview of pathophysiology, diagnosis, and treatment of musculoskeletal disorders. Clear and straightforward accompanying text describes the anatomy, basic science, and fundamental principles of evaluation and treatment that guide every clinical intervention. Features more than 350 informative, beautifully drawn illustrations either by, or in the style of, Frank H. Netter, MD. Provides relevant anatomy and basic science in the beginning of each chapter to lay the foundation for understanding the pathophysiology, diagnosis, and treatment of each clinical condition. Covers individual topics affecting the entire musculoskeletal system, such as arthritic disorders, fractures, rehabilitation, and nerve disorders. Organizes diagnostic and therapeutic techniques by region to help you apply management principles in practice.

Evidence suggests a direct correlation between the quality of postoperative orthopaedic rehabilitation and the effectiveness of the surgery. Clinical Orthopaedic Rehabilitation, 4th Edition, helps today's orthopaedic teams apply the most effective, evidence-based protocols for maximizing return to function following common sports injuries and post-surgical conditions. Charles Giangarra, MD and Robert Manske, PT continue the commitment to excellence established by Dr. S. Brent Brotzman in previous editions, bringing a fresh perspective to the team approach to rehabilitation. Every section is written by a combination of surgeons, physical therapists, and occupational therapists, making this respected text a truly practical "how-to" guide for the appropriate initial exam, differential diagnosis, treatment, and rehabilitation. Treatment and rehabilitation protocols are presented in a step-by-step, algorithmic format with each new phase begun after criteria are met (criteria-based progression, reflecting current best practice). Revised content brings you up to date with new evidence-based literature on examination techniques, classification systems, differential diagnosis, treatment options, and criteria-based rehabilitation protocols. Extensive updates throughout include new chapters on: medial patellofemoral ligament, shoulder impingement, pec major ruptures, thoracic outlet syndrome, general humeral fractures, foot and ankle fractures, medial patellofemoral ligament reconstruction, the arthritic hip, athletic pubalgia, and labral repair and reconstruction.

Basic Orthopaedic Sciences, Second Edition CRC Press

This eBook provides access to the complete book content electronically. Pageburst (formerly Evolve eBooks) allows you to quickly search the entire book, make notes, add highlights, and study more efficiently. Buying other Pageburst titles makes your learning experience even better: all of the eBooks will work together on your electronic "bookshelf", so that you can search across your entire library of eBooks. Feline Orthopedic Surgery and Musculoskeletal Disease is the first book dedicated specifically to treating cats with disorders in this specific area. The practice of feline orthopedic surgery and traumatology has developed to a great extent over the last ten years as cat ownership is increasing and this textbook discusses new veterinary diagnostic procedures and surgical techniques that have been developed that veterinarians, residents and students working in the field of internal medicine need to know about. Covers the basics of feline anesthesia, analgesia, preoperative and postoperative care of the patient, orthopedic instrumentation and implants Contains detailed sections on investigation and diagnosis of feline orthopedic diseases

and injuries, with specific chapters on diseases of the footpads and nails, tumors of the musculoskeletal system, and polytrauma. Surgical techniques of feline orthopedic diseases and injuries are explained step-by-step with many schematic illustrations. Presents both classical treatments using cost-effective implants and new osteosynthesis techniques using modern implants. Over 20 new and original surgical methods are included.

Extensively illustrated with high-quality radiographs and line diagrams, this undergraduate orthopaedics and trauma textbook has been fully updated for its third edition.

Designed with the practicing clinician in mind, *Biologics in Orthopaedic Surgery* provides a succinct, easy-to-digest overview of the integration of biologics (platelet-rich-plasma [PRP], bone marrow aspirate [BMA], and stem cells) into today's orthopaedic practice. Covering relevant basic science as well as clinical applications, this concise reference takes a head-to-toe approach to the emerging role of orthobiologics for specific conditions and procedures, in addition to future directions for implementation.

Quickly reference the answers you need to the most important clinical questions in orthopedics with *Orthopedic Secrets*. Fully updated throughout, this classic medical reference book covers the entire range of essential topics in orthopedics, organized by subspecialty, for rapid access to the knowledge you need for success both in practice and on board and recertification exams. Consult this title on your favorite e-reader, conduct rapid searches, and adjust font sizes for optimal readability. Zero in on key orthopedic information with a question-and-answer format, bulleted lists, mnemonics, and practical tips from the authors. Enhance your reference power with "Key Points" boxes and lists of useful websites. Review essential material efficiently with a "Top 100 Secrets" chapter, perfect for last-minute study or self-assessment. Take a fresh, updated approach to orthopedics with new editors and authors from the world-class orthopedic program at the University of Pennsylvania. Focus on the details most relevant to your needs through a new case-based approach that's perfect for student or resident reference/review, or for any practitioner looking for a broad overview of the field.

AAOS Comprehensive Orthopaedic Review, 3rd edition offers sweeping coverage of the core of orthopaedic knowledge that spans the spectrum of the orthopaedic specialties. This convenient, comprehensive and user-friendly text combines the specific information you need to prepare for your examination.

Specific operative and nonoperative techniques and their results are stressed. The book is extensively illustrated with drawings, most of which were made for this book, microscopy photos, and serial radiographs. The reader learns of pediatric orthopedic deformity in relation to normal and abnormal developmental biology, the worsening of untreated disease with growth, and the diagnostic and treatment interventions required based on the stage of progression. * Treatments are correlated with the pathologic state of the disorder * Discusses disorders from earliest onset to the final state showing how the altered biology leads to progressively greater clinical deformity * Initial chapter focuses on development bone biology stressing a broad based approach involving histologic, gene and molecular, and biomechanical features * Subsequent chapters discuss the pathogenesis of the various deformities, natural history, radiographic and imaging findings and orthopaedic and surgical management

The fifth edition of *Orthopaedic Basic Science: Foundations of Clinical Practice* is your concise and clinically relevant resource for the diagnosis and treatment of musculoskeletal diseases and conditions. This completely rewritten edition explains the functions and limitations of the science behind the decisions, treatments, and procedures you perform in your practice every day. Use it to build and reinforce your foundation of knowledge for applying advances in scientific discovery to your decision-making in the clinic and the OR.

This book has been written specifically for candidates sitting the oral part of the FRCS (Tr & Orth) examination. It presents a selection of questions arising from common clinical scenarios along with detailed model answers. The emphasis is on current concepts, evidence-based medicine and major exam topics. Edited by the team behind the successful *Candidate's Guide to the FRCS (Tr & Orth) Examination*, the book is structured according to the four major sections of the examination; adult elective orthopaedics, trauma, children's/hands and upper limb and applied basic science. An introductory section gives general exam guidance and end section covers common diagrams that you may be asked to draw out. Each chapter is written by a recent (successful) examination candidate and the style of each reflects the author's experience and their opinions on the best tactics for first-time success. If you are facing the FRCS (Tr & Orth) you need this book.

Get a quick, expert overview of the role of emerging 3D printing technology in orthopaedic surgery, devices, and implants. This concise resource by Drs. Matthew DiPaola and Felasfa Wodajo provides orthopaedic surgeons and residents with need-to-know information on the clinical applications of 3D printing, including current technological capabilities, guidance for practice, and future outlooks for this fast-growing area. Covers basic principles such as engineering aspects, software, economics, legal considerations, and applications for education and surgery planning. Discusses 3D printing in arthroplasty, trauma and deformity, the adult and pediatric spine, oncology, and more. Includes information on setting up a home 3D printing "plant" and 3D printing biologics. Consolidates today's available information on this burgeoning topic into a single convenient resource.

For nearly a quarter century *Miller's Review of Orthopaedics* and the accompanying annual *Miller Review Course* (www.MillerReview.org) have been must-have resources that residents and practitioners have turned to for efficient and effective exam preparation. This 7th Edition continues to provide complete coverage of the field's most-tested topics, now reorganized to be more intuitive, more user-friendly, and easier to read. Numerous study aids help you ace your exams: a superb art program, including full-color tables, images, and pathology slides; improved concise, bulleted text design; "testable facts" in every chapter; multiple-choice review questions written by experts in the field; and much more. Content and topic emphasis are fully aligned with the ABOS (American Board of Orthopaedic Surgery) and OITE (Orthopaedic In-Service Training Exam) exams, giving you the confidence you need to prepare for certification and recertification. Completely revised sections on anatomy, spine, and tumors, along with input from many new authors, keep you fully up to date. An increased emphasis on imaging, along with the most current results and techniques, ensure that you're prepared for today's exams. Includes new coverage of femoroacetabular impingement, spine trauma, common medications used in orthopaedics, and recent advances in basic sciences.

The latest techniques and advances in the field ... cutting-edge clinical and surgical knowledge ... a clear, bulleted format ... it all adds up to the fully revised 2nd Edition of *Core Knowledge in Orthopaedics: Foot and Ankle*. Perfect for exam review or in preparation for rotations or a challenging clinical case, this easy-to-use resource is designed for busy orthopaedic residents and fellows as well as practitioners who want a quick review of the foot and ankle. Brings you fully up to date with current techniques and advances in the area of foot and ankle, including new developments in orthotics, ankle fractures, Achilles injuries, and more. Features a new, full-color design throughout, plus new chapters on Hallux Rigidus and Sesamoid Pathology and Osteochondral

Lesions of Talus. Presents new and fully revised information in a bulleted, templated format, with summary tables that help you find and retain key information. Includes key facts for quick review and selected references for further reading in every chapter. Shares the knowledge and experience of two experts in the field, Drs. Justin K. Greisberg and J. Turner Vosseller.

Following on from the highly successful first edition, published in 2006, the second edition of Basic Orthopaedic Sciences has been fully updated and revised, with every chapter rewritten to reflect the latest research and practice. The book encompasses all aspects of musculoskeletal basic sciences that are relevant to the practice of orthopaedics and that are featured and assessed in higher specialty exams. While its emphasis is on revision, the book contains enough information to serve as a concise textbook, making it an invaluable guide for all trainees in orthopaedics and trauma preparing for the FRCS (Tr & Orth) as well as for surgeons at MRCS level, and other clinicians seeking an authoritative guide. The book helps the reader understand the science that underpins the clinical practice of orthopaedics, an often neglected area in orthopaedic training, achieving a balance between readability and comprehensive detail. Topics covered include biomechanics, biomaterials, cell & microbiology, histology, structure & function, immunology, pharmacology, statistics, physics of imaging techniques, and kinesiology.

Publisher's Note: Products purchased from 3rd Party sellers are not guaranteed by the Publisher for quality, authenticity, or access to any online entitlements included with the product. Build your Foundation of Basic Science – from Research to Clinical Application A great tool for MOC preparation! A 'must have' for residency! This fourth edition, developed in a partnership between the American Academy of Orthopaedic Surgeons (AAOS) and the Orthopaedic Research Society (ORS), is your concise and clinically relevant resource for the diagnosis and treatment of musculoskeletal diseases and conditions.

Total joint arthroplasty is an effective surgical procedure for end-stage osteoarthritis of major joints with satisfactory long term clinical outcome. A large and growing number of arthroplasties are performed annually worldwide and a great number of orthopaedic surgeons are practicing arthroplasty surgery as their main surgical activity. The biological behavior of the bone-implant interface is crucial for the long term survival of the artificial joint. All factors which have a positive or negative effect on the interface are of great interest for those practicing arthroplasty surgery. Basic scientists and the industry are continuously searching for new implant fixation mechanisms and improved materials. There is an accumulation of a great amount of basic science data (both biological, material and mechanical) related to the incorporation or loosening of the bone-implant interface. However, basic science data does not always translate to satisfactory clinical application, and orthopaedic practitioners often wonder which piece of information is clinically useful. A further problem is that basic scientists often speak their own scientific language and may not fully appreciate common clinical practice needs. In this textbook the biological and mechanical mechanisms of implant incorporation and loosening will be presented. All new data concerning materials and methods for incorporation enhancement will be critically analyzed. Data useful for clinical application will be stressed. Orthopaedic Surgeons will find information which will improve their clinical practice and basic scientists will be helped to understand and appreciate clinical needs.

Basic Orthopaedic Sciences is a brand new book for trainees in orthopaedic surgery covering all aspects of musculoskeletal basic sciences that are relevant to the practice of orthopaedics, as assessed in the FRCS Higher Specialty exams. Based on the authoritative 'Stanmore course' run by the Royal National Orthopaedic Hospital, the book contains enough information to serve as a concise textbook while its emphasis is on revision. The book is a guide to the basic sciences underpinning the practice of orthopaedic surgery, covering aspects of biomechanics, biomaterials, cell & microbiology, histology, structure & function, immunology, pharmacology, statistics, physics of imaging techniques, and kinesiology as relevant to the subject of orthopaedics. The book will help trainees understand the science that underpins the clinical practice of orthopaedics, an often neglected area in orthopaedic training. It covers the breadth of topics in orthopaedic basic science achieving a balance between readability and comprehensive detail. Basic Orthopaedic Sciences is an invaluable guide for all trainees in orthopaedics and trauma preparing for the FRCS, as well as for surgeons at MRCS level.

This text features a problem-oriented approach to the basic sciences component of orthopaedic surgical training. It is intended for quick referral and review purposes.

Now in vibrant full color, Manual of Orthopaedics, Eighth Edition, provides the must-know information you need to diagnose and treat musculoskeletal injuries and diseases with confidence. This quick-reference manual has been completely updated and revised to include content particularly valuable for orthopaedic physician assistants, while retaining key information for orthopaedic residents and nurse practitioners, primary care physicians, and orthopaedic providers in all practice environments.

The Johns Hopkins High-Yield Review for Orthopaedic Surgery is a compact, concise study tool to help residents prepare for Part 1 of the American Board of Orthopaedic Surgery (ABOS) examination and the Orthopaedic In-Training Examination (OITE). The book is also ideal for seasoned clinicians studying for the ABOS recertification exams and motivated medical students preparing for orthopaedic surgery rotations. With its numerous illustrations, streamlined structure and heavily bulleted text, the book is designed as a 'memory-jogger' to supplement basic knowledge of fundamental orthopaedic surgery principles and procedures. This concise third edition offers hands-on guidance for identifying and treating the most commonly seen orthopedic problems in children and adults. Convenient as a study source for medical students, its many photographs and illustrations will also serve as a useful clinical reference for young surgeons, residents, nurses, and physician assistants. Each of the many topics is covered in depth and is designed to educate medical students and steer them towards formulating excellent diagnoses and treatment plans. As a further aid, multiple-choice questions are included at the end of each chapter, and there is a section devoted to case studies.

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