Chapter 36 Skeletal Muscular And Integumentary Systems Section Review 1

The extracellular matrix (ECM) is an ensemble of non-cellular components present within all tissues and organs of the human body. The ECM provides structural support for scaffolding cellular constituents and biochemical and biomechanical support for those events leading to tissue morphogenesis, differentiation and homeostasis. Essential components of all ECMs are water, proteins and polysaccharides. However, their composition, architecture and bioactivity greatly vary from tissue to tissue in relation to the specific role the ECM is required to assume. This book overviews the role of the ECM in different tissues and organs of the human body.

This book clarifies the pathology and genetics of muscle disease for pathologists, clinicians, geneticists and researchers to aid in the diagnosis and management of patients. Organized around the 'motor unit' concept, this book presents the latest understanding of muscle disease, and how this can help identify new treatments.

Provides readers with a detailed understanding of the different facets of muscle physiology. Examines motoneuron and muscle structure and function. It is intended for those need to know about skeletal muscle--from undergraduate and graduate students gaining advanced knowledge in kinesiology to physiotherapists, physiatrists, and other professionals whose work demands understanding of muscle form and function.

One program that ensures success for all students

The aim of this treatise is to summarize the current understanding of the mechanisms for blood flow control to skeletal muscle under resting conditions, how perfusion is elevated (exercise hyperemia) to meet the increased demand for oxygen and other substrates during exercise, mechanisms underlying the beneficial effects of regular physical activity on cardiovascular health, the regulation of transcapillary fluid filtration and protein flux across the microvascular exchange vessels, and the role of changes in the skeletal muscle circulation in pathologic states. Skeletal muscle is unique among organs in that its blood flow can change over a remarkably large range. Compared to blood flow at rest, muscle blood flow can increase by more than 20-fold on average during intense exercise, while perfusion of certain individual white muscles or portions of those muscles can increase by as much as 80-fold. This is compared to maximal increases of 4- to 6-fold in the coronary circulation during exercise. These increases in muscle perfusion are required to meet the enormous demands for oxygen and nutrients by the active muscles. Because of its large mass and the fact that skeletal muscles receive 25% of the cardiac output at rest, sympathetically mediated vasoconstriction in vessels supplying this tissue allows central hemodynamic variables (e.g., blood pressure) to be spared during stresses such as hypovolemic shock. Sympathetic vasoconstriction in skeletal muscle in such pathologic conditions also effectively shunts blood flow away from muscles to tissues that are more sensitive to reductions in their blood supply that might otherwise occur. Again, because of its large mass and percentage of cardiac output directed to skeletal muscle, alterations in blood vessel structure and function with chronic disease (e.g., hypertension) contribute significantly to the pathology of such disorders. Alterations in skeletal muscle vascular resistance and/or in the exchange properties of this vascular bed also modify transcapillary fluid filtration and solute movement across the microvascular barrier to influence muscle function and contribute to disease pathology. Finally, it is clear that exercise training induces an adaptive transformation to a protected phenotype in the vasculature supplying skeletal muscle and other tissues to promote overall cardiovascular health. Table of Contents: Introduction / Anatomy of Skeletal Muscle and Its Vascular Supply / Regulation of Vascular Tone in

Skeletal Muscle / Exercise Hyperemia and Regulation of Tissue Oxygenation During Muscular Activity / Microvascular Fluid and Solute Exchange in Skeletal Muscle / Skeletal Muscle Circulation in Aging and Disease States: Protective Effects of Exercise / References

This newly revised edition contains updated versions of all of the topics that were in the first edition and has been substantially expanded with an additional 5 chapters. Each chapter includes information from the most up-to-date research on how nutritional factors can affect bone health, written with an evidence-based focus and complete with comprehensive references for each subject. Nutrition and Bone Health, second edition covers all aspects of nutrition and the skeleton, from the history and fundamentals, to the effects of macronutrients, minerals, vitamins, and supplements, and even covers the effects of lifestyle, the different life stages, and nutrition-related disorders and secondary osteoporosis. New chapters include HIV & AIDs and the skeleton, celiac disease and bone health, and nutrition and bone health in space. Nutrition and Bone Health, second edition is a necessary resource for health care professionals, medical students, graduate students, dietitians, and nutritionists who are interested in how nutrition affects bone health during all stages of life.

Intensive care unit (ICU) teams have traditionally focused on short term goals, however, recent research demonstrates that many ICU survivors can suffer from ill health and mental health issues for months or years to follow. The book identifies the long term outcomes of ICU and the steps that can be taken to improve patients' health and wellbeing.

Topic editor Dr. Thomas Solomon is the owner of Blazon Scientific company. All other topic editors declare no competing interests with regards to the Research Topic subject.

Get the core knowledge in pain medicine you need from one of the most trusted resources in the field. The new fourth edition guides you through every aspect of pain medicine with concise descriptions of evaluation, diagnosis of pain syndromes, rationales for management, treatment modalities, and much more. From commonly seen pain syndromes, including headaches, trunk pain, orofacial pain, back pain, and extremity pain...through specific pain management challenges such as postoperative pain, pain due to cancer, phantom pain, and pain in the management of AIDS patients...this popular text will equip you with the know-how you need to effectively manage even your most challenging cases. A practical, multidisciplinary approach to pain management makes key concepts and techniques easier to apply to everyday practice. Expert contributors provide the latest knowledge on all aspects of pain management, from general principles through to specific management techniques. Detailed discussions of the latest concepts and treatment plans help you provide the best possible outcomes for all your patients. Extensively updated chapters acquaint you with the most current trends and techniques in pain management. A new section on complications helps you avoid and manage potential pitfalls. A new editorial team ensures that you are getting the freshest, most clinically relevant information available today. New, full-color art clarifies key concepts and techniques.

World-renowned coverage of today’s pharmacology at your fingertips Keeps you up-to-date with new information in this fast-changing field, including significantly revised coverage of CNS drugs, cognitive enhancers, anti-infectives, biologicals/biopharmaceuticals, lifestyle drugs, and more. Includes access to unique features, including more than 100

brand new chapter-specific multiple-choice questions and 6 new cases for immediate self-assessment. Features a color-coded layout for faster navigation and cross-referencing. Clarifies complex concepts with Key Points boxes, Clinical Uses boxes and full-color illustrations throughout.

Knowledge of cardiac ion channels and transporters has advanced remarkably in the last two decades with the development of patch-clamp and molecular biological techniques. This textbook offers a comprehensive overview of structures and functions of ion channels and transporters in the heart. Readers are first introduced to the molecular biology and electrophysiology of all the important ion channels. After discussing their developmental changes, the pharmacology and pathophysiology of clinically-relevant ion channels are reviewed. Molecular aspects of the cardiac excitation-contraction coupling and intracellular Ca2+ regulation by ion transporters are also described. The book will be useful to electrophysiologists, cardiac physiologists and pharmacologists, and molecular biologists interested in ion channels at all levels. For research specialists, the book will provide a perspective of the field. The book can be used as a reference source for working scientists in the fields of ion channels, biophysics, cardiac electrophysiology, and pharmacology. It is aimed at graduate and medical students, designed for use as a textbook for graduate and medical courses.

First developed as an accessible abridgement of the successful Handbook of Stem Cells, Essentials of Stem Cell Biology serves the needs of the evolving population of scientists, researchers, practitioners, and students embracing the latest advances in stem cells. Representing the combined effort of 7 editors and more than 200 scholars and scientists whose pioneering work has defined our understanding of stem cells, this book combines the prerequisites for a general understanding of adult and embryonic stem cells with a presentation by the world's experts of the latest research information about specific organ systems. From basic biology/mechanisms, early development, ectoderm, mesoderm, endoderm, and methods to the application of stem cells to specific human diseases, regulation and ethics, and patient perspectives, no topic in the field of stem cells is left uncovered. Contributions by Nobel Laureates and leading international investigators Includes two entirely new chapters devoted exclusively to induced pluripotent stem (iPS) cells written by the scientists who made the breakthrough Edited by a world-renowned author and researcher to present a complete story of stem cells in research, in application, and as the subject of political debate Presented in full color with a glossary, highlighted terms, and bibliographic entries replacing references

This monograph focuses on the actions exerted by sex hormones, 17?-estradiol and testosterone, in skeletal muscle tissue. An important consideration of this volume is the fact that both estrogen receptors (ERs) and androgen receptors (ARs) are ubiquitously expressed and, as a result, steroid hormones affect growth and different cell functions in several

organs. Moreover, ERs and ARs may have a non-classical pattern of intracellular localizations, raising complexity to the functional roles of estradiol and testosterone. Readers will find key information about the role of sex hormones in mitochondrial physiology and their relation with ageing, apoptosis, and sarcopenia. Chapters integrate important points with the latest information on the subject, including work of leading researchers studying the cellular and molecular mechanisms underlying the age-linked changes in muscle tissue while highlighting the role of satellite cells. Furthermore, the book presents a chapter about phytoestrogens (compounds which are structurally very similar to estrogen 17?-estradiol) and their selective action on sex steroid receptors (specifically, they have a higher affinity for ER? receptors than ER? receptors). The book is recommended reading for scientists and clinicians involved in the field of medical and health sciences as well as for scholarly readers (students of biochemistry and medicine) who are interested in the molecular mechanism of cellular apoptosis regulated by steroid hormones.

Written by a panel of world authorities, this comprehensive text is the only book of its kind, covering the full range of neuromuscular diseases seen in children. It explains how childhood neuromuscular diseases differ from those in adult patients, and it provides clinicians with all the knowledge they need to successfully diagnose and treat their pediatric patients. Only paediatric neuromuscular disease book available Provides exposure to the experience and knowledge of world authorities Discusses the entire range of paediatric neuromuscular disorders

Most routine motor tasks are complex, involving load transmission through out the body, intricate balance, and eye-head-shoulder-hand-torso-leg coor dination. The quest toward understanding how we perform such tasks with skill and grace, often in the presence of unpredictable perturbations, has a long history. This book arose from the Ninth Engineering Foundation Con ference on Biomechanics and Neural Control of Movement, held in Deer Creek, Ohio, in June 1996. This unique conference, which has met every 2 to 4 years since the late 1960s, is well known for its informal format that promotes high-level, up-to-date discussions on the key issues in the field. The intent is to capture the high quality ofthe knowledge and discourse that is an integral part of this conference series. The book is organized into ten sections. Section I provides a brief intro duction to the terminology and conceptual foundations of the field of move ment science; it is intended primarily for students. All but two of the re maining nine sections share a common format: (l) a designated section editor; (2) an introductory didactic chapter, solicited from recognized lead ers; and (3) three to six state-of-the-art perspective chapters. Some per spective chapters are followed by commentaries by selected experts that provide balance and insight. Section VI is the largest section, and it con sists of nine perspective chapters without commentaries.

Volume 28 in the series of Side Effects of Drugs Annuals (http://www.elsevier.com/locate/series/seda) continues to serve its primary goal: to provide clinicians and medical investigators with a reliable and critical yearly survey of new data and trends in the area of Adverse Drug Reactions and Interactions. An international team of specialists has reviewed new data and trends by

selecting from the year's writing all that is truly new and informative, by critically interpreting it, and by pointing to whatever is unproven or misleading. The use of the book is enhanced by separate indexes, allowing the reader to access the text via drug name, adverse effect, or drug interaction. The current annual includes an essay by the editor, Dr Jeffrey Aronson, entitled 'Classifying Drug Adverse Reactions in the 21st Century.' In it he describes how the modern approach to classifying adverse drug reactions takes into account the dose that causes the reaction, the time-course of the reaction, and the susceptibility factors that increase the individual patient's risk, and shows how this analysis can facilitate regulatory decision making. Provides a critical yearly survey of new data and trends Includes an essay that describes the modern approach to classifying adverse drug reactions Special reviews in this Annual include, among other topics: Antipsychotic drugs and now-onset diabetes mellitus, Treating asthma during pregnancy, and MMR vaccine and autism

Authors Kenneth Miller and Joseph Levine continue to set the standard for clear, accessible writing and up-to-date content that engages student interest. Prentice Hall Biology utilizes a student-friendly approach that provides a powerful framework for connecting the key concepts a biology. Students explore concepts through engaging narrative, frequent use of analogies, familiar examples, and clear and instructional graphics. Whether using the text alone or in tandem with exceptional ancillaries and technology, teachers can meet the needs of every student at every learning level.

With complete coverage appropriate for residents through experienced pediatric orthopaedic surgeons, Tachdjian's Pediatric Orthopaedics, 6th Edition, continues a 50-year tradition of excellence as the most comprehensive, authoritative guide to diagnosing and treating pediatric musculoskeletal disorders. Editor John Herring, MD, and experts from the Texas Scottish Rite Hospital for Children offer step-by-step instruction and detailed visual guidance on both surgical and non-surgical approaches. It’s everything the orthopaedic surgeon needs to know to accurately treat the full spectrum of pediatric orthopaedic conditions and injuries. Presents complete coverage of the latest knowledge on etiology, imaging, differential diagnosis, growth instrumentation, and non-operative and surgical techniques for a wide range of pediatric orthopaedic conditions. Provides expert guidance on difficult diagnostic and clinical management issues for your most challenging cases. Covers today’s most effective approaches for management of severe spinal deformities, early onset scoliosis, hip preservation methods, long-term follow-up of trauma conditions, and much more. Offers superb visual guidance with nearly 2,500 full-color illustrations and 70 videos (many are new!) of pediatric surgical procedures, including a number that highlight clinical examination and unusual clinical findings.

Skeletal MusclePathology, Diagnosis and Management of DiseaseCambridge University Press

The loss of skeletal muscle mass and strength substantially impairs physical performance and quality of life. This book details some approaches to the treatment of muscle wasting. It also reviews novel applications against pulmonary arterial hypertension such as cell reprogramming and the use of anticancer drugs that induce programmed cell death. Vascular smooth muscle cells (VSMCs) are the most prevalent cell types in blood vessels and serve critical regulatory roles. This publication also introduces mathematical models concerning the molecular mechanism and targets of cyclic guanosine 3?,5?-monophosphate (cGMP) in the

contraction of VSMCs. This book will be of interest to professionals in clinical practice, medical and health care students, and researchers working in muscle-related fields of science.

Since the publication of the first edition, the U.S. Surgeon General released the first-ever report on bone health and osteoporosis in October 2004. This report focuses even more attention on the devastating impact osteoporosis has on millions of lives. According to the National Osteoporosis Foundation, 2 million American men have osteoporosis, and another 12 million are at risk for this disease. Yet despite the large number of men affected, the lack of awareness by doctors and their patients puts men at a higher risk that the condition may go undiagnosed and untreated. It is estimated that one-fifth to one-third of all hip fractures occur in men. This second edition brings on board John Bilezikian and Dirk Vanderschueren as editors with Eric Orwoll. The table of contents is more than doubling with 58 planned chapters. The format is larger – 8.5 x 11. This edition of Osteoporosis in Men brings together even more eminent investigators and clinicians to interpret developments in this growing field, and describe state-of-the-art research as well as practical approaches to diagnosis, prevention and therapy. Brings together more eminent investigators and clinicians to interpret developments in this growing field. Describes state-of-the-art research as well as practical approaches to diagnosis, prevention and therapy. There is no book on the market that covers osteoporosis in men as comprehensively as this book.

It’s the revolutionary science study guide just for middle school students from the brains behind Brain Quest. Everything You Need to Ace Science . . . takes readers from scientific investigation and the engineering design process to the Periodic Table; forces and motion; forms of energy; outer space and the solar system; to earth sciences, biology, body systems, ecology, and more. The BIG FAT NOTEBOOK™ series is built on a simple and irresistible conceit—borrowing the notes from the smartest kid in class. There are five books in all, and each is the only book you need for each main subject taught in middle school: Math, Science, American History, English Language Arts, and World History. Inside the reader will find every subject’s key concepts, easily digested and summarized: Critical ideas highlighted in neon colors. Definitions explained. Doodles that illuminate tricky concepts in marker. Mnemonics for memorable shortcuts. And quizzes to recap it all. The BIG FAT NOTEBOOKS meet Common Core State Standards, Next Generation Science Standards, and state history standards, and are vetted by National and State Teacher of the Year Award–winning teachers. They make learning fun, and are the perfect next step for every kid who grew up on Brain Quest.

Written by a team of best-selling authors, BIOLOGY: THE UNITY AND DIVERSITY OF LIFE, 14th Edition reveals the biological world in wondrous detail. Packed with eye-catching photos and images, this text engages students with applications and activities that encourage critical thinking. Chapter opening Learning Roadmaps help students focus on the topics that matter most and section-ending “Take Home Messages” reinforce key concepts. Helpful in-text features include a running glossary, case studies, issue-related essays, linked concepts, self-test questions, data analysis problems, and more. The accompanying MindTap for Biology is the most engaging and easiest to customize online solution in Biology. Known for a clear, accessible style, BIOLOGY: THE UNITY AND DIVERSITY OF LIFE, 14th Edition puts the living world of biology under a microscope for students to analyze, understand, and enjoy! Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

In order to complete tissue regeneration, various cells (neuronal, skeletal and smooth) interact coordinately with each other. This book, Muscle Cell and Tissue - Current Status of Research Field, deals with current progress and perspectives in a variety of topics on the skeletal and smooth muscle, stem cells, regeneration, disease or therapeutics. Novel applications for cell and tissue engineering including cell therapy, tissue models and disease pathology modeling are introduced. This book also deals with the differentiation/de-differentiation process of vascular smooth muscle cells in health and disease. Furthermore, natural products to reverse metabolic syndromes are descriptively reviewed. These chapters can be interesting for graduate students, teachers, physicians, executives and researchers in the field of molecular biology and regenerative medicine.

A strong clinical emphasis is present throughout this volume from the first section of commonly presenting problems through to the section addressing problems shared with a range of other clinical sub-specialties.

Learn the essential concepts of pathophysiology and stay up to date on treatments, manifestations, and mechanisms of disease with Understanding Pathophysiology, 5th Edition. Filled with vibrant illustrations and complemented by online resources that bring pathophysiology concepts to life, this easy-to-read text delivers the latest, most accurate information on the disease process across the lifespan, giving you the fundamental knowledge you need to move forward in your nursing education. Consistent presentation helps you better distinguish pathophysiology, clinical manifestations, and evaluation and treatment for each disease. More than 1,000 high-quality illustrations vividly depict clinical manifestations and cellular mechanisms underlying diseases. Lifespan coverage details age-specific conditions affecting pediatric, adult, and aging patients in great depth. Algorithms throughout the text clarify disease progression. Risk Factor boxes alert you to important safety considerations associated with specific diseases. Health Alert boxes highlight new developments in biologic research, diagnostic studies, preventive care, treatments, and more. Quick Check boxes test your retention of important chapter concepts. Did You Understand? sections provide fast, efficient review of chapter content. Chapter outlines help you find specific information with ease. Chapter introductions explain why chapter content is important and how it fits into a broader health care context. Key terms are bolded throughout the text for fast, easy reference. Glossary of selected terms familiarizes you with the most difficult or important terminology. Companion Evolve website provides convenient online access to animations, review questions, key terms matching exercises, and more. NEW! Extensively updated content reflects the latest clinical findings and research across the full spectrum of pathophysiology. NEW! Hundreds of new and enhanced full-color illustrations clarify anatomy and physiologic concepts. NEW! 30 new animations on the companion Evolve website reinforce your understanding of complex processes.

Metabolic and functional impairments in skeletal muscle occur frequently, often in diverse conditions and each with different aetiologies, methods of diagnosis and treatment. This comprehensive text brings the complex facets of skeletal muscle pathology, diagnosis and management together.

Metabolism at a Glance presents a concise, illustrated summary of metabolism in health and disease. This essential text is progressively appropriate for introductory through to advanced medical and biochemistry courses. It also provides a succinct review of inborn errors of metabolism, and reference for postgraduate medical practitioners and biomedical scientists who need a resource to quickly refresh their knowledge. Fully updated and extensively illustrated, this new edition of Metabolism at a Glance is now in full colour throughout, and includes new coverage of sports biochemistry; the metabolism of lipids, carbohydrates and cholesterol; glyceroneogenesis, ?-oxidation and ?-oxidation of fatty acids. It also features the overlooked “Krebs Uric Acid Cycle”. Metabolism at a Glance offers an accessible introduction to

metabolism, and is ideal as a revision aid for students preparing for undergraduate and USMLE Step 1 exams.

ENDOCRINOLOGY, edited by J. Larry Jameson, MD, PhD and Leslie J. De Groot, MD, has been considered the definitive source in its field for decades. Now this landmark reference has been exhaustively updated to bring you the latest clinical guidance on all aspects of diagnosis and treatment for the full range of endocrine and metabolism disorders, including new information on diabetes, obesity, MEN I and II, disorders of sex determination, and pituitary tumors. Entirely new chapters on Lipodystrophy Syndromes, Lipoprotein Metabolism, and Genetic Disorders of Phosphate Homeostasis keep you well informed on today's hot topics. You'll benefit from unique, global perspectives on adult and pediatric endocrinology prepared by an international team of renowned authorities. This reference is optimally designed to help you succeed in your demanding practice and ensure the best possible outcomes for every patient. Overcome virtually any clinical challenge with detailed, expert coverage of every area of endocrinology, authored by hundreds of leading luminaries in the field. Provide state-of-the-art care with comprehensive updates on diabetes, obesity, MEN I and II, disorders of sex determination, and pituitary tumors ... brand-new chapters on Lipodystrophy Syndromes, Lipoprotein Metabolism, and Genetic Disorders of Phosphate Homeostasis ... expanded coverage of sports performance, including testosterone, androgen research, and bone growth and deterioration ... and the newest discoveries in genetics and how they affect patient care. Make the best clinical decisions with an enhanced emphasis on evidence-based practice in conjunction with expert opinion. Rapidly consult with trusted authorities thanks to new expert-opinion treatment strategies and recommendations. Zero in on the most relevant and useful references with the aid of a more focused, concise bibliography. Locate information more quickly, while still getting the complete coverage you expect.

The new edition has been significantly revised to include an expanded problem section at the end of each chapter with more quantitative examples and some clinical problems where appropriate. The clinical physiology chapter is now broken into several short chapters.

is an amalgamation of Medical and basic sciences, and is comprehensively written, revised, and updated to meet the curriculum requirements of Medical, Pharmacy, Dental, Veterinary, Biotechnology, Agriculture, Life sciences, and others studying Biochemistry as one of the subjects. is written in a lucid style with the subject being presented as an engaging story, growing from elementary information to the most recent advances, and with theoretical discussions being supplemented with illustrations, tables, Medical concepts, clinical correlates, and case studies for easy understanding of Biochemistry. has each chapter beginning with a four-line verse followed by the text with clinical correlates, a summary, and self-assessment exercises. the lively illustrations and text with appropriate headings and sub-headings in bold type

faces facilitate reading path clarity and quick recall. All this will help the students to master the subject and boldly face the examinations. describes a variety of case studies with Medical correlations. the case studies are listed at the end of relevant chapters for immediate reference, quick review, and better understanding of Biochemistry. contains the basics (Bioorganic and Biophysical Chemistry, Tools of Biochemistry, Immunology, and Genetics) for beginners to learn easily Biochemistry, origins of biochemical words, confusables in Biochemistry, principles of Practical Biochemistry, and clinical Biochemistry Laboratory. has medically/clinically oriented Biochemistry with inputs from M.D. (Biochemistry) and M.D. (General Medicine) Professors. Satisfies the new MCI/NMC curriculum with a relevant competency map, specifically giving information on competency codes with chapters and pages. is thoroughly revised and reorganized with special focus on medical concepts/clinical correlates, case studies and current topics such as Diabetes, Cancer, Free Radicals and Antioxidants, COVID-19, etc.

Obesity is officially recognised as a major worldwide public health problem. "Progress in Obesity Research: 9" fulfils the need for an accessible and fundamental research, highly recommended towards a better understanding of obesity. It will prove an indispensable resource for all those involved in the research, prevention and treatment of obesity.

Russell/Hertz/McMillan, BIOLOGY: THE DYNAMIC SCIENCE 4e and MindTap teach Biology the way scientists practice it by emphasizing and applying science as a process. You learn not only what scientists know, but how they know it, and what they still need to learn. The authors explain complex ideas clearly and describe how biologists collect and interpret evidence to test hypotheses about the living world. Throughout, Russell and MindTap provide engaging applications, develop quantitative analysis and mathematical reasoning skills, and build conceptual understanding. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Part of the Oxford Textbooks in Clinical Neurology series, the Oxford Textbook of Neuromuscular Disorders covers the scientific basis, clinical diagnosis, and treatment of neuromuscular disorders with a particular focus on the most clinically relevant disorders. The book is organized into seven sections, starting with the general approach to the patient with neuromuscular disorders and then focusing on specific neuromuscular conditions affecting the peripheral nervous system from its origins at the spinal cord anterior horn on its outward course to their effector muscles and the inbound sensory pathways. Chapters on specific neuromuscular conditions are illustrated with typical case histories and their presenting features, allowing readers to put rarer conditions into their clinical context more easily. The concurrent online version allows access to the full content of the textbook, contains links from the references to primary research journal articles, allows full text searches, and provides access to figures and tables that can be downloaded to PowerPointRG. This textbook will serve as a useful reference for neurologists and specialist trainees in neurology, neuroscientists,

neurophysiologists, and other healthcare professionals.
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