

Avian Gastrointestinal Anatomy And Physiology

Bringing together annotated images and anatomical terms, this reference book is a unique combination of a practical, clinically oriented textbook and pictorial atlas of avian anatomy. Containing very high quality photographs, including histological and radiographic images and schematic diagrams, this edition focuses on ornamental birds and poultry. Among the various species examined are chickens, ducks and geese, as well as budgerigars, psittacines and many others. In addition, wild bird species such as the common buzzard and falcon are taken into account and raptors are featured in a dedicated new chapter. Translated from Anatomie der Voegel, first published by Schattauer, Avian Anatomy is an ideal book for veterinary practitioners and students.

The role of the gastrointestinal (GI) nurse has changed considerably over recent years. The development of endoscopic equipment has resulted in a demand for skilled nurses to perform procedures which, in the past, were carried out by doctors. In addition, nurses now commonly perform diagnostic tests and prescribe specific drugs in gastroenterology, and the widespread recognition of the need for psychosocial support for gastrointestinal patients, in areas such as Irritable Bowel Syndrome (IBS), has seen a large increase in the number of GI nurse consultants, nurse specialists, and nurse practitioners. GI nurses work with a wide range of patients from those suffering from minor and acute gastrointestinal disorders, through chronic conditions, to those requiring major surgery and treatment for malignant disease. The Oxford Handbook of Gastrointestinal Nursing summarizes the current state of knowledge in gastrointestinal nursing and provides user-friendly, evidence-based guidelines on the management of patients with gastrointestinal disorders. Organized into three sections covering the principles of gastrointestinal nursing, the sections of the gut, and specific disorders of the digestive system, this handbook offers a wealth of information on how to plan, implement, manage, and evaluate nursing care for gastrointestinal patients, whether in the pediatric or adult setting. Topics featured include nutrition, pain management, complementary therapies, prescribing in GI nursing and emergencies. So you can find the information you need without delay, the book is clearly laid out with one topic per double page spread, and written in an easily readable note-based style. Blank pages for writing notes, observations and local protocols allow your handbook to be customised to meet your specific needs. All this is available at your fingertips, in a pocket-sized handbook with hard-wearing plastic covers. Written by practicing nurses and subject experts, the Oxford Handbook of Gastrointestinal Nursing is a unique and invaluable companion for practicing nurses, and for all health care professionals who are involved in the care of patients with gastrointestinal disorders.

Revised and updated, the eighth edition of Anatomy and Physiology of Farm Animals remains the essential resource for detailed information on farm animal anatomy and physiology. Offers a revised edition to this comprehensive guide to the anatomy and physiology of farm animals Presents learning objectives in each chapter for the first time Adds new material on endocrine and metabolic regulation of growth and body composition Features additional illustrations to enhance comprehension Includes a companion website that offers supplemental content, including word roots, clinical cases, study and practice questions, the images from the book and additional images, diagrams, and videos to enhance learning.

Gamebird Medicine and Management A complete and authoritative reference covering the management of gamebirds and exhibition Galliformes in health and disease In Gamebird Medicine and Management, a team of distinguished professionals deliver a comprehensive discussion of gamebirds and exhibition Galliformes for veterinary practitioners, gamebird producers, breeders and conservationists, as well as other avian health professionals. The book covers common diseases affecting gamebirds and offers management and production information not found in other resources. The authors combine relevant material from avian veterinarians, commercial production professionals, and experts from the conservation and captive breeding sectors, that enables veterinarians, gamebird producers, and conservationists to develop diagnostic and treatment plans for small or large gamebird flocks. Readers will also find: Thorough introductions to laws and regulations governing gamebirds in the United States In-depth examinations of the anatomy and physiology of gamebirds Comprehensive explorations of the medical management of gamebirds Information on treating dermatological, musculoskeletal, neurological, digestive, and respiratory diseases affecting gamebirds A practical, step-by-step necropsy guide An engaging photo collection of gamebird and exhibition Galliformes diseases Perfect for veterinary practitioners, gamebird producers, and conservationists, Gamebird Medicine and Management will also earn a place in the libraries of zoo veterinarians and staff.

Anatomy and Physiology of Farm Animals

Companion and Aviary Birds, Second Edition

Gastrointestinal Anatomy and Physiology

Sturkie's Avian Physiology

Physiological and Ecological Adaptations to Feeding in Vertebrates

Reinforce the A&P principles you've learned in Clinical Anatomy & Physiology for Veterinary Technicians, 2nd Edition with this practical laboratory resource. Filled with interactive exercises, step-by-step procedure guidelines, and full-color photos and illustrations, this lab manual is designed to help you understand A&P in relation to your clinical responsibilities as a veterinary technician and apply your knowledge in the laboratory setting. A comprehensive approach builds on the concepts presented in Clinical Anatomy & Physiology for Veterinary Technicians, 2nd Edition to strengthen your anatomical and physiological knowledge of all major species. Engaging, clinically oriented activities help you establish proficiency in radiographic identification, microscopy, and other essential skills. Step-by-step dissection guides familiarize you with the dissection process and ensure clinical accuracy. Clinical Application boxes demonstrate the clinical relevance of anatomical and physiological principles and reinforce your understanding. Full-color photographs and illustrations clarify structure and function. A renowned author team lends practical guidance specifically designed for veterinary technicians. A detailed glossary provides quick access to hundreds of key terms and definitions.

Now in its Fifth Edition, Functional Anatomy and Physiology of Domestic Animals provides a basic understanding of domestic animal anatomy and physiology, taking an interconnected approach to structure and function of the horse, dog, cat, cow, sheep, goat, pig, and chicken. Offers a readable introduction to basic knowledge in domestic animal anatomy and physiology Covers equine, canine, feline, bovine, ovine, ruminant, swine, and poultry anatomy and physiology Considers structure and function in relation to each other for a full understanding of the relationship between the two Provides pedagogical tools to promote learning, including chapter outlines, study questions, self-evaluation exercises, clinical correlates, key terms, suggested readings, and a robust art program Includes access to a companion website with video clips, review questions, and the figures from the book in PowerPoint

The second edition of Avian Immunology provides an up-to-date overview of the current knowledge of avian immunology. From the ontogeny of the avian immune system to practical application in vaccinology, the book encompasses all aspects of innate and adaptive immunity in chickens. In addition, chapters are devoted to the immunology of other commercially important species such as turkeys and ducks, and to ecoimmunology summarizing the knowledge of immune responses in free-living birds often in relation to reproductive success. The book contains a detailed description of the avian innate immune system, encompassing the mucosal, enteric, respiratory and reproductive systems. The diseases and disorders it covers include immunodepressive diseases and immune evasion, autoimmune diseases, and tumors of the immune system. Practical aspects of vaccination are examined as well. Extensive appendices summarize resources for scientists including cell lines, inbred chicken lines, cytokines, chemokines, and monoclonal antibodies. The world-wide importance of poultry protein for the human diet, as well as the threat of avian influenza pandemics like H5N1 and heavy reliance on vaccination to protect commercial flocks makes this book a vital resource. This book provides crucial information not only for poultry health professionals and avian biologists, but also for comparative and veterinary immunologists, graduate students and veterinary students with an interest in avian immunology. With contributions from 33 of the foremost international experts in the field, this book provides the most up-to-date review of avian immunology so far Contains a detailed description of the avian innate immune system reviewing constitutive barriers, chemical and cellular responses; it includes a comprehensive review of avian Toll-like receptors Contains a wide-ranging review of the "ecoimmunology" of free-living avian species, as applied to studies of population dynamics, and reviews methods and resources available for carrying out such research

The keeping of ornamental fishes is the biggest animal related hobby in the world. Many textbooks and most of the related literature focus on diseases of fish designated for human consumption, especially aquaculture species. This book provides the reader with over 250 clinical cases and covers all of the important medical and surgical conditions found in ornamental fishes. The well-illustrated cases appear randomly and are targeted at different levels of expertise. Questions pertaining to fish anatomy, physiology, husbandry, and identification have been included to make this text both educational and comprehensive. A team of internationally known and respected authors have written the questions and detailed explanatory answers, and Dr Lewbart has edited the text so that it is practical, informative and easy to read. Veterinary practitioners, professional aquarists, hobbyists, and students find this book to be a valuable addition to their education and clinical training.

Self-Assessment Color Review

The Essentials

Medicine, Surgery, Reproduction, Nutrition, and Herd Health

Microscopic Anatomy of the Digestive System of the Chicken

Avian Gut Function in Health and Disease

This fully revised new edition of the classic reference ondomestic animal physiology provides detailed descriptions of animalfunction and dysfunction, with an emphasis on clinical relevanceand pedagogical features to enhance learning. • Presents in-depth, comprehensive descriptions ofdomestic animal function and dysfunction •

Emphasizes clinical relevance, with clinicalcorrelations, notes of relevance, and self-assessment questionsfeaturing situations likely to be faced in practice • Offers pedagogical features, including chapteroutlines and introductions, key terms throughout the book,additional images, questions to enhance learning, andself-assessment exercises • Distills the most useful information for ease of use,with improved continuity and reduced repetition • Includes a companion website offering review questionsand answers and the figures from the book in PowerPoint

Combining the in-depth coverage of a text with the practicality of a clinical manual and the visual detail of an atlas, Avian Medicine, 3rd Edition is the complete, all-in-one guide to every aspect of avian care. Written by some of the world's leading authorities in avian medicine, this highly illustrated reference covers a wide variety of avian species — including psittacines, raptors, bustards, parrots, finches, and more. Comprehensive coverage includes issues ranging from the basic aspects of patient management to the most sophisticated diagnostic techniques. Plus, with more illustrations, a wealth of practical advice, and the latest information on cutting-edge treatments and procedures incorporated into this new edition, today's general clinician will be fully equipped to effectively and confidently care for all birds. Comprehensive coverage of all aspects of clinical management written by leading experts in the field provides readers with a depth and breadth of knowledge on avian medicine and care. Coverage of a wide variety of species — including raptors, bustards, and many others — enables practitioners to treat a greater assortment of patients with more confidence and skill. Bulleted text and tables help present information in an accessible way. More than 900 color images give readers a better picture of disease and how it will be encountered in practice. Appendices bring together wide-ranging data on hematology and blood chemistry reference values, commonly used pharmaceuticals and other information relevant to avian practitioners. NEW! New chapter sections, revised references, and updated suggested readings ensure that readers have the most up-to-date information. NEW! New chapter contributors ensure the information in the text reflects the most current techniques and advances. NEW! Expanded content on parrots, finches and fruit-eating birds has been added to the text to make content more relevant to the needs of today's practitioners. NEW! Thoroughly updated content includes the latest surgical techniques and procedures to keep practitioners on top of the most cutting-edge information in the field. NEW! Additional content and images on MRI have been incorporated throughout the text to complete the coverage of other advanced imaging techniques such as CT scans.

This Research Topic eBook includes articles from Volume I and II of The Future of Physiology: 2020 and Beyond series: Research Topic “The Future of Physiology: 2020 and Beyond, Volume I” Research Topic “The Future of Physiology: 2020 and Beyond, Volume II” The term Physiology was introduced in the 16th century by Jean Francois Fernel to describe the study of the normal function of the body as opposed to pathology, the study of disease. Over the ensuing centuries, the concept of physiology has evolved and a central tenet that unites all the various sub-disciplines of physiology has emerged: the quest to understand how the various components of an organism from the sub-cellular and cellular domain to tissue and organ levels work together to maintain a steady state in the face of constantly changing and often hostile environmental conditions. It is only by understanding normal bodily function that the disruptions that leads to disease can be identified and corrected to restore the healthy state. During the summer of 2009, I was invited by Dr. Henry Markram, one of the founders of the “Frontiers In” series of academic journals, to serve as the Field Chief Editor and to launch a new Open-access physiology journal that would provide a forum for the free exchange of ideas and would also meet the challenge of integrating function from molecules to the intact organism. In considering the position, I needed to answer two questions: 1) What exactly is Open-access publishing?; and 2) What could Frontiers in Physiology add to the already crowded group of physiology related journals? As a reminder, the traditional model of academic publishing “is a process by which academic scholars provide material, reviewing, and editing expertise for publication, free of charge, then pay to publish their work” and, to add insult to injury, they and their colleagues must pay the publisher a fee (either directly or via an institutional subscription) to read their published work [slightly modified from the “The Devil’s Dictionary of Publishing” Physiology News (the quarterly newsletter of the Physiological Society) Spring 2019: Issue 114, page 8]. In the traditional model, the publisher, not the authors, owns the copyright such that the author must seek permission and may even be required to pay a fee to re-use their own material (such as figures) in other scholarly articles (reviews, book chapters, etc.). In contrast, individuals are never charged a fee to read articles published in open-access journals. Thus, scholars and interested laymen can freely access research results (that their tax dollars paid for) even if their home institution does not have the resources to pay the often exorbitant subscription fees. Frontiers takes the open-access model one step further by allowing authors (rather than the publisher) to retain ownership (i.e., the copyright) of their intellectual property. Having satisfied the first question, I then considered whether a new physiology journal was necessary. At that point in time there were no open-access physiology journals, and further, many aspects of physiology were not covered in the existing journals. Frontiers afforded the unique opportunity to provide a home for more specialized sections under the general field journal, Frontiers in Physiology, with each section having an independent editor and editorial board. I therefore agreed to assume the duties of Field Chief Editor in November 2009. Frontiers in Physiology was launched in early 2010 and the first articles were published in April 2010. Since these initial publications, we have published over 10,000 articles and have become the most cited physiology journal. Clearly we must be fulfilling a critical need. Now that it has been over a decade since Frontiers in Physiology was launched, it is time to reflect upon what has been accomplished in the last decade and what questions and issues remain to be addressed. Therefore, it is the goal of this book to evaluate the progress made during the past decade and to look forward to the next. In particular, the major issues and expected developments in many of the physiology sub-disciplines will be explored in order to inspire and to inform readers and researchers in the field of physiology for the year 2020 and beyond. A brief summary of each chapter follows: In chapter 1, Billman provides a historical overview of the evolution of the concept of homeostasis. Homeostasis has become the central unifying concept of physiology and is defined as a self-regulating process by which a living organism can maintain internal stability while adjusting to changing external conditions. He emphasizes that homeostasis is not static and unvarying but, rather, it is a dynamic process that can change internal conditions as required to survive external challenges and can be said to be the very basis of life. He further discusses how the concept of homeostasis has important implications with regards to how best to understand physiology in intact organisms: the need for more holistic approaches to integrate and to translate this deluge of information obtained in vitro into a coherent understanding of function in vivo. In chapter 2, Aldana and Robeva explore the emerging concept of the holobiont: the idea that every individual is a complex ecosystem consisting of the host organism and its microbiota. They stress the need for multidisciplinary approaches both to investigate the symbiotic interactions between microbes and multicellular organisms and to understand how disruptions in this relationship contributes to disease. This concept is amplified in chapter 3 in which Pandolf addresses the future of gastrointestinal physiology ,emphasizing advances that have been made by understanding the role that the gut microbiome plays in both health and in disease. Professor Head, in chapter 4, describes areas in the field of integrative physiology that remain to be examined, as well as the potential for genetic techniques to reveal physiological processes. The significant challenges of developmental physiology are enumerated by Burggren in chapter 5. In particular, he analyzes the effects of climate change (environmentally induced epigenetic modification) on phenotype expression. In chapter 6, Ivell and Annad-Ivell highlight the major differences between the reproductive system and other organ systems. They conclude that the current focus on molecular detail is impeding our understanding of the processes responsible for the function of the reproductive organs, echoing and amplifying the concepts raised in chapter 1. In chapter 7, Costa describes the role of both circadian and non-circadian biological “clocks” in health and disease, thereby providing additional examples of integrated physiological regulation. Coronel, in chapter 8, provides a brief history of the development of cardiac electrophysiology and then describes areas that require further investigation and includes tables that list specific questions that remain to be answered. In a similar manner, Reiser and Janssen (chapter 9) summarize some of the advancements made in striated muscle physiology during the last decade and then discuss likely trends for future research; to name a few examples, the contribution of gender differences in striated muscle function, the mechanisms responsible of age-related declines in muscle mass, and role of exosome-released extracellular vesicles in pathophysiology. Meininger and Hill describe the recent advances in vascular physiology (chapter 10) and highlight approaches that should facilitate our understanding of the vascular processes that maintain health (our old friend homeostasis) and how disruptions in these regulatory mechanisms lead to disease. They also stress the need for investigators to exercise ethical vigilance when they select journals to publish in and meetings to attend. They note that the proliferation of profit driven journals of dubious quality threatens the integrity of not only physiology but science in general. The pathophysiological consequences of diabetes mellitus are discussed in chapters 11 and 12. In chapter 11, Ecelbarger addresses the problem of diabetic nephropathy and indicates several areas that require additional research. In chapter 12, Sharma evaluates the role of oxidative damage in diabetic retinopathy, and then proposes that the interleukin-6-transsignaling pathway is a promising therapeutic target for the prevention of blindness in diabetic pateints. Bernardi, in chapter 13, after briefly reviewing the considerable progress that has been achieved in understanding mitochondrial function, lists the many questions that remain to be answered. In particular, he notes several areas for future investigation including (but not limited to) a more complete understanding of inner membrane permeability changes, the physiology of various cation channels, and the role of mitochondrial DNA in disease. In chapter 14, using Douglas Adam’s “The Hitchhikers Guide to the Universe” as a model, Bogdanova and Kaestner address the question why a young person should study red blood cell physiology and provide advice for early career scientists as they establish independent laboratories. They the, describe a few areas that merit further attention, not only related to red blood cell function, but also to understanding the basis for blood related disease, and the ways to increase blood supplies that are not dependent on blood donors. Finally, the last two chapters specifically focus on non-mammalian physiology. In chapter 15, Scanes asks the question, are birds simply feathered mammals, and then reviews several of the significant differences between birds and mammals, placing particular emphasis on differences in gastrointestinal, immune, and female reproductive systems. In the final chapter (chapter 16) Anton and co-workers stress that since some 95% of living animals species are invertebrates, invertebrate physiology can provide insights into the basic principles of animal physiology as well as how bodily function adapts to environmental changes. The future of Physiology is bright; there are many important and interesting unanswered questions that will require further investigation. All that is lacking is sufficient funding and a cadre of young scientists trained to integrate function from molecules to the intact organism. George E. Billman, Ph.D, FAHA, FHRS, FTPS Department of Physiology and Cell Biology The Ohio State University Columbus OH, United States

The enteric nervous system (ENS) is a complex neural network embedded in the gut wall that orchestrates the reflex behaviors of the intestine. The ENS is often referred to as the “little brain” in the gut because the ENS is more similar in size, complexity and autonomy to the central nervous system (CNS) than other components of the autonomic nervous system. Like the brain, the ENS is composed of neurons that are surrounded by glial cells. Enteric glia are a unique type of peripheral glia that are similar to astrocytes of the CNS. Yet enteric glial cells also differ from astrocytes in many important ways. The roles of enteric glial cell populations in the gut are beginning to come to light and recent evidence implicates enteric glia in almost every aspect of gastrointestinal physiology and pathophysiology. However, elucidating the exact mechanisms by which enteric glia influence gastrointestinal physiology and identifying how those roles are altered during gastrointestinal pathophysiology remain areas of intense research. The purpose of this e-book is to provide an introduction to enteric glial cells and to act as a resource for ongoing studies on this fascinating population of glia. Table of Contents: Introduction / A Historical Perspective on Enteric Glia / Enteric Glia: The Astroglia of the Gut / Molecular Composition of Enteric Glia / Development of Enteric Glia / Functional Roles of Enteric Glia / Enteric Glia and Disease Processes in the Gut / Concluding Remarks / References / Author Biography

Merck Veterinary Manual

Essentials of Avian Medicine and Surgery

The Tribute of Physiology for the Understanding of COVID-19 Disease

A Guide to the Principles of Animal Nutrition

Clinical Anatomy and Physiology for Veterinary Technicians

This book offers one of the most comprehensive reviews in the field of gastrointestinal (GI) physiology, guiding readers on a journey through the complete digestive tract, while also highlighting related organs and glandular systems. It is not solely limited to organ system physiology, and related disciplines like anatomy and histology, but also examines the molecular and

cellular processes that keep the digestive system running. As such, the book provides extensive information on the molecular, cellular, tissue, organ, and system levels of functions in the GI system. Chapters on the roles of the gut as an endocrine, exocrine and neural organ, as well as its microbiome functions, broaden readers’ understanding of the multi-organ networks in the human body. To help illustrate the interconnections between the physiological concepts, principles and clinical presentations, it outlines clinical examples such as pathologies that link basic science with clinical practice in special “clinical correlates” sections. Covering both traditional and contemporary topics, it is a valuable resource for biomedical students, as well as healthcare and scientific professionals.

Since the publication of earlier editions, there has been The new edition has a number of new contributors, a considerable increase in research activity ina number who have written on the nervous system, sense organs, of areas, with each succeeding edition including new muscle, endocrines, reproduction, digestion and immu chapters and an expansion of knowledge in older chap nophysiology. Contributors from previous editions ters, have expanded their offerings considerably. The fourth edition contains two new chapters, on The authors are indebted to various investigators, muscle and immunophysiology, the latter an area journals and books for the many illustrations used. Indi where research on Aves has contributed significantly vidual acknowledgement is made in the legends and to our general knowledge of the subject. references. Preface to the 'Third Edition Since the publication of the first and second editions, pathways of birds and mammals. New contributors in there has been a considerable increase of research activ clude M. R. Fedde and T. B. Bolton, who have com ity in avian physiology in a number of areas, including pletely revised and expanded the chapters on respira endocrinology and reproduction, heart and circulation, tion and the nervous system, respectively, and J. G. respiration, temperature regulation, and to a lesser ex Rogers, Jr. , W. J. Mueller, H. Opel, and D. e. Meyer, who have made contributions to Chapters 2,16, 17, tent in some other areas. There appeared in 1972-1974 a four volume treatise and 19, respectively.

This is a Pageburst digital textbook; Examine the diverse ways animal bodies function at both the systemic and cellular levels with this vital resource. It brings you clear coverage essential to understanding the clinical relevance of anatomical and physiological principles. Fully updated and written by respected veterinary technician educators, this popular textbook is the practical, comprehensive foundation for your success in veterinary technology. Clinical application boxes help you sharpen your skills and apply principles to practice. Test Yourself boxes throughout chapters emphasize important study points. An extensive glossary provides quick reference to hundreds of important terms and definitions. Over 300 new illustrations help you identify structures with rich, realistic clarity. A NEW full color format visually enhances your understanding of anatomic and physiologic concepts. Four NEW chapters give you the latest insight on the chemical basis of life, nutrition and metabolism, pregnancy, development, and lactation, and reptile and amphibian anatomy and physiology. A revised chapter on the cardiovascular system helps you most effectively comprehend the complex functions of the heart and blood vessels.

A sound knowledge of anatomy and physiology is an essential basis for the effective clinical treatment of companion animals. The new Introduction to Veterinary Anatomy and Physiology Textbook builds on the success of the first edition in its thorough coverage of the common companion animal species. Updated throughout, the new edition features online learning resources, providing students with the opportunity to test their knowledge with questions and visual exercises, while instructors can download questions, figures and exercises to use as teaching aids. An essential first purchase for all those embarking upon a veterinary career Now with on-line resources including self-assessment tools and teaching aids Comprehensive coverage of all major companion animal species New equine chapter 'Applied Anatomy' tips relate theory to clinical practice, showing the relationship between anatomy and physiology and the disease process

Fowler's Zoo and Wild Animal Medicine Current Therapy, Volume 7 - E-Book

Dukes' Physiology of Domestic Animals

Clinical Anatomy and Physiology Laboratory Manual for Veterinary Technicians

Enteric Glia

Jetzt auch in englischer Sprache! Dieser Atlas ist eine bislang einmalige Zusammenstellung aller bildgebenden Verfahren für die drei großen „Heimtierklassen“ Vögel, Kleinsäuger und Reptilien. Separate Sektionen des Buches behandeln die drei Tierklassen, was ein schnelles und spezifisches Nachschlagen von Informationen und Bildreferenzen ermöglicht. Jede Sektion beginnt mit der anatomischen Darstellung der Körperregionen in den einzelnen Diagnostikverfahren. In einem zweiten Teil werden die häufigsten pathologischen Befunde nach den Organsystemen dargestellt und im Vergleich besprochen. Die vergleichende Darstellung ermöglicht die schnelle und richtige Diagnose mit dem adäquaten Diagnostikverfahren. Alle Röntgen-, Ultraschall-, CT- und MRT-Bilder sind eindeutig beschriftet. Mit rund 1500 Abbildungen ist dieser Atlas ein konkurrenzloses diagnostisches Archiv für die Heimtierpraxis.

Gastroenterologists require detailed knowledge regarding the anatomy of the GI system in order to understand the disturbances caused by diseases they diagnose and treat. Gastrointestinal Anatomy and Physiology will bring together the world’s leading names to present a comprehensive overview of the anatomical and physiological features of the gastrointestinal tract. Full colour and with excellent anatomical and clinical figures throughout, it will provide succinct, authoritative and didactic anatomic and physiologic information on all the key areas, including GI motility, hepatic structure, GI hormones, gastric secretion and absorption of nutrients. GI trainees will enjoy the self-assessment MCQs, written to the level they will encounter during their Board exams, and the seasoned gastroenterologist will value it as a handy reference book and refresher for re-certification exams

Avian Medicine and Surgery in Practice is an invaluable quick reference resource for clinicians and a useful study guide for veterinary students. In this practical and beautifully illustrated book, early chapters cover physical examination, advice on interpreting diagnostic tests, and avian anatomy and physiology. Disorders affecting the different body regions and systems make up the majority of the book from the external—skin, feathers, eyes, legs and feet—to the internal including the gastrointestinal tract and the cardiovascular system. Further aspects of avian medicine discussed in the book include behavioural problems, incubation of eggs, paediatrics and surgery. Written by an expert with more than 30 years of clinical experience in avian medicine, the new edition is thoroughly revised with updated diseases, new and expanded clinical techniques, and over 100 new color illustrations. It also adds four important new chapters: Husbandry, Grooming and Nutrition, Diagnostic Imaging, Endoscopy, and Oncology as well as new sections on cardiovascular anatomy and neuroanatomy.

Essentials of Avian Medicine and Surgery is designed as a concise quick reference for the busy practitioner and animal nurse. Eminently practical, this classic avian text is prized for its down-to-earth approach. new contributions from world renowned experts in avian medicine new chapter on the special senses of birds, an understanding of which is crucial when giving advice on avian welfare problems fully up-to-date on the latest diagnostic and imaging techniques avian zoonotics are highlighted in infectious diseases section

Llama and Alpaca Care - E-Book

Diagnostic Imaging of Exotic Pets

Ornamental Fish

Pageburst Retail

Development, Principles and Mechanisms of Regulation

This handy "how-to" guide provides a practical framework for diagnosis and treatment of common, small animal gastrointestinal disorders, filling the gap left by larger, encyclopedic references. It features a complete review of symptoms and diagnostic methods, descriptions of digestive tract disorders by organ system, and a series of sample GI cases. Logically organized into three easy-reference expanded edition is a valuable clinical tool for primary care practitioners. The familiar handbook format, based primarily on organs of the gastrointestinal tract, offers quick access to key information. Coverage of symptoms, nutrition, and chronic and acute disorders presents a thorough discussion of gastroenterology. A new diagnostic modality (BIPS) is covered, detailing this useful technique for use on the most current terminology. The chapter on Enteral and Parenteral Nutrition has been completely revised with several new illustrations, for a more complete discussion of this important topic. A new, complete chapter on Neoplasia, written by an expert oncologist, draws together all relevant discussions on neoplasia throughout the book into one comprehensive, coherent treatment.

Sturkie's Avian Physiology is the classic comprehensive single volume on the physiology of domestic as well as wild birds. The Fifth Edition is thoroughly revised and updated, and includes new chapters on the physiology of incubation and growth. Chapters on the nervous system and sensory organs have been greatly expanded due to the many recent advances in the field. The text also covers the immunophysiology of birds. The Fifth Edition, like the earlier editions, is a must for anyone interested in comparative physiology, poultry science, veterinary medicine, and related fields. This volume establishes the standard for those who need the latest and best information on the physiology of birds. Thoroughly updated and revised Coverage of both domestic and wild birds New larger format On

A concise guide to the care of small mammals, Ferrets, Rabbits, and Rodents: Clinical Medicine and Surgery covers the conditions seen most often in veterinary practice. The book emphasizes preventive medicine along with topics including disease management, ophthalmology, dentistry, and zoonosis. More than 400 illustrations demonstrate key concepts related to radiographic interpretation, rel full color, this edition adds coverage of more surgical procedures and expands coverage of zoonotic disease. From editors Katherine Quesenberry and James W. Carpenter, along with a team of expert contributors, the "Pink Book" provides an authoritative, single source of information that is hard to find elsewhere. A logical organization makes it quick and easy to find important information, with organized by body system. Over 400 photographs and illustrations highlight key concepts such as radiographic interpretation and the main points of diagnostic, surgical, and therapeutic techniques. A chapter on ophthalmology provides hard-to-find information on eye care for ferrets, rabbits, rodents, and other small mammals. Coverage of preventive medicine includes basic biology, husbandry, and instructions for ferrets, rabbits, guinea pigs, chinchillas, hamsters, rats/mice, prairie dogs, hedgehogs, and sugar gliders. Chapter outlines offer at-a-glance overviews of the contents of each chapter. Handy tables and charts make it easy to find key information. Expanded Zoonotic Diseases chapter adds more depth along with the latest information on the rising potential for disease transmission procedures for each species are included, some with step-by-step instructions accompanied by color photographs and line drawings. Full-color images show the sometimes minute structures of these small animals and make accurate diagnoses easier, especially for lymphoproliferative diseases of rabbits, endoscopy, cytology, and hematology.

Avian Medicine and Surgery in Practice is an invaluable quick reference resource for clinicians and a useful study guide for veterinary students. In this practical and beautifully illustrated book, early chapters cover physical examination, advice on interpreting diagnostic tests, and avian anatomy and physiology. Disorders affecting the different body regions and systems make up the majority of the including the gastrointestinal tract and the cardiovascular system. Further aspects of avian medicine discussed in the book include behavioural problems, incubation of eggs, paediatrics and surgery. Written by an expert with more than 30 years of clinical experience in avian medicine, the new edition is thoroughly revised with updated diseases, new and expanded clinical techniques, and over 100 Husbandry, Grooming and Nutrition, Diagnostic Imaging, Endoscopy, and Oncology as well as new sections on cardiovascular anatomy and neuroanatomy. s: Husbandry, Grooming and Nutrition, Diagnostic Imaging, Endoscopy, and Oncology as well as new sections on cardiovascular anatomy and neuroanatomy.

Gamebird Medicine and Management

Birds - Small Mammals - Reptiles

Comparative Avian Nutrition

Clinical Medicine and Surgery

Oxford Handbook of Gastrointestinal Nursing

Gastrointestinal Physiology, a volume in the Mosby Physiology Monograph Series, explains the fundamentals of gastrointestinal physiology in a clear and concise manner. Ideal for your systems-based curriculum, this fully updated medical textbook provides you with a basic understanding of how the GI system functions in both health and disease. Stay current with clear, accurate, and up-to-the-minute coverage of the physiology of the gastrointestinal system focusing on the needs of the student. Bridge the gap between normal function and disease with gastrointestinal pathophysiology content throughout the book. Master the material more easily with learning objectives at the start of each chapter, overview boxes, key words and concepts, chapter summaries, and physiology review questions at the end of the book. Understand complex concepts by examining clear, 2-color diagrams. Apply what you've learned to real-life clinical situations with the aid of featured clinical cases with questions and explained answers. Consult the book online at Student Consult, where you can perform quick searches, add your own notes and bookmarks, and more! Stay abreast of the latest research and findings in physiology with coverage of the physiological significance of gastrointestinal peptides; the regulation of mucosal growth and cancer; details surrounding acid secretion and peptic ulcers; and more. Access new gastrointestinal information on the regulation of pancreatic secretion and gallbladder contraction; the transport processes for the absorption of nutrients; facts about fat absorption; and the regulation of food intake.

With coverage of current issues and emerging trends, Fowler's Zoo and Wild Animal Medicine, Volume 7 provides a comprehensive, all-new reference for the management of zoo and wildlife diseases. A Current Therapy format emphasizes the latest advances in the field, including nutrition, diagnosis, and treatment protocols. Cutting-edge coverage includes topics such as the "One Medicine" concept, laparoscopic surgery in elephants and rhinoceros, amphibian viral diseases, and advanced water quality evaluation for zoos. Editors R. Eric Miller and Murray E. Fowler promote a philosophy of animal conservation, bridging the gap between captive and free-ranging wild animal medicine with chapters contributed by more than 100 international experts. The Current Therapy format focuses on emerging trends, treatment protocols, and diagnostic updates new to the field, providing timely information on the latest advances in zoo and wild animal medicine. Content ranges from drug treatment, nutrition, husbandry, surgery, and imaging to behavioral training. Coverage of species ranges from giraffes, elephants, lions, and orangutans to sea turtles, hellbenders, bats, kakapos, and more. An extensive list of contributors includes recognized authors from around the world, offering expert information with chapters focusing on the latest research and clinical management of captive and free-ranging wild animals. A philosophy of animal conservation helps zoo and wildlife veterinarians fulfill not only the technical aspects of veterinary medicine, but contribute to the overall biological teams needed to rescue many threatened and endangered species from extinction. All content is new, with coverage including coverage of cutting-edge issues such as white-nose disease in bats, updates on Ebola virus in wild great apes, and chytrid fungus in amphibians. Full-color photographs depict external clinical signs for more accurate clinical recognition. Discussions of the "One Medicine" concept include chapters addressing the interface between wildlife, livestock, human, and ecosystem health. New sections cover Edentates, Marsupials, Carnivores, Perrissodactyla, and Camelids. Over 100 new tables provide a quick reference to a wide range of topics. An emphasis on conserving threatened and endangered species globally involves 102 expert authors representing 12 different countries.

Their natural beauty, exceptional variety and unique biology make birds (Aves) one of the most fascinating groups of animals. They are also of great importance to humans as food and as experimental subjects that have catalyzed significant advances in many areas of biological research. Central to our ability to maintain and develop these resources is a thorough understanding of avian nutrition. This book presents, uniquely, all aspects of our current knowledge, drawn from such diverse disciplines as physiological ecology, poultry production, zoo biology and biomedical science. The physical and biochemical processes of digestion, the metabolic functions of nutrients and the diversity of evolutionary adaptations required to accommodate very different foodstuffs are examined in depth. Emphasis is placed on the quantitative nature of nutrition and the practical consequences for the dietary requirements of captive and wild avian populations throughout their life cycle. This book is key reading for advanced students of animal nutrition and poultry science and for research ornithologists. It will also be valuable for practicing nutritionists working with farmed, pet, zoo or wild birds and represents an essential purchase for libraries of animal science, veterinary medicine and ornithology.

Derived from the 28th Poultry Science Symposium of the World's Poultry Science Association (UK), this book focuses on the current interest of the phasing out of antibiotic use in poultry and covers in-depth interactions between the bird, its diet and potential pathogens. It also demonstrates. the understanding of the gut health in the 21st century of commercial poultry and flocks and the ultimate safety of poultry product in the human food chain.

Companion and Aviary Birds

Avian Medicine and Surgery in Practice

Mosby Physiology Monograph Series (With STUDENT CONSULT Online Access)

Textbook and Colour Atlas (Second Edition)

Gastrointestinal Physiology

Sturkie's Avian PhysiologyElsevier

For more than forty years, animal health professionals have turned to the Merck Veterinary Manualfor integrated, concise and reliable veterinary information. Now this manual covering the diagnosis, treatment, and prevention of diseases of companion, food and zoo animals.is available on an easy-to-use, fully searchable CD-ROM. The CD includes the full text of The Merck Veterinary Manual 8/e and has been enhanced with picture links featuring original anatomical artwork and numerous clinical and diagnostic illustrations, table links and quick search links that provide quick accesss to cross referenced text.

Laboratory animals, including birds, play an important role in biomedical research. The humane care and management of these animals is an ongoing concern. A new addition to the acclaimed Laboratory Animal Pocket Reference series, The Laboratory Bird is the first publication dedicated to the care and use of avian species in the research setting. Covering avian species such as chickens, ducks, doves, parrots, and songbirds that are commonly used as research models, the book is divided into focused chapters that cover a broad range of topics, including: General avian biology and physiology Husbandry Regulations and regulatory compliance regarding the use of birds in research Experimental methods Veterinary care Along with discussing applicable regulations, the book also details issues of health management and quarantine approaches. The final chapter provides resources such as organizations, publications, vendors, and diagnostic laboratories. With its focus on the care of a diverse group of avian species in biomedical research settings, The Laboratory Bird is a valuable reference for animal care and veterinary technicians, laboratory animal veterinarians, trainees in laboratory animal medicine, and research staff members, as well as individuals involved in laboratory work who lack experience in working with birds.

Sturkie's Avian Physiology is the classic comprehensive single volume on the physiology of domestic as well as wild birds. The Sixth Edition is thoroughly revised and updated, and features several new chapters with entirely new content on such topics as migration, genomics and epigenetics. Chapters throughout have been greatly expanded due to the many recent advances in the field. The text also covers the physiology of flight, reproduction in both male and female birds, and the immunophysiology of birds. The Sixth Edition, like the earlier editions, is a must for anyone interested in comparative physiology, poultry science, veterinary medicine, and related fields. This volume establishes the standard for those who need the latest and best information on the physiology of birds. Includes new chapters on endocrine disruptors, magnetoreception, genomics, proteomics, mitochondria, control of food intake, molting, stress, the avian endocrine system, bone, the metabolic demands of migration, behavior and control of body temperature Features extensively revised chapters on the cardiovascular system, pancreatic hormones, respiration, pineal gland, pituitary gland, thyroid, adrenal gland, muscle, gastro-intestinal physiology, incubation, circadian rhythms, annual cycles, flight, the avian immune system, embryo physiology and control of calcium. Stands out as the only comprehensive, single volume devoted to bird physiology Offers a full consideration of both blood and avian metabolism on the companion website (http://booksite.elsevier.com/ 9780124071605). Tables feature hematological and serum biochemical parameters together with circulating concentrations of glucose in more than 200 different species of wild birds

The Future of Physiology: 2020 and Beyond

Avian Physiology

Functional Anatomy and Physiology of Domestic Animals

Avian Immunology

Alimentary Canal: Secretion

From budgies and cockatiels to chipmunks and chinchillas, our interest in exotic pets has rocketed in recent years. With the house rabbit being the UK's third most commonly kept pet after the cat and dog, and sales in small mammals, reptiles and birds continuing to grow, exotic pets have now become a specialist area of veterinary practice in their own right. Veterinary Nursing of Exotic Pets is the first book to address the need for a definitive reference book devoted entirely to the principles and applications of nursing exotic species. Developed from a City and Guild's course, it not only covers husbandry, nutrition and handling, but also explores anatomy and chemical restraint, and provides an overview of diseases and treatments.

Responding to recent interest in the gastrointestinal tract as a model for studies in physiological and ecological adaptation to fluctuating environmental conditions, this collection summarizes the current state of knowledge from an integrative perspective. The contributors come from the fields of comparative morphology, nutritional physiology, eco Designed for the mixed practice large animal veterinarian, veterinary students, and camelid caretakers alike, *Llama and Alpaca Care* covers all major body systems, herd health, physical examination, nutrition, reproduction, surgery, anesthesia, and multisystem diseases of llamas and alpacas. Written by world-renowned camelid specialists and experts in the field, this comprehensive and uniquely global text offers quick access to the most current knowledge in this area. With coverage ranging from basic maintenance such as restraint and handling to more complex topics including anesthesia and surgery, this text provides the full range of knowledge required for the management of llamas and alpacas. "...an essential text for anyone working with South American camelids." Reviewed by Claire E. Whitehead on behalf of *Veterinary Record*, July 2015 Over 500 full-color images provide detailed, highly illustrated coverage of all major body systems, physical examination, nutrition, anesthesia, fluid therapy, multisystem diseases, and surgical disorders. World-renowned camelid experts and specialists in the field each bring a specific area of expertise for a uniquely global text. Comprehensive herd health content includes handling techniques, vaccinations, biosecurity, and protecting the herd from predators. Coverage of anesthesia and analgesia includes the latest information on pharmacokinetics of anesthetic drugs, chemical restraint, injectable and inhalation anesthesia, neuroanesthesia, and pain management. Reproduction section contains information on breeding management, lactation, infertility, and embryo transfer. Nutrition information offers detailed nutritional requirements and discusses feeding management systems and feeding behavior.

Sturkie's Avian Physiology, Seventh Edition is the classic, comprehensive, single volume on the physiology of domestic and wild birds. This latest edition is thoroughly revised and updated with several new chapters with entirely new content on such topics as vision, sensory taste, pain reception, evolution and domestication. Chapters throughout have been greatly expanded due to the many recent advances in the field. This book is written by international experts in different aspects of avian physiology. For easy reading and searches, the book is structured under a series of themes, beginning with genomic studies, sensory biology and nervous systems, and major organs. This book is an important resource for ornithologists, poultry scientists, and other researchers in avian studies. It is also useful for students in avian or poultry physiology, as well as avian veterinarians. Stands out as the only single volume devoted to bird physiology Features updates, revisions or additions to each chapter Written and edited by international leaders in avian studies

Veterinary Nursing of Exotic Pets

Avian Medicine and Surgery

Introduction to Veterinary Anatomy and Physiology E-Book

Avian Medicine

Self-assessment Color Review