

Fenner S Veterinary Virology

Fenner and White's Medical Virology, Fifth Edition provides an integrated view of related sciences, from cell biology, to medical epidemiology and human social behavior. The perspective represented by this book, that of medical virology as an infectious disease science, is meant to provide a starting point, an anchor, for those who must relate the subject to clinical practice, public health practice, scholarly research, and other endeavors. The book presents detailed exposition on the properties of viruses, how viruses replicate, and how viruses cause disease. These chapters are then followed by an overview of the principles of diagnosis, epidemiology, and how virus infections can be controlled. The first section concludes with a discussion on emergence and attempts to predict the next major public health challenges. These form a guide for delving into the specific diseases of interest to the reader as described in Part II. This lucid and concise, yet comprehensive, text is admirably suited to the needs of not only advanced students of science and medicine, but also postgraduate students, teachers, and research workers in all areas of virology. Features updated and expanded coverage of pathogenesis and immunity Contains the latest laboratory diagnostic methods Provides insights into clinical features of human

viral disease, vaccines, chemotherapy, epidemiology, and control

Animal Virus Structure provides a comprehensive, state-of-the-art summary of the structure, molecular composition, and principal antigenic and biological properties of each currently recognized family of animal viruses. Information deriving from electron microscopy, computer image processing and X-ray diffraction is integrated systematically with biochemical data into three-dimensional molecular models of viral architecture. A brief account of virus/cell interaction and pathogenicity completes each chapter.

The most complete and definitive reference to all aspects of poultry diseases, Diseases of Poultry, Fourteenth Edition has been fully revised and updated to offer a comprehensive survey of current knowledge. Updates the definitive reference of poultry health and disease Provides more clinically relevant information on management of specific diseases, contributed by clinical poultry veterinarians Offers information on disease control in organic and antibiotic-free production Presents more concise, streamlined chapters for ease of use Incorporates advances in the field, from new diagnostic tools and information to changes brought about by the increasing globalization and the re-emergence of zoonotic pathogens

This text explains the underlying anatomical

structure of small animals, and then explains the physiology of all the body systems applying theoretical concepts to actual clinical cases.

A Laboratory Manual

Veterinary Echocardiography

A Textbook for Veterinary Nurses and Technicians

The Nonhuman Primate in Nonclinical Drug Development and Safety Assessment

An Integrated Approach

Completely rewritten, this edition has expanded coverage of zoonotic viruses and the diseases they cause, and viruses and viral diseases of laboratory animals, poultry, fish, and wildlife.

The concept of new emerging and reemerging viral diseases reflects the new perspective this concept has brought to veterinary and zoonotic virology and related fields. Part I presents fundamental principles of virology related to animal infection and disease. Part II details the properties and clinical features of the viruses that afflict animals and describes their treatment and control. Key Features * Comprehensive coverage of animal viruses, viral diseases, and viral zoonoses * Covers veterinary and zoonotic virology from the perspective of pathogenesis of viral infections, as well as from the perspective of disease prevention and control

The first book in two decades to address this multi-faceted field, The Toxicology and Biochemistry of Insecticides provides the most

up-to-date information on insecticide classification, formulation, mode of action, resistance, metabolism, environmental fate, and regulatory legislation. The book draws on the author's groundbreaking research in insect detoxification. It discusses mechanisms at the molecular level such as specific enzymes that contribute to insecticide resistance, the modification of which can change insecticide susceptibility and influence host plant selections in phytophagous insects. Beginning with a general introduction, eleven chapters integrate classical toxicology with physiology, biochemistry, and molecular biology to present a comprehensive look at the field. The book discusses the demand and formulation of pesticides and describes each type from dusts and powders to baits and aerosols. It classifies insecticides by target, chemical compound, and mechanism; evaluates toxicity testing procedures; explains pesticide uptake, mode of action, and metabolism; and explores species differences, resistance, and interactions. It also considers pesticides in the environment and federal and state regulatory legislation and enforcement. A long-awaited, state-of-the-science review on insect toxicology, this indispensable book brings you up-to-date on the many aspects and implications of pesticide use and provides the necessary background and platform from which to conduct future research.

REBHUN'S DISEASES OF DAIRY CATTLE, 2nd Edition is your all-in-one guide to bovine disease management. With thorough, up-to-date coverage of differential diagnosis methods, surgical and therapeutic treatment options, and prevention strategies, it provides vital information for battling bovine diseases in both dairy and non-dairy cattle. The book is organized by body system for quick, convenient reference, and this new edition meets the growing need for management of both diseases of individual cows and problems affecting whole herds. Individual case presentations provide a valuable tool for differential diagnosis. Practical overviews for procedures such as blood transfusion, abdominal paracentesis, and ECG give you reliable support for some of the most common procedures in bovine care. Body systems organization makes diagnosis easier and more effective by isolating system-specific diseases and conditions. Full-color design and over 200 new photographs depict disease processes in realistic clarity and ensure the most accurate diagnosis and treatment. Emphasis on herd health addresses the dairy industry's increased concern over population medicine. Expanded coverage of lameness highlights key problem areas in bovine feet. Revised drug usage recommendations and legal considerations present the most current information in these critical areas to help you prevent dangerous or costly errors. Additional

public health/safety considerations identify diseases that pose a substantial public threat and detail special measures for related care of dairy cattle. New, innovative DVD features real-time videos of neurologic case studies, ultrasound and endoscopy procedures, and imaging techniques that familiarize you with the latest technological equipment and protocols. Features coverage of the latest treatment innovations including antibiotic residue testing, care of individual metabolic disease, troubleshooting, and much more.

Virology: A Laboratory Manual is designed for a one-semester virology laboratory course, although more than one semester of exercises are included. Choices of experiments allow for flexibility within a sequentially organized framework. The text features detailed experimental protocols with comprehensive sections on materials and preparations for all exercises, plus introductory material, discussion questions, and further reading. the use of few viruses and cell lines provides continuity and simplifies preparation of the laboratory exercises. An Instructor's Manual is available to give alternative and assistance in laboratory set-up. n Methods for studying viral properties and quantification n Assays for viral antibodies and interferons n Techniques in cell culture for viral research n Experiments to accommodate a bi-weekly laboratory schedule n Experiments

designed to minimize need for extensive preparation or sophisticated instrumentation

Aquaculture Virology

Animal Coronaviruses

The Nature of Viruses

Georgis' Parasitology for Veterinarians

The Role of Animals in Emerging Viral Diseases

Fully revised and reformatted, Veterinary Echocardiography, Second Edition covers the pertinent physical principles of sound that allow for use of ultrasound as a diagnostic tool. It depicts the two dimensional, M-mode and Doppler examinations, including instructions and pictures for obtaining these images. Additional coverage includes echocardiographic examination assessment, echocardiographic features of common cardiac diseases, acquired valvular diseases, features of systemic and pulmonary hypertension, myopathies, pericardial effusion and cardiac masses, congenital shunts, and stenotic lesions. This book provides a comprehensive reference and instruction manual for echocardiographers at all levels of experience.

Veterinary Microbiology, Third Edition is a comprehensive reference on the bacterial, fungal, and viral pathogenic agents that cause animal disease. Now in full color with improved images throughout, the new edition has been thoroughly updated to reflect information from current research and diagnostic and clinical

publications. Key changes include a review of microbial cell structure and function and increased emphasis on the key points of pathogenesis and host responses to infection. Organized into four sections, the Third Edition begins with an updated and expanded introductory section on infectious disease pathogenesis, diagnosis and clinical management. The second section covers bacterial and fungal pathogens, and the third section describes viral diseases and viruses. The final section presents a systematic approach of describing infection and disease of animals. Equally useful for beginning veterinary students and seasoned practitioners, Veterinary Microbiology offers a thorough introduction and reference text for veterinary infectious disease. Veterinary Clinical Parasitology, Eighth Edition, prepared under the auspices of the American Association of Veterinary Parasitologists (AAVP), emphasizes the morphologic identification of both internal and external parasites of domestic animals. Focusing on the tests and information most relevant to daily practice, the book describes accurate, cost-effective techniques for diagnosing parasitic infections in animals. Including clear, easy-to-find information on the distribution, life cycle, and importance of each parasite, Veterinary Clinical Parasitology offers more than 450 images to aid with diagnosis. The Eighth Edition includes a new chapter on

immunologic and molecular diagnosis, increased coverage of ticks and new sections on identification of microfilariae and larvae in diagnostic samples. The new edition also features expanded information on quantitative egg counts, detection of anthelmintic resistance and identification of ruminant strongylid larvae. Additional improvements include many new images throughout the book, revised taxonomic information, a new layout featuring tabs by section to improve user-friendliness, and a companion website offering the images from the book in PowerPoint at www.wiley.com/go/zajac. Veterinary Clinical Parasitology is a highly practical benchside reference invaluable to clinicians, technicians, and students. This book provides a comprehensive but concise overview on the economically important emerging cattle pox virus derived Lumpy Skin Disease, including the characteristics of causative agent, description of clinical signs in cattle, pathology and histopathology, immunity, geographical distribution, epidemiology and transmission pathways, control and eradication of the disease. In addition the recent developments in vaccination, mathematical modeling and risk assessment are discussed. Lumpy Skin Disease currently spreads aggressively across the Middle and Near East. The first incursion to the European Union territory occurred in Greece in autumn 2015. The

book targets clinicians and field veterinarians in Lumpy Skin Disease affected regions, veterinary authorities as well as advanced students in veterinary medicine and virology.

The Flaviviruses: Detection, Diagnosis and Vaccine Development

Diseases of Swine

Animal Virus Structure

Bringing Up Boys

Both a theoretical text and a practical handbook, Vaccines for Veterinarians is the first of its kind to bring the basic science of animal vaccination and the practical details of vaccine use together in one single volume. From the first chapter on the history of vaccination and the triumph of rinderpest eradication to the last chapter on the rapidly emerging field of cancer vaccines, this book offers a truly comprehensive grounding in established and emerging vaccines for both major and minor species. Specific topics include viral vectored vaccines, DNA-plasmid vaccines, RNA vaccines, reverse vaccinology, the complexities of adjuvant use, vaccine failures and adverse events, vaccine production and

regulation, robotic vaccination machines, contraceptive and production-enhancing vaccines, and so much more. At a time when resistance to human vaccination is receiving much publicity, this evidence-based book is the ideal counter to ill-informed speculation — serving as a timely reminder that vaccination is essential for the control of infectious diseases in animals. Well-respected and experienced veterinary author, Ian Tizard, provides expert guidance on the topic of vaccinations and immunology in veterinary medicine. Expert Consult site offers an online version of the book, making it easy to search the entire book electronically. The latest information on viral vectored vaccines keeps you up-to-date on the topic as well as the properties and relative advantages of currently used vectors in animal vaccines. Survey of vaccine responses covers the different mechanisms by which the immune system responds to different types of vaccines. Inclusion of the latest vaccine technologies discusses the advantages and disadvantages of DNA-

plasmid vaccines, RNA vaccines, and more. Coverage of adverse events and hypersensitivities includes the best ways to treat them and report them. Coverage of passive immunization discusses the growing use of therapeutic monoclonal antibodies in veterinary medicine. Coverage of immunotherapy includes recent improvements and new products in both active and passive immunotherapy against animal cancers.

To date textbooks on viruses infecting fish, crustaceans and molluscs, the three main aquatic animal farmed groups, have been on the whole "diseases-centric and individual viral diseases selected based on "epizoo-centric approaches with little to no coverage of the basic biology of the viruses, in contrast to textbooks on viruses infecting terrestrial - farmed, pet, and free-range (wild) - animals and humans. Despite considerable advances in animal virology in recent years coupled with an economically important global aquaculture industry, knowledge of viruses of animal aquaculture is still sparse and in some

cases outdated although these viruses are closely related to well-known virus families. The last book in fish virology (Fish viruses and fish viral diseases 1988, Wolf, K.) was published in the 1980s. A lot of work has been done on fish viruses and many new aquatic animal viruses continue to be discovered. Aquaculture Virology provides the current state of knowledge of aquatic animal viruses within the current virus classification and taxonomic context thereby allowing the reader to draw on the principles of general virology. This book is a systematic and concise resource useful to anyone involved with or looking to move into aquaculture and fisheries. Clinical veterinarians, aquaculture disease practitioners, biologists, farmers, and all those in industry, government or academia who are interested in aquatic animal virology will find this book extremely useful. Provides unique comprehensive information on animal viruses for aquaculture and fisheries Presents high quality illustrations of viral structure, diagrams of viral disease

processes, gross pathology and histopathology lesions, and summary tables to aid in understanding. Describes aquatic animal viruses of the three major aquatic animals, fish, crustaceans, and molluscs, within the current virus classification and taxonomic context thereby allowing the reader to draw on the principles of general virology.

Microbiology is one of the core subjects for veterinary students, and since its first publication in 2002, *Veterinary Microbiology and Microbial Disease* has become an essential text for students of veterinary medicine. Fully revised and expanded, this new edition updates the subject for pre-clinical and clinical veterinary students in a comprehensive manner. Individual sections deal with bacteriology, mycology and virology. Written by an academic team with many years of teaching experience, the book provides concise descriptions of groups of microorganisms and the diseases which they cause. Microbial pathogens are discussed in separate chapters which provide information on the more

important features of each microorganism and its role in the pathogenesis of diseases of animals. The international and public health significance of these pathogens are reviewed comprehensively. The final section is concerned with the host and is organized according to the body system affected. Tables, boxes and flow diagrams provide information in an easily assimilated format. This edition contains new chapters on molecular diagnostics and on infectious conditions of the skin, cardiovascular system, urinary tract and musculoskeletal system. Many new colour diagrams are incorporated into this edition and each chapter has been updated. Key features of this edition: Twelve new chapters included Numerous new illustrations Each chapter has been updated Completely re-designed in full colour Fulfils the needs of veterinary students and academics in veterinary microbiology Companion website with figures from the book as Powerpoints for viewing or downloading by chapter: www.wiley.com/go/quinn/veterinarymicrobiology Veterinary Microbiology and

Microbial Disease remains indispensable for all those studying and teaching this essential component of the veterinary curriculum.

Parasitology: An Integrated Approach, provides a concise, student-friendly account of parasites and parasite relationships that is supported by case studies and suggestions for student projects. The book focuses strongly on parasite interactions with other pathogens and in particular parasite-HIV interactions, as well as looking at how host behaviour contributes to the spread of infections. There is a consideration of the positive aspects of parasite infections, how humans have used parasites for their own advantage and also how parasite infections affect the welfare of captive and domestic animals. The emphasis of *Parasitology* is on recent research throughout and each chapter ends with a brief discussion of future developments. This text is not simply an updated version of typical parasitology books but takes an integrated approach and explains how the study of parasites requires an understanding of a wide

range of other topics from molecular biology and immunology to the interactions of parasites with both their hosts and other pathogens.

The Lives of Frank and Charles Fenner

The Toxicology and Biochemistry of Insecticides

Viruses and Human Disease

Textbook of Medical Virology

Fenner's Veterinary Virology

Fenner's Veterinary, Virology, Fourth Edition, is the long awaited new edition of Veterinary Virology, 3e, which was published in 1999. Fully revised and updated by the new author team, part I presents the fundamental principles of virology related to animal infection and disease, and part II addresses the clinical features, pathogenesis, diagnosis, epidemiology and prevention of individual diseases. New to this Edition New author team - one main author to ensure that the book reads like an authored book but with the benefit of using experts to contribute to specific topics Text has been refocused - part I has been condensed and where appropriate incorporated into part II to make it more user friendly The number of figures have been increased and are now in full color Fully revised and updated to include the latest information in the field of veterinary virology Beautifully illustrated color figures throughout Organized and current information provided by an expert team of authors Pathology and Pathogenesis of Human Viral Disease is a comprehensive reference that examines virus-induced clinical disease of humans in the context of the responsible virus and its epidemiology. Encompassing everything from cold and flu viruses to sexually transmitted diseases, this important

resource describes the cellular and tissue pathological changes attributable to infection in the context of the pathogenic mechanisms involved. The author provides a comprehensive review of the older and contemporary literature, considering both the common and much rarer complications of infection. Pathology and Pathogenesis of Human Viral Disease is written from the unique perspective of the clinical pathologist. It will help clinicians and pathologists gain a better understanding of changes that occur in viral infected cells, tissues, and organs. It will also serve as a pathology source book for virologists, internists, and pediatricians. Key Features * Provides a comprehensive, worldwide perspective of viral disease pathology * Bridges the fields of pathology and virology; integrating clinical disease with cell and tissue pathology * Addresses topics from the perspective of the clinical pathologist * Illustrates unique, viral induced pathological lesions * Considers common and uncommon complications of infection

Veterinary Neuroanatomy: A Clinical Approach is written by veterinary neurologists for anyone with an interest in the functional, applied anatomy and clinical dysfunction of the nervous system in animals, especially when of veterinary significance. It offers a user-friendly approach, providing the principal elements that students and clinicians need to understand and interpret the results of the neurological examination. Clinical cases are used to illustrate key concepts throughout. The book begins with an overview of the anatomical arrangement of the nervous system, basic embryological development, microscopic anatomy and physiology. These introductory chapters are followed by an innovative, hierarchical approach to understanding the overall function of the nervous system. The applied anatomy of posture and movement, including the vestibular system and cerebellum, is comprehensively described and illustrated by

examples of both function and dysfunction. The cranial nerves and elimination systems as well as behaviour, arousal and emotion are discussed. The final chapter addresses how to perform and interpret the neurological examination. *Veterinary Neuroanatomy: A Clinical Approach* has been prepared by experienced educators with 35 years of combined teaching experience in neuroanatomy. Throughout the book great care is taken to explain key concepts in the most transparent and memorable way whilst minimising jargon. Detailed information for those readers with specific interests in clinical neuroanatomy is included in the text and appendix. As such, it is suitable for veterinary students, practitioners and also readers with a special interest in clinical neuroanatomy. Contains nearly 200 clear, conceptual and anatomically precise drawings, photographs of clinical cases and gross anatomical specimens Keeps to simple language and focuses on the key concepts Unique 'NeuroMaps' outline the location of the functional systems within the nervous system and provide simple, visual aids to understanding and interpreting the results of the clinical neurological examination The anatomical appendix provides 33 high-resolution gross images of the intact and sliced dog brain and detailed histological images of the sectioned sheep brainstem. An extensive glossary explains more than 200 neuroanatomical structures and their function.

Microbiologists; Virologists; Educators; Geographers; Biography; Australia.

Vesicular Diseases

Lumpy Skin Disease

Veterinary Physiology and Applied Anatomy

Rebhun's Diseases of Dairy Cattle E-Book

Veterinary Microbiology and Microbial Disease

Veterinary Virology deals with basic

biomedical virology and the clinical discipline of infectious diseases. The book discusses the principles of virology as effecting future developments in the search for preventive and management of infectious diseases in animals, whether singly or as a whole herd or flock. Part I explains the principles of animal virology including the structure, composition, classification, nomenclature, cultivation, and assay of viruses. This part also discusses viral genetics, replication, and evolution (including mutation and genetic engineering). The book also reviews the pathogenesis of viruses, host resistance and susceptibility, as well as the mechanisms of persistent infections and tumor induction. Part II deals with viruses found in domestic animals; this part also explains in detail the properties, replication methods, pathogenesis, immunity, diagnosis, and control of some common viruses. The book discusses some other families of viruses of which no members are yet known as to have caused serious or important diseases in animals.

Read PDF Fenner S Veterinary Virology

Veterinarians, immunologists, virologists, molecular researchers, students, and academicians in the discipline of virology and cellular biology, as well as livestock owners will find this book helpful.

Completely revised and updated, the new edition of this groundbreaking text integrates basic virology with pathophysiological conditions to examine the connection between virology and human disease. Most virology textbooks focus on the molecular biology involved without adequate reference to physiology. This text focuses on viruses that infect humans, domestic animals and vertebrates and is based on extensive course notes from James Strauss' virology class at the California Institute of Technology taught for over 30 years. Expertly depicting in color the molecular structure and replication of each virus, it provides an excellent overview for students and professionals interested in viruses as agents of human disease. Includes over 30% new material - virtually all of the figures and tables have been redrawn to include

the latest information and the text has been extensively rewritten to include the most up-to-date information

Includes a new chapter on emerging and reemerging viral diseases such as avian flu, SARS, the spread of West Nile virus across America, and the continuing spread of Nipah virus in Southeast Asia

Further reading sections at the end of each chapter make it easy find key references World maps depicting the current distribution of existing and newly emerging viruses are also incorporated into the text

Through mid-May 2007, the United States had confirmed three cases of bovine spongiform encephalopathy (BSE, or "mad cow disease"): the first in December 2003 in a Canadian-born cow found in Washington state, the second in June 2005 in cow in Texas, and the third in March 2006 in a cow in Alabama. Shortly after the first case, U.S. Department of Agriculture (USDA) and other officials announced measures to improve existing safeguards against the introduction and spread of BSE.

Previously, the major safeguards were: (1) USDA restrictions on imports of

ruminants and their products from countries with BSE; (2) a ban on feeding most mammalian proteins to cattle and other ruminants, issued by the Food and Drug Administration (FDA); and (3) a targeted domestic surveillance program by USDA's Animal and Plant Health Inspection Service (APHIS), the agency responsible for animal health monitoring and disease control.

Here's sensible advice and caring encouragement on raising boys from the nation's most trusted parenting authority, Dr. James Dobson. With so much confusion about the role of men in our society, it's no wonder so many parents and teachers are asking questions about how to bring up boys. Why are so many boys in crisis? What qualities should we be trying to instill in young males? Our culture has vilified masculinity and, as a result, an entire generation of boys is growing up without a clear idea of what it means to be a man. In the runaway bestseller *Bringing Up Boys*, Dr. Dobson draws from his experience as a child psychologist and family counselor, as

well as extensive research, to offer advice and encouragement based on a firm foundation of biblical principles.

Veterinary Clinical Parasitology

A Clinical Approach

Pathology and Pathogenesis of Human

Viral Disease

Fenner and White's Medical Virology

Vaccines for Veterinarians E-Book

Over 50% of known flaviviruses have been associated with human disease. The Flavivirus genus constitutes some of the most serious human pathogens including Japanese encephalitis, dengue and yellow fever.

Flaviviruses are known for their complex life cycles and epidemic spread, and are considered a globally-emergent viral threat. Detection, Diagnosis and Vaccine Development, the third volume of The Flaviviruses details the current status of technologies for detection and differentiation of these viruses, their use in surveillance and outbreak investigation, and also reviews the latest clinical research.

Comprehensive approach to the scientific disciplines needed to unravel the complexities of virus-host interactions Describes the technologies that have contributed to our current knowledge about the Flaviviruses Identifies the major problems faced in understanding the virus-host interactions that result in disease An exhaustive compendium of current and past knowledge on the Flavivirus family

Fenner's Veterinary Virology Academic Press

Now in its fourth edition, Pathology of Laboratory

Rodents and Rabbits has become a standard text for

veterinary pathologists, laboratory animal veterinarians, students, and others interested in these species. • The standard reference on the pathogenesis and cardinal diagnostic features of diseases of mice, rats, hamsters, gerbils, guinea pigs, and rabbits • Expanded coverage of rabbit disease, normal anatomic features, and biology • Over 450 color photographs illustrating gross and microscopic pathology • Companion website offering images from the text in PowerPoint

The Novartis Foundation Series is a popular collection of the proceedings from Novartis Foundation Symposia, in which groups of leading scientists from a range of topics across biology, chemistry and medicine assembled to present papers and discuss results. The Novartis Foundation, originally known as the Ciba Foundation, is well known to scientists and clinicians around the world.

Veterinary Neuroanatomy - E-Book

Diseases of Poultry

Current and Proposed Safeguards

Veterinary Virology

Nature, Nurture and Chance

*Fenner's Veterinary, Virology 4e, is the long awaited new edition of Veterinary Virology, 3e, which was published in 1999. Fully revised and updated by the new author team, part I presents the fundamental principles of virology related to animal infection and disease, and part II addresses the clinical features, pathogenesis, diagnosis, epidemiology and prevention of individual diseases. New to this Edition * New author team - one main author to ensure that the book reads like an authored book but with the benefit of using experts to contribute to specific topics * Text has been refocused - part*

*I has been condensed and where appropriate incorporated into part II to make it more user friendly * The number of figures have been increased and are now in full color Key Features and Benefits · Fully revised and updated to include the latest information in the field of veterinary virology · Beautifully illustrated color figures throughout · Organized and current information provided by an expert team of authors*

Textbook of Medical Virology presents a critical review of general principles in the field of medical virology. It discusses the description and molecular structures of virus. It addresses the morphology and classifications of viruses. It also demonstrates the principal aspects of virus particle structure. Some of the topics covered in the book are the symmetrical arrangements of viruses; introduction to different families of animal viruses; biochemistry of virus particles; the immunological properties and biological activities of viral gene products; description of enzymatic activities of viruses; and haemagglutination, cell fusion, and haemolysis of viruses. The description and characteristics of viral antigens are covered. The identification and propagation of viruses in tissue and cell cultures are discussed. An in-depth analysis of the principles of virus replication is provided. A study of the morphogenesis of virions is also presented. A chapter is devoted to virus-induced changes of cell structures and functions. The book can provide useful information to virologists, microbiologists, students, and researchers.

This detailed volume provides diagnosticians and researchers with practical methodologies and approaches to tackle animal coronaviruses. It explores conventional

immunohistochemistry, virus neutralization, enzyme-linked immunosorbent assays, expression and purification of recombinant viral proteins, and various molecular assays, including conventional and real-time reverse transcription-PCR, reverse genetics methodology, and next generation sequencing and sequence analyses. As part of the Springer Protocols Handbooks series, chapters contain readily reproducible laboratory protocols as well as expert tips on troubleshooting and avoiding known pitfalls. Practical and authoritative, Animal Coronaviruses serves as an ideal reference for researchers examining a wide variety of coronavirus species in the Coronaviridae.

Provides a fully revised Eleventh Edition of the definitive reference to swine health and disease Diseases of Swine has been the definitive reference on swine health and disease for over 60 years. This new edition has been completely revised to include the latest information, developments, and research in the field. Now with full color images throughout, this comprehensive and authoritative resource has been redesigned for improved consistency and readability, with a reorganized format for more intuitive access to information. Diseases of Swine covers a wide range of essential topics on swine production, health, and management, with contributions from more than 100 of the foremost international experts in the field. This revised edition makes the information easy to find and includes expanded information on welfare and behavior. A key reference for anyone involved in the swine industry, Diseases of Swine, Eleventh Edition: Presents a thorough revision to the gold-standard reference on pig health and disease Features full color images throughout the book Includes information on

the most current advances in the field Provides comprehensive information on swine welfare and behavior Offers a reorganized format to make the information more accessible Written for veterinarians, academicians, students, and individuals and agencies responsible for swine health and public health, Diseases of Swine, Eleventh Edition is an essential guide to swine health.

Parasitology

Veterinary Microbiology

Virology

Physiology E-Book

Bovine Spongiform Encephalopathy (BSE, Or "mad Cow Disease")

The Role of Animals in Emerging Viral Diseases presents what is currently known about the role of animals in the emergence or re-emergence of viruses including HIV-AIDS, SARS, Ebola, avian flu, swine flu, and rabies. It presents the structure, genome, and methods of transmission that influence emergence and considers non-viral factors that favor emergence, such as animal domestication, human demography, population growth, human behavior, and land-use changes. When viruses jump species, the result can be catastrophic, causing disease and death in humans and animals. These zoonotic outbreaks reflect several factors, including increased mobility of human populations, changes in demography and environmental changes due to globalization. The threat of new, emerging viruses and the fact that there are no vaccines for the most common zoonotic viruses drive research in the biology and ecology of zoonotic

transmission. In this book, specialists in 11 emerging zoonotic viruses present detailed information on each virus's structure, molecular biology, current geographic distribution, and method of transmission. The book discusses the impact of virus emergence by considering the ratio of mortality, morbidity, and asymptomatic infection and assesses methods for predicting, monitoring, mitigating, and controlling viral disease emergence.

Analyzes the structure, molecular biology, current geographic distribution and methods of transmission of 10 viruses Provides a clear perspective on how events in wildlife, livestock, and even companion animals have contributed to virus outbreaks and epidemics Exemplifies the "one world, one health, one medicine" approach to emerging disease by examining events in animal populations as precursors to what could affect humans

The Nonhuman Primate in Drug Development and Safety Assessment is a valuable reference dedicated to compiling the latest research on nonhuman primate models in nonclinical safety assessment, regulatory toxicity testing and translational science. By covering important topics such as study planning and conduct, inter-species genetic drift, pathophysiology, animal welfare legislation, safety assessment of biologics and small molecules, immunotoxicology and much more, this book provides scientific and technical insights to help you safely and successfully use nonhuman primates in pharmaceutical toxicity testing. A comprehensive yet practical guide, this book is intended for new researchers or practicing

toxicologists, toxicologic pathologists and pharmaceutical scientists working with nonhuman primates, as well as graduate students preparing for careers in this area. Covers important topics such as species selection, study design, experimental methodologies, animal welfare and the 3Rs (Replace, Refine and Reduce), social housing, regulatory guidelines, comparative physiology, reproductive biology, genetic polymorphisms and more Includes practical examples on techniques and methods to guide your daily practice Offers a companion website with high-quality color illustrations, reference values for safety assessment and additional practical information such as study design considerations, techniques and procedures and dosing and sampling volumes

This richly-illustrated handbook covers all aspects of modern feline dermatology, from the approach to different signs and symptoms to the description of the etiology, pathogenesis, clinical manifestation, diagnosis and current treatment of each feline dermatological disease. Thus this manual serves as essential practical guide to the busy practitioner to quickly and surely tackle cats with dermatological conditions, and offers a current and complete reference tool for the feline veterinarian and the veterinary dermatologist.

Renowned physiology instructor Dr. Linda Costanzo's friendly, logical, easy-to-follow writing style makes Physiology, 6th Edition ideal for coursework and USMLE preparation. Well-designed figures and tables provide handy visuals for procedures or physiologic equations, and

step-by-step explanations clarify challenging concepts. This full-color, manageably-sized text offers a comprehensive and consistent overview of core physiologic concepts at the organ system and cellular levels, making complex principles easy to understand. Information is presented in a short, simple, and focused manner – the perfect presentation for success in coursework and on exams. Chapter summaries and "Challenge Yourself" questions at the end of each chapter provide an extensive review of the material and reinforce understanding and retention. Equations and sample problems are integrated throughout the text. NEW! More Clinical Physiology Case Boxes relate to pathophysiology for a clinical context

Algebraic Statistics for Computational Biology

Feline Dermatology

Pathology of Laboratory Rodents and Rabbits

This book, first published in 2005, offers an introduction to the application of algebraic statistics to computational biology.

Now in full color, this comprehensive reference provides current information on all parasites commonly encountered in veterinary medicine. This edition also covers organisms that infect poultry, laboratory animals, and exotic species.