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Wonders of the Human Body Vol 2: Cardiovascular & Respiratory Systems The Respiratory System E-Book *Structure-Function Relationships in Various Respiratory Systems The Human Respiratory System* **The Respiratory System Respiration in Archaea and Bacteria The Respiratory System** Introduction to Anatomy & Physiology Volume 2: Cardiovascular and Respiratory Systems **The Respiratory System** *Inside Your Heart* **The Respiratory System at a Glance** Design Parameters for the Engineering of Closed Respiratory Systems **Cardiovascular and Respiratory Systems Approaches to Cardio-Respiratory Systems in Health and Ilnesses Digestive and Respiratory Systems** The Lungs and Respiratory System **Senses, Nervous System and Respiratory System 20 Fun Facts About the Respiratory System** The Respiratory System **Netter Collection of Medical Illustrations: Respiratory System E-Book** Bridges: Body Systems: The Respiratory and Circulatory Systems **The Respiratory System** *Respiratory Physiology* The Human Respiratory System **The Respiratory System** *The Respiratory System* **Control of the Cardiovascular and Respiratory Systems in Health and Disease** *The Respiratory System* **Your Respiratory System The Remarkable Respiratory System Biological Systems in Vertebrates, Vol. 1** The Respiratory System at a Glance **Concepts of Biology Regulation of Tissue Oxygenation, Second Edition** *Closed Circuit Respiratory Systems Symposium* Computational Fluid and Particle Dynamics in the Human Respiratory System *Crash Course Respiratory System Updated Edition - E-Book The Respiratory System* The Respiratory System, Third Edition **The Biology of the Avian Respiratory System**

Inside Your Heart Jan 19 2022 "What's 30,000 miles long and found right inside your body? Your circulatory system! And which organs help your circulatory system get its job done? Your lungs! This fascinating, fact-filled book about the heart and lungs provides amazing information, clear explanations, and up-close photos and illustrations of the circulatory and respiratory systems at work.." -- Back cover.

The Respiratory System Sep 03 2020 The Systems of the Body series has established itself as a highly valuable resource for medical and other health science students following today's systems-based courses. Now thoroughly revised and updated in this third edition, each volume presents the core knowledge of basic science and clinical conditions that medical students need, providing a concise, fully integrated view of each major body system that can be hard to find in more traditionally arranged textbooks or other resources. Multiple case studies help relate key principles to current practice, with links to clinical skills, clinical investigation and therapeutics made clear throughout. Each (print) volume also now comes with access to the complete, enhanced eBook version, offering easy anytime, anywhere access - as well as self-assessment material to check your understanding and aid exam preparation. The Respiratory System provides highly accessible coverage of the core basic science principles in the context of clinical case histories, giving the reader a fully integrated understanding of the system and its major diseases. Introduction Structure and function of the respiratory system Elastic properties of the respiratory system Airflow and resistance in the respiratory system Pulmonary Ventilation Diffusion of Gases between air and blood The Pulmonary Circulation Carriage of gases by the blood and acid/base balance Nervous control of breathing Chemical control of breathing Lung function tests Systems of the Body Series: The Renal System The Musculoskeletal System The Nervous System The Digestive System The Endocrine System The Respiratory System The Cardiovascular System

The Biology of the Avian Respiratory System Jun 19 2019 The central focus of this book is the avian respiratory system. The authors explain why the respiratory system of modern birds is built the way it is and works the way that it does. Birds have been and continue to attract particular interest to biologists. The more birds are studied, the more it is appreciated that the existence of human-kind on earth very much depends directly and indirectly on the existence of birds. Regarding the avian respiratory system, published works are scattered in biological journals of fields like physiology, behavior, anatomy/morphology and ecology while others appear in as far afield as paleontology and geology. The contributors to this book are world-renowned experts in their various fields of study. Special attention is given to the evolution, the structure, the function and the development of the lung-air sac system. Readers will not only discover the origin of birds but will also learn how the respiratory system of theropod dinosaurs worked and may have transformed into the avian one. In addition, the work explores such aspects as swallowing mechanism in birds, the adaptations that have evolved for flight at extreme altitude and gas exchange in eggs. It is a highly informative and carefully presented work that provides cutting edge scientific insights for readers with an interest in the respiratory biology and the evolution of birds.

Bridges: Body Systems: The Respiratory and Circulatory Systems Feb 08 2021

Regulation of Tissue Oxygenation, Second Edition Dec 26 2019 This presentation describes various aspects of the regulation of tissue oxygenation, including the roles of the circulatory system, respiratory system, and blood, the carrier of oxygen within these components of the cardiorespiratory system. The respiratory system takes oxygen from the atmosphere and transports it by diffusion from the air in the alveoli to the blood flowing through the pulmonary capillaries. The cardiovascular system then moves the oxygenated blood from the heart to the microcirculation of the various organs by convection, where oxygen is released from hemoglobin in the red blood cells and moves to the parenchymal cells of each tissue by diffusion. Oxygen that has diffused into cells is then utilized in the mitochondria to produce adenosine triphosphate (ATP), the energy currency of all cells. The mitochondria are able to produce ATP until the oxygen tension or PO2 on the cell surface falls to a critical level of about 4–5 mm Hg. Thus, in order to meet the energetic needs of cells, it is important to maintain a continuous supply of oxygen to the mitochondria at or above the critical PO2 . In order to accomplish this desired outcome, the cardiorespiratory system, including the blood, must be capable of regulation to ensure survival of all tissues under a wide range of circumstances. The purpose of this presentation is to provide basic information about the operation and regulation of the cardiovascular and respiratory systems, as well as the properties of the blood and parenchymal cells, so

that a fundamental understanding of the regulation of tissue oxygenation is achieved.

The Respiratory System at a Glance Dec 18 2021 Following the familiar, easy to use at a Glance format, and now in full-colour, The Respiratory System at a Glance is an accessible introduction and revision text for medical students. Reflecting changes to the content and assessment methods used in medical education and published clinical recommendations, this at a Glance provides a user-friendly overview of the respiratory system to encapsulate all that the student needs to know. This new edition of The Respiratory System at a Glance: Integrates both basic and clinical science - ideal for systems-based courses Includes both the pathophysiology and clinical aspects of the respiratory system Features more case studies, updated and colour figures, and new chapters on the epidemiology of respiratory disease, public health issues, and Sarcoidosis Includes self-assessment questions and answers and an appendix of tables of standard values Provides a simple 'one-stop' easy to use course and revision text

Crash Course Respiratory System Updated Edition - E-Book Sep 22 2019 Crash Course - your effective everyday study companion PLUS the perfect antidote for exam stress! Save time and be assured you have all the core information you need in one place to excel on your course and achieve exam success. A winning formula now for over 15 years, each volume has been fine-tuned and fully updated, with an improved layout tailored to make your life easier. Especially written by senior students or recent graduates - those who understand what is essential for exam success - with all information thoroughly checked and quality assured by expert Faculty Advisors, the result is a series of books which exactly meets your needs and you know you can trust. This volume in the essential area of respiratory medicine provides a coherent journey from basic science to clinical assessment and finally respiratory pathology. The careful inclusion of cross referencing and the very latest guidelines will enable you to quickly link the key aspects of science and clinical medicine in an evidence-based manner. Whether you are revising for basic science exams or are on the wards looking for clinical information with a pathophysiological focus, this new edition is for you! More than 170 illustrations present clinical, diagnostic and practical information in an easy-to-follow manner Friendly and accessible approach to the subject makes learning especially easy Written by students for students - authors who understand exam pressures Contains 'Hints and Tips' boxes, and other useful aide-mémoires Succinct coverage of the subject enables 'sharp focus' and efficient use of time during exam preparation Contains a fully updated self-assessment section - ideal for honing exam skills and self-testing Self-assessment section fully updated to reflect current exam requirements Contains 'common exam pitfalls' as advised by faculty Crash Course - your effective everyday study companion PLUS the perfect antidote for exam stress! Save time and be assured you have all the core information you need in one place to excel on your course and achieve exam success. A winning formula now for over 15 years, each volume has been fine-tuned and fully updated, with an improved layout tailored to make your life easier. Especially written by senior students or recent graduates - those who understand what is essential for exam success - with all information thoroughly checked and quality assured by expert Faculty Advisors, the result is a series of books which exactly meets your needs and you know you can trust. This volume in the essential area of respiratory medicine provides a coherent journey from basic science to clinical assessment and finally respiratory pathology. The careful inclusion of cross referencing and the very latest guidelines will enable you to quickly link the key aspects of science and clinical medicine in an evidence-based manner. Whether you are revising for basic science exams or are on the wards looking for clinical information with a pathophysiological focus, this new edition is for you!

The Lungs and Respiratory System Jul 13 2021 Examines the different parts and functions of the lungs and respiratory system.

The Respiratory System Feb 20 2022 Describes the various parts of the respiratory system and how they work, and discusses asthma, lung cancer and other lung diseases, and related topics.

The Respiratory System Oct 04 2020 Discusses what the respiratory system is, how it works, and how it may be affected by various diseases.

Wonders of the Human Body Vol 2: Cardiovascular & Respiratory Systems Oct 28 2022 In Volume 2 of the Wonders of the Human Body series, Dr. Tommy Mitchell covers the intricate design of both the cardiovascular system, consisting of the blood, blood vessels, and heart, as well as the respiratory system that focuses on the transportation of oxygen through the body. From the level of the cells to the organs themselves, you will examine these systems in depth. In the Cardiovascular & Respiratory Systems, prepare to discover the incredible design of the human heart, including: The incredible design of the human heart and how it is really “two pumps in one!”How blood moves through an incredible network of arteries and veinsWhat “blood pressure” is and the marvelous systems that help regulate itHow the respiratory system allows us to get the “bad air out “ and the “good air in” Along the way, we will see what happens when things go wrong. We will also suggest things to do to keep the heart and lungs healthy. Although the world insists that our bodies are merely the result of time and chance, as you examine the human body closely, you will see that it cannot be an accident. It can only be the product of a Master Designer.

The Remarkable Respiratory System Apr 29 2020 Explains how the lungs and respiratory system function. Readers are introduced to the bronchial tree, discover how the diaphragm and intercostals muscles help the lungs fill and empty. Includes sections on the dangers of smoking, good health practices, respiratory illnesses, and amazing facts.

The Respiratory System, Third Edition Jul 21 2019 Praise for the previous edition: "...well-developed...clear and detailed...useful at the secondary level in health and anatomy classes and for research...Recommended."—Library Media Connection Breathing is essential to human survival, as it gives us the necessary oxygen we need to live. Yet the act of respiration is an involuntary process, something many people do not think about on a day-to-day basis. The Respiratory System, Third Edition explains how we get air into our lungs, how our bodies use that air, and the fundamental physical and biological principles underlying respiratory function. In addition, this essential title examines several respiratory diseases and how they affect the body as a whole. Packed with full-color photographs and illustrations, this absorbing book provides students with sufficient background information through references, websites, and suggested reading for further study.

Closed Circuit Respiratory Systems Symposium Nov 24 2019

The Respiratory System E-Book Sep 27 2022 This is an integrated textbook on the respiratory system, covering the anatomy, physiology and biochemistry of the system, all presented in a clinically relevant context appropriate for the first two years of the medical student course. One of the seven volumes in the Systems of the Body series. Concise text covers the core anatomy, physiology and biochemistry in an integrated manner as required by system- and problem-based medical courses. The basic science is presented in the clinical context in a way appropriate for the early part of the medical course. There is a linked website providing self-assessment

material ideal for examination preparation.

Your Respiratory System May 31 2020 Audisee® eBooks with Audio combine professional narration and text highlighting for an engaging read aloud experience! The respiratory system is made up of the nose, the throat, the lungs, and other parts. But what does the respiratory system do? And how do its parts work together to keep your body healthy? Explore the respiratory system in this engaging and informative book.

Approaches to Cardio-Respiratory Systems in Health and Ilnesses Sep 15 2021 Oxygenated blood must flow! These four golden words summarize the essence of this book. Two ventricles pump hand in hand to deliver blood to the pulmonary and systemic circulation to ensure adequate perfusion to vital organs in the body. Various compensatory mechanism occurs by the shocked cells – be it immediate and late – to restore health. The understanding of the cardio-respiratory system, which is the underlying root of systemic hypoxemia, is enhanced with simple hand-drawn illustrations. Most importantly, students' attention is directed to a specific use of medical terms and definition such as cyanosis and hypoxemia. The authors carefully explain and link the function of the cardiac and respiratory systems as a parallel loop. The topics highlighted in this book focus on common cardio-respiratory diseases and the associated immediate life-saving procedures. Students are carefully guided on the best practices based on local latest guidelines. We sincerely hope that physiology students will benefit and enjoy this value-for-money book.

Concepts of Biology Jan 27 2020 Concepts of Biology is designed for the single-semester introduction to biology course for non-science majors, which for many students is their only college-level science course. As such, this course represents an important opportunity for students to develop the necessary knowledge, tools, and skills to make informed decisions as they continue with their lives. Rather than being mired down with facts and vocabulary, the typical non-science major student needs information presented in a way that is easy to read and understand. Even more importantly, the content should be meaningful. Students do much better when they understand why biology is relevant to their everyday lives. For these reasons, Concepts of Biology is grounded on an evolutionary basis and includes exciting features that highlight careers in the biological sciences and everyday applications of the concepts at hand.We also strive to show the interconnectedness of topics within this extremely broad discipline. In order to meet the needs of today's instructors and students, we maintain the overall organization and coverage found in most syllabi for this course. A strength of Concepts of Biology is that instructors can customize the book, adapting it to the approach that works best in their classroom. Concepts of Biology also includes an innovative art program that incorporates critical thinking and clicker questions to help students understand--and apply--key concepts.

Respiration in Archaea and Bacteria May 23 2022 The book summarizes the achievements of the past decade in the biochemistry, bioenergetics, structural and molecular biology of respiratory processes in selected genera of the domain Bacteria along with an extensive coverage of the redox chains of extremophiles belonging to the Archaean domain. The volume is a unique piece of work since it contains a series of chapters dealing with metabolic features having important microbiological and ecological relevance such as the use of ammonium, iron, methane, sulfur and hydrogen as respiratory substrates or nitrous compounds in denitrification processes. Particular attention is also dedicated to peculiar groups of prokaryotes such as Gram positives, acetic acid bacteria, pathogens of the genera Helicobacter and Campylobacter, nitrogen fixing symbionts and free-living species, oxygenic phototrophs (Cyanobacteria) and anoxygenic (purple non-sulfur) phototrophs. The book is intended to be a long-term source of information for Ph.D. students, researchers and undergraduates from disciplines such as microbiology, biochemistry and ecology, studying basic and applied sciences, medicine and agriculture.

The Respiratory System Jan 07 2021 Illustrates the respiratory system from the frontal sinus to the diaphragm. Includes views of the paranasal sinuses, larynx, and bronchopulmonary segments. Also shows the structure of intrapulmonary airways and the cross section of alveolus. Discusses the conducting system, lungs and pleurae, ventilation and gas exchange.

Control of the Cardiovascular and Respiratory Systems in Health and Disease Aug 02 2020 On April 8-9, 1994, a symposium entitled Control of the Cardiovascular and Respiratory Systems in Health and Disease was held at the University of California Davis Medical Center in Sacramento. The purpose of this symposium was to honor the careers of Professors Hazel M. and John C. G. Coleridge. Participants in this symposium came from throughout the world. Their attendance at the symposium was a symbol of great respect and affection for the honorees. The Professors Coleridge have made many important contribu tions to the scientific literature concerning neural control of the cardiovascular and respira tory systems. In addition, they have made remarkable contributions to the lives of other scientists working in this field of investigation. Some of us have known them as mentors, counselors, friends, and supervisors; others have known them as co-investigators. Most importantly, all of us have known them as friends. This book, which contains the proceedings of the symposium, is dedicated to Hazel and John Coleridge. C. T. Kappagoda M. P. Kaufman v ACKNOWLEDGMENTS We wish to acknowledge the financial support of the following agencies for making this symposium a reality: • Astra Merck Group (Tarek Ackad, M. D. , Ph. D.) • Boehringer Ingelheim Pharmaceuticals, Inc. (Ms. Kathryn B. Lucas and Mr. Allan Holloway) • Bristol-Myers Squibb (David L. Cram, Jr. , Pharm. D.) • Marion/Merrell Dow, Inc. (Mr. Brian Scheffield) • Merck and Company (Mr. Johnathan Sakakibara) • Pfizer Laboratories (Mr.

The Respiratory System Apr 22 2022 Describes the anatomy, function, mechanics, diseases, and disorders of the human respiratory system.

Design Parameters for the Engineering of Closed Respiratory Systems Nov 17 2021

Computational Fluid and Particle Dynamics in the Human Respiratory System Oct 24 2019 Traditional research methodologies in the human respiratory system have always been challenging due to their invasive nature. Recent advances in medical imaging and computational fluid dynamics (CFD) have accelerated this research. This book compiles and details recent advances in the modelling of the respiratory system for researchers, engineers, scientists, and health practitioners. It breaks down the complexities of this field and provides both students and scientists with an introduction and starting point to the physiology of the respiratory system, fluid dynamics and advanced CFD modeling tools. In addition to a brief introduction to the physics of the respiratory system and an overview of computational methods, the book contains best-practice guidelines for establishing high-quality computational models and simulations. Inspiration for new simulations can be gained through innovative case studies as well as hands-on practice using pre-made computational code. Last but not least, students and researchers are presented the latest biomedical research activities, and the computational visualizations will enhance their understanding of physiological functions of the respiratory system.

The Human Respiratory System Jul 25 2022 The Human Respiratory System combines emerging ideas from biology and mathematics to show the reader how to produce models for the development of biomedical engineering applications associated with the lungs and airways. Mathematically mature but in its infancy as far as engineering uses are concerned, fractional calculus is the basis of the methods chosen for system analysis and modelling. This reflects two decades' worth of conceptual development which is now suitable for bringing to bear in biomedical engineering. The text reveals the latest trends in modelling and identification of human respiratory parameters with a view to developing diagnosis and monitoring technologies. Of special interest is the notion of fractal structure which is indicative of the large-scale biological efficiency of the pulmonary system. The related idea of fractal dimension represents the adaptations in fractal structure caused by environmental factors, notably including disease. These basics are linked to model the dynamical patterns of breathing as a whole. The ideas presented in the book are validated using real data generated from healthy subjects and respiratory patients and rest on non-invasive measurement methods. The Human Respiratory System will be of interest to applied mathematicians studying the modelling of biological systems, to clinicians with interests outside the traditional borders of medicine, and to engineers working with technologies of either direct medical significance or for mitigating changes in the respiratory system caused by, for example, high-altitude or deep-sea environments.

Biological Systems in Vertebrates, Vol. 1 Mar 29 2020 Gives an account of the morphologies of vertebrate respiratory organs and attempts to explicate the basis of the common and different structural and functional designs and stratagems that have evolved for acquisition of molecular oxygen. The book has been written with a broad readership in mind: students of biology as well as experts in the discipl

The Respiratory System Jun 24 2022 Aimed principally at those on the 'new' medical curriculum, this textbook on the respiratory system covers the structure and function of the system and its major diseases. It offers integrated coverage of the structure, function and major diseases of the respiratory system.

The Human Respiratory System Nov 05 2020 The human respiratory system is what makes people able to breathe. This detailed guide explains what the respiratory system is, how it works, and the key organs used in its processes. Fun fact boxes, vivid photographs and diagrams, and accessible language paint a detailed picture of the respiratory system and highlight its importance for human life. Readers are also asked to think independently about life science through discussion questions based on the informative narrative.

Senses, Nervous System and Respiratory System Jun 12 2021 How long is a nerve cell? How are our lungs like a train station? We answer these questions and much more in our second resource on the human body. Curriculum-based material written in an easy-to-understand way makes this a hit for teachers and students alike. Loaded with information on the brain, spinal cord and nerves, students will learn the main parts of the nervous system and how each works. Also investigate the organs of the five senses, and then take a trip around the respiratory system! Find out exactly where air goes when we breathe it in, and then out. Reading passages, comprehension questions, hands-on activities and overheads are provided. Also included: Crossword, Word Search and Final Quiz.

Cardiovascular and Respiratory Systems Oct 16 2021 Cardiovascular and Respiratory Systems: Modeling, Analysis, and Control uses a principle-based modeling approach and analysis of feedback control regulation to elucidate the physiological relationships. Models are arranged around specific questions or conditions, such as exercise or sleep transition, and are generally based on physiological mechanisms rather than on formal descriptions of input-output behavior. The authors ask open questions relevant to medical and clinical applications and clarify underlying themes of physiological control organization. Current problems, key issues, developing trends, and unresolved questions are highlighted. Researchers and graduate students in mathematical biology and biomedical engineering will find this book useful. It will also appeal to researchers in the physiological and life sciences who are interested in mathematical modeling.

Structure-Function Relationships in Various Respiratory Systems Aug 26 2022 This book elucidates the morphological backgrounds of various functional parameters of the human respiratory system, including the respiratory control system, dynamics of the upper and lower airways, gas transport and mixing in the lower airways, gas exchange in the acinus, and gas transfer through the alveolar wall. Presenting the latest findings on the interrelationships between morphology and physiology in the respiratory system, the book's goal is to provide a foundation for further exploring structure-function relationships in various respiratory systems, and to improve both the quality of basic science, and that of clinical medicine targeting the human respiratory system. Edited and written by internationally recognized experts, Structure-Function Relationships in Various Respiratory Systems offers a valuable asset for all physicians and researchers engaging in clinical, physiological, or morphological work in the field of respiration. Moreover, it provides a practical guide for physicians, helping them make more precise pathophysiological decisions concerning patients with various types of lung disease, and will be of interest to respiratory physiologists and respiratory morphologists.

The Respiratory System Jul 01 2020 Describes the workings of the respiratory system and its functions. Also discusses respiratory problems and how they can be avoided

The Respiratory System Apr 10 2021

Introduction to Anatomy & Physiology Volume 2: Cardiovascular and Respiratory Systems Mar 21 2022 Wonders of the Human Body, Volume Two, covers both the cardiovascular and respiratory systems. From the level of the cell to the organs themselves, we will examine these systems in depth. Here you will learn: The incredible design of the human heart and how it is really "two pumps in one!" How blood moves through an incredible network of arteries and veins What "blood pressure" is and the marvelous systems that help regulate it How the respiratory system allows us to get the "bad air out " and the "good air in" Along the way, we will see what happens when things go wrong. We will also suggest things to do to keep the heart and lungs healthy. Although the world insists that our bodies are merely the result of time and chance, as you examine the human body closely, you will see that it cannot be an accident. It can only be the product of a Master Designer.

Netter Collection of Medical Illustrations: Respiratory System E-Book Mar 09 2021 Respiratory System, 2nd Edition provides a concise and highly visual approach to the basic sciences and clinical pathology of this body system. This volume in The Netter Collection of Medical Illustrations (the CIBA "Green Books") has been expanded and revised by Dr. David Kaminsky to cover important topics like pulmonary hypertension, COPD, asthma, drug-resistant TB, modern endoscopic and surgical techniques, and more. Classic Netter art, updated illustrations, and modern imaging make this timeless work essential to your library. Access rare illustrations in one convenient source from the only Netter work devoted specifically to the respiratory system. Get a complete

overview of the respiratory system through multidisciplinary coverage from physiology and biochemistry to adult and pediatric medicine and surgery. Gain a quick understanding of complex topics from a concise text-atlas format that provides a context bridge between primary and specialized medicine. Grasp the nuances of the pathophysiology of today’s major respiratory conditions—including pulmonary hypertension, COPD, asthma, environmental lung disease, sleep disorders, infections of the immunocompromised, neonatal breathing disorders, and drug-resistant TB, and modern endoscopic and surgical techniques—through advances in molecular biology and radiologic imaging. Benefit from the expertise of the new editor, David Kaminsky, MD, who contributes significant experience in asthma and general pulmonary and critical care medicine, and his team of world class contributors. Clearly see the connection between basic and clinical sciences with an integrated overview of normal structure and function as it relates to pathologic conditions. Apply a visual approach—with the classic Netter art, updated illustrations, and modern imaging—to normal and abnormal body function and the clinical presentation of the patient. Tap into the perspectives of an international advisory board for content that reflects the current global consensus.

20 Fun Facts About the Respiratory System May 11 2021 Oxygen is one of the most essential needs for life on Earth, and respiration is how living things use it. But there's a lot more going on in this seemingly simple process than you might think. The respiratory system is in some ways the most underappreciated of the body systems, since it works 24/7, mostly without being noticed, and never gets a single moment's rest. In this book, readers discover the most fascinating facts about respiration, the structure of the lungs, and even some of the seemingly gross processes that happen in their body!

Respiratory Physiology Dec 06 2020 This exciting volume offers a unique approach to respiratory physiology examining the subject based upon fundamental biological, chemical, and physical principles. At each step, the book asks "Does it make sense?". This allows readers to understand not only how gas exchange works, but why scientifically and logically, gas exchange must work as it does. This approach leads to important practical benefits, including a rational understanding of the bases of both physiological acclimation and respiratory therapeutics; insight into what to expect when organisms respond to environmental on pathological challenges; and improved ability to synthesize and explore relationships between what may otherwise seem to be unrelated functions. The insight into respiratory physiology provided by this important text applies to a broad range of disciplines. Health professionals will find their ability to care for patients enhanced by their improved understanding of the functioning of gas exchange in the respiratory system. In addition, the book's thorough coverage provides direction for zoologists and physiologists interested in the development and function of animal respiratory systems.

Digestive and Respiratory Systems Aug 14 2021 Digestive and Respiratory Systems Digestive and Respiratory Systems

The Respiratory System at a Glance Feb 26 2020 The Respiratory System at a Glance has been thoroughly updated in line with current practice guidelines and new techniques to provide a highly illustrated and comprehensive guide to normal lung structure and function, as well as associated pathophysiology. Each topic has been fully revised and is accompanied by clear diagrams to encapsulate essential knowledge. Reflecting changes to the content, teaching and assessment methods used in medical education, this new edition now includes more information on acid base and its clinical ramifications, further detail on defence mechanisms and immunology, and also features online access to clinical cases and flashcards. The Respiratory System at a Glance: • Integrates basic and clinical science – ideal for integrated and systems-based courses • Includes both the pathophysiology and clinical aspects of the respiratory system • Is fully revised and updated to reflect current practice guidelines and new therapies • Provides online clinical cases, brand new flashcards, and MCQs • Includes a companion website at www.ataglanceseries.com/respiratory featuring interactive multiple choice questions and digital flashcards

The Respiratory System Aug 22 2019 A True Book explores the respiratory system, explaining why and how people breathe, how each organ works, and how certain diseases can influence respiration. Reprint.