Clinical Focus Series® Fibroproliferative diseases are a broad spectrum of entities from organ-specific involvement (e.g., pulmonary, heart, liver, and kidney fibrosis) to multi-system diseases such as systemic sclerosis and sclerodermatous graft vs. host disease. These diseases also encompass pathophysiologies not readily recognizable related, such as macular degeneration and cancer metastasis. Fibroproliferative diseases are a leading cause of morbidity and mortality and can affect all tissues and organ systems. Remarkable progress in elucidating the pathogenesis of these common diseases with fibrotic components, including the critical roles of myofibroblasts and the molecular mechanisms driving the transcriptional activation involved in the induction of fibrosis. As the importance of these processes is realized in the long-term recovery and treatment of diseases, effective anti-fibrotic therapies targeting the underlying ongoing disease processes are lacking. The complexity of discovering and applying therapies to fibroproliferative disease may be due to the diversity of the systems the pathogenesis of disease itself involves. By nature, fibroproliferative diseases are interdisciplinary, involving multiple cell types (organ-specific epithelial cells), immune cells, endothelial cells, and fibroblasts. Bone marrow, cytokines, and organ-specific pathologies further speckle both the clinical and scientific disciplines in such a way that communication is often limited to the clinical or scientific tribes we live in, despite the greatest access to information known to man available today. Therefore, the primary focus of this text is to bring together authors from a diversity of both clinical, scientific, and therapeutic backgrounds for readers to more fully appreciate that fantastic platform that is available to build upon to lessen the
isolation of the clinical and scientific disciplines. With advances in the discovery of pre-clinical therapeutic targets (at least 20+ to date) involving TGF-beta (and other cytokines), transcription factors, and downstream kinases, it’s important to both recognize the broader impact and potential opportunities that exist even today. This book will serve as a state-of-the-art resource for physicians and translational medical researchers alike who are interested in the rapidly evolving field of fibroproliferative diseases. The book will provide new insight into the fundamental mechanisms of classic fibrotic pathophysiologic processes like myocardial infarction, idiopathic pulmonary fibrosis, chronic kidney disease, wound healing, and systemic sclerosis. It will also highlight the many new areas of therapeutic investigation currently underway. Lastly, we will touch upon newly emerging fields investigating the role of fibrosis in macular degeneration and cancer metastasis. The chapters will be written by established experts in their fields, including clinicians (cardiologists, cardiovascular surgeons, pathologists, and general practitioners) and translational biomedical researchers in a wide range of disciplines. However, the material will certainly have a broader audience including medical residents, fellows, and general practitioners as well as M.D. or Ph.D. post-doctoral research fellows. While comprehensive, we’ll attempt to present the material in a manner that simplifies the complex pathophysiologic mechanisms that underlie common fibroproliferative diseases while making it appealing to a broad audience.

Year Book of Pulmonary Diseases 2014, This book details all aspects of lung transplantation and equips the general pulmonologist/physician with the necessary tools and knowledge to assist patients with the preparation for and care post lung transplantation. Written by global experts, chapters present general principles and history; indications and eligibility for lung transplantation, including screening for COPD, cystic fibrosis, scleroderma, Idiopathic pulmonary fibrosis (IPF) and idiopathic pulmonary arterial hypertension; approach to and complications of lung transplantation, such as prognostic markers, radiological approach, and immunology and rejection; and medical and surgical guidelines for lung transplantation. The goal of lung transplantation is to increase survival and to provide a greater quality of life for patients with untreatable end-stage lung disease and this book serves to best prepare clinicians in achieving that goal. Lung Transplantation: Evolving knowledge and New horizons offers valuable insights into this modality and is an authoritative resource for multidisciplinary services that include experts in pulmonary diseases, critical care, cardiology, thoracic surgery, infection diseases, internal medicine, radiology, immunology, nephrology, rehabilitation, psychology /psychiatry, nurses, social workers and nutritionists.

Ferri's Clinical Advisor Designed with the practicing clinician in mind, Idiopathic Pulmonary Fibrosis provides a succinct, easy-to-digest overview of this challenging condition in which the cause of thickening lung tissue is unknown. This concise resource by Drs. Kevin K. Brown and Jeff Swigris provides essential information for the physician who sees pulmonary fibrosis patients, including epidemiology, genetics and biomarkers, pathology, diagnosis, disease monitoring, and therapeutics intended to improve the patient’s lifespan and quality of life.

Basic and Clinical Aspects of Pulmonary Fibrosis The field of acute exacerbations in chronic respiratory disease is challenging: definitions of acute exacerbations differ amongst the diseases and their severity has proven difficult to define. The Guest Editors of this Monograph tackle this challenging area by bringing together articles from internationally recognised experts in the field of acute exacerbations in chronic lung diseases. The book is separated
Read PDF Chronic Idiopathic Pulmonary Fibrosis In Five Dogs Jaaha

into three sections: the first considers the definition, severity and consequences of exacerbations in each disease; the second looks at exacerbation triggers; and the third discusses the treatment and prevention of exacerbations using pharmacological and non-pharmacological interventions. The book’s structure allows comparisons between the definitions, short- and long-term consequences, triggers and therapeutic management of different respiratory diseases. It serves as a complete reference that raises awareness about the importance of acute exacerbations in patients with chronic lung diseases.

Pulmonary Manifestations of Systemic Diseases This clinically focused pocket guide offers a concise yet complete overview of idiopathic pulmonary fibrosis, covering the most recent information on aspects such as pathophysiology, management, treatment, and clinical trials. The text is easily accessible and offers pulmonologists and other health care professionals with an excellent quick reference tool. Full color images and figures enhance and summarize key aspects of the text. Idiopathic pulmonary fibrosis is a condition that affects the alveoli and leads to serious lung damage, and the idiopathic nature of this disease means that the origin or cause is unknown. This disease is relatively rare, affecting 3 in 10,000 people, but it is becoming more common. Physicians should be aware of the early stages and symptoms of this disease so management strategies can be implemented quickly, and the best treatment can be administered.

Fibrosis in Disease Pulmonary hypertension (PH) is a disorder of the pulmonary vasculature defined by increased mean pulmonary arterial pressure (mPAP) leading to right ventricle (RV) hypertrophy and dysfunction, right-sided heart failure and ultimately death. PH is a common complication of chronic lung diseases (CLD) including idiopathic pulmonary fibrosis (IPF) or chronic obstructive pulmonary disease (COPD) where it is classified as Group 3 PH by the WHO. It can also be associated with cardiovascular conditions such as left-heart disease (classified as Group 2 PH) or appear on its own as pulmonary arterial hypertension (PAH) and classified as Group1 PH. In all of these cases the diagnosis of pulmonary hypertension is strongly associated with increased morbidity and mortality. The focus of this Research Topic is to enhance our understanding of the mechanisms that contribute to the pathophysiology of pulmonary hypertension and right ventricle hypertrophy.

Chronic Cough Rehabilitation in 30 Days This Monograph provides expert clinical guidance on these difficult diseases, which will be helpful to both respiratory and nonrespiratory physicians alike. The initial chapters consider diagnostic issues, pulmonary function tests and techniques that are currently in development. The book then goes on to cover a variety of pulmonary manifestations of very different disease entities, such as connective tissue diseases, systemic vasculitis and much more.

Idiopathic Pulmonary Fibrosis Here is a fast, efficient way to access important diagnostic and therapeutic information. Five distinct sections offer key information on patient and disease management · differential diagnosis · clinical algorithms · laboratory evaluations · and preventive guidelines. Covering nearly 1,100 current topics, this resource is a must-have, all-in-one guide to accessing key clinical information quickly and efficiently when busy practitioners need it most. The available book/CD-ROM package features the full contents of the book, plus complete prescribing information.
on all drugs listed in the book, and customizable patient teaching guides in English and Spanish—20 new to the 2003 volume. 90 new differential diagnosis topics. Timely sections on anthrax and smallpox vaccinations for children who travel pneumococcal conjugate vaccine for young children influenza antiviral medications management guidelines for occupational exposure to HBV, HCV, and HIV, and recommendations for postexposure prophylaxis. Expanded information on ICD codes and Medicare reimbursement. New laboratory topics, including BRCA analysis, C282Y and H63D mutation analysis, and cytokines. Over 100 new illustrations.

Idiopathic Pulmonary Fibrosis Basic and clinical aspects are discussed by expert contributors in this book devoted to stimulating further studies and developing new therapies for pulmonary fibrosis. Current laboratory and basic findings are reviewed in the book's first 19 chapters, while clinical aspects are addressed in the remaining 16 chapters. These aspects include laboratory and bronchalveolar findings, diagnosis, treatment and prognosis of idiopathic pulmonary fibrosis, collagen disease lungs, sarcoidosis, pneumoconiosis, hypersensitive pneumonia, drug-induced pneumonia, ARDS, radiation pneumonia, BOOP, viral pneumonia, and other diseases causing pulmonary fibrosis. The roles of various cytokines, viral infection, and lung injuries in the development and pathogenesis of pulmonary fibrosis are discussed. The definition, classification, and lung functions of pulmonary fibrosis are included as well.

Interstitial Lung Disease, An Issue of Clinics in Chest Medicine The guest editors for this issue, Talmadge King, Harold Collard, celebrated pulmonary specialists from UCSF, and Luca Richeldi, renowned visiting professor to UCSF from University of Modena, Italy, bring together a state-of-the-art issue on the important topic of Interstitial Lung Diseases (ILD). This comprehensive issue reviews the approach to diagnosis of ILD, radiology if ILD, pathology of ILD. Idiopathic pulmonary fibrosis is discussed, including phenotypes and comorbidities, acute exacerbation and accelerated decline, management, and pathobiology of novel approaches to therapy. Connective Tissue ILD, Chronic Hypersensitivity Pneumonitis, familial ILD and smoking-related ILD, and non-specific interstitial pneumonia are reviewed. In the final article, lung transplantation is discussed.

Targeting Chronic Inflammatory Lung Diseases Using Advanced Drug Delivery Systems Translational Inflammation links laboratory and clinical data within primary and secondary care to clinical research data and offers a holistic and innovative approach to chronic inflammation and ageing. Understanding the role of inflammation as a part of clinical disease states is becoming a valuable tool in both direct treatment and the development of therapeutics. Translational Inflammation, the 4th volume in the Perspectives in Translational Cell Biology series, offers content for professors, students and researchers across basic and translational biology. Emphasizes the role of inflammation in disease and therapeutic approaches Integrates broad concepts relating inflammation to other fields Offers a bridge to review literature and primary research on the inflammatory response towards medical application

Pulmonary Fibrosis The guest editors for this issue, Talmadge King, Harold Collard, celebrated pulmonary specialists from UCSF, and Luca Richeldi, renowned visiting professor to UCSF from University of Modena, Italy, bring together a state-of-the-art issue on the important topic of Interstitial Lung Diseases (ILD). This comprehensive issue reviews the approach to diagnosis of ILD, radiology if ILD, pathology of ILD. Idiopathic pulmonary fibrosis is discussed, including
phenotypes and comorbidities, acute exacerbation and accelerated decline, management, and pathobiology of novel approaches to therapy. Connective Tissue ILD, Chronic Hypersensitivity Pneumonitis, familial ILD and smoking-related ILD, and non-specific interstitial pneumonia are reviewed. In the final article, lung transplantation is discussed.

Pharmacology and Therapeutics of Cough Idiopathic pulmonary fibrosis (IPF) is a steadily progressive and ultimately fatal disease of unknown origin. Recent years have seen advances in our understanding of IPF and a number of guidelines have been published. But many questions remain unanswered, particularly surrounding probable versus definite IPF. This Monograph aims to discuss the latest achievements in IPF, and covers key diagnostic issues, staging of the disease, complications and comorbidities, treatment, unmet patient needs and perspectives for the future. This book will be of interest to all clinicians and researchers in this area.

Specialty Imaging: HRCT of the Lung E-Book Packed with over 600 high quality illustrations, this practical handbook covers both the key principles of thoracic imaging, including the relevant principles, dose considerations, and radiological signs and their meaning, and the different pulmonary diseases.

Evidence-Based Critical Care Part of the highly regarded Specialty Imaging series, this fully updated second edition by Drs. Santiago Martínez-Jiménez, Melissa L. Rosado-de-Christenson, and Brett W. Carter, reflects the many recent changes in HRCT diagnostic interpretation. An easy-to-read bulleted format and state of the art imaging examples guide you step-by-step through every aspect of thin-section CT and HRCT in the evaluation of patients with suspected lung disease. This book is an ideal resource for radiologists who need an easily accessible tool to help them understand the indications, strengths, and limitations of HRCT in their practice. Superb illustrations with comprehensive captions display both typical and variant findings on HRCT scans. Introductory sections are specifically designed to lead the general radiologist to differential diagnoses from specific imaging findings, pathologic patterns, or from the disease/pathology itself. Time-saving bulleted format distills essential information for fast and easy comprehension. Updated content includes changes in HRCT interpretation and novel disease processes such as DIPNECH, new classification of idiopathic interstitial pneumonias, airway-centered interstitial fibrosis, light-chain deposition disease, and interstitial pneumonia with autoimmune features (IPAF). Fully revised throughout with new references, images, and histopathologic correlations.

Guide to Clinical Management of Idiopathic Pulmonary Fibrosis Idiopathic pulmonary fibrosis (IPF) is a chronic, progressive fibrotic interstitial lung disease (ILD) of unknown origin. It is a difficult disease to diagnose and often requires the collaborative expertise of a chest physician, radiologist and histopathologist to reach a consensus diagnosis. Most people with idiopathic pulmonary fibrosis experience symptoms of breathlessness, which may initially be only on exertion. Cough, with or without sputum is a common symptom. Over time, these symptoms are associated with a decline in lung function, reduced quality of life and ultimately death. Specific pharmacological therapies for IPF are limited but the last decade has seen more trials of new drugs which have had a variable impact on clinical practice. A number of difficulties arise when undertaking clinical trials in IPF in terms of defining precise, diagnostic inclusion criteria and clinically meaningful end-points. However, such trials are the only way by which promising new treatments
will come to benefit patients. Furthermore, it is only by performing rigorous clinical trials, we have learned that drugs once widely used to treat IPF may in fact have been harmful. The limitations of current pharmacological therapies for IPF highlight the importance of other forms of treatment including lung transplantation and best supportive care such as oxygen therapy, pulmonary rehabilitation and palliation of symptoms. These are interventions which justifiably require scrutiny in the context of healthcare delivery by the modern NHS. Despite the significant burden of disease caused by IPF, there is currently no established framework within the NHS for its diagnosis and management thus creating an environment in which significant variations in clinical care may occur. In recognition of this, the Department of Health commissioned the National Institute of Health and Care Excellence (NICE) to produce a guideline aimed at improving the care of people with IPF.

Stress-Activated Protein Kinases 'Chronic Cough Rehabilitation in 30 Days' is a health guide designed to improve your chronic cough symptoms. By following the Chronic Cough health rehabilitation plan and choosing a naturally healthy lifestyle as recommended inside this ebook, it's possible to achieve the ultimate goal - long term health.

Idiopathic Pulmonary Fibrosis Clinically focused and designed to provide a to-the-point overview, Interstitial Lung Disease, by Drs. Talmadge King, Harold Collard, and Luca Richeldi, bring you up to date with increased understanding, new treatment protocols, and recent advances in the field. Written by contributing specialists who are global experts in their respective areas, this one-stop reference provides pulmonologists, intensivists, internal medicine physicians, and researchers with a dependable source of information on current treatment options and patient care. • Evidence for current treatment options for interstitial pneumonia, idiopathic pulmonary fibrosis, and smoking-related interstitial lung diseases. • Approach to diagnosis of interstitial lung diseases, such as sarcoidosis, hypersensitivity pneumonitis, and Churg-Strauss syndrome. • Genetic markers for inherited interstitial lung diseases such as dyskeratosis congenita, tuberous sclerosis/LAM, and hyper-IgE syndrome.

Lung Transplantation Idiopathic pulmonary fibrosis (IPF) represents one of the most important devastating diseases that affects the lungs. Traditionally, the development of acute or chronic respiratory failure in disiorepresents an important dilemma for pulmonologists, intensivists, internists and anesthesiologists, due to the limited respiratory and functional reserve of these patients. In the last decade, we have witnessed a novel development of non-invasive mechanical ventilation and high flow oxygenation systems, representing an attractive option for patients compared to those patients with well-known poor results of invasive mechanical ventilation. In this book, we analyze all the options of non-invasive mechanical ventilation, indications, ventilatory modes, protocols, technology, equipment and applications in acute and chronic phase of patients with IPF, in addition to an exhaustive approach of all complementary techniques that optimize the application of these procedures. There are no previous descriptions or updates that incorporate this comprehensive analysis. This book, thus, serves as an updated scientific and practical reference for the knowledge of all spectrum respiratory failure presentations in idiopathic pulmonary fibrosis.

Mesenchymal Stem Cell Therapy Interstitial lung disease (ILD) is a broad category of lung diseases that includes more than 150 disorders characterized by scarring or fibrosis of the lungs. In Pulmonary Arterial Hypertension and
Interstitial Lung Disease: A Clinical Guide, renowned experts provide a state-of-the-art overview of the problems seen by physicians in the clinical management of ILDs. Divided into two sections, the first part provides and update on general issues and introduces both interstitial lung disease and associated pulmonary hypertension. A detailed analysis of the pathology of the various interstitial lung diseases is also provided. The second part addresses specific categories of disease. Bronchiolitis, hypersensitivity pneumonitis, and other conditions are covered, and the use of inspiratory and expiratory high resolution CT scan is discussed as well. This important new text is an invaluable resource for the practicing physician who must be aware of the broad and troubling manifestations of interstitial lung disease.

Diagnosis and Management of Suspected This book is a comprehensive assessment of the patients with COPD and asthma with appropriate diagnosis and management. Review on the diagnosis and management of the patients with bronchiectasis and cystic fibrosing along with the current management of acute exacerbation. A discussion of the diagnosis and management of the patients with idiopathic pulmonary fibrosis and an acute exacerbation and the management options those are currently available. Extensive reviews of the treatment of acute pulmonary exacerbation of sarcoidosis and the three phases of hypersensitivity pneumonitis (acute, subac.

Pulmonary Diseases and Disorders This handbook provides clinical guidance to the practicing physician on the diagnosis and treatment of Interstitial Lung Diseases (ILD). A contributed work with invited chapters which draw on the knowledge and experience of recognised global leaders in respiratory medicine, it is authoritative, concise and portable and is intended for use in a fast-paced clinical setting. The book: offers practical tips and clear guidance for clinicians provides detailed explanations of the main therapeutic options for each individual ILD contains high-quality visuals, including radiology and histopathology of the most common as well as some of the rarer ILDs discusses individual ILDs and has topics common to all including critical care, lung transplantation and palliative care navigates clinicians through cases with decision making guidelines and algorithms includes appendices with international practice guidelines, sample patient information sheets and other helpful resources. Emphasizing how to perform a thorough assessment of an ILD patient for accurate diagnosis and their subsequent effective management, this is both a gold standard text as well as a daily companion for physicians caring for ILD patients. A first-of-its-kind, it will become the go-to guide for all clinicians who manage patients with ILD.

Aging and Lung Disease The last decade or so has seen remarkable advances in our knowledge of cough. This applies especially to its basic mechanisms: the types of airway sensors, the phar- cological receptors on their membranes, the brainstem organization of the 'cough centre', and the involvement of the cerebral cortex in the sensations and the vol- tary control of cough. With the exception of the last of these, nearly all the studies have been on experimental animals rather than humans, for obvious reasons. One group of experimental studies has particular relevance to human patients, and that is the demonstration of the sensitization of cough pathways both in the periphery and in the brainstem. Similar sensitizations have been shown for patients with chronic cough or who have been exposed to pollutants, and it is reasonable to suppose that this is the basis of their cough and that the underlying mechanisms are generally similar in humans and other species. Important advances are also being made in clinical cough research. For the three main causes
of clinical cough, asthma, post-nasal drip syndrome, and gast- oesophageal re?ux disease, we are beginning to understand the pathological processes involved. There remains a diagnostically obdurate group of idiopathic chronic coughers, but even for them approaches are being devised to clarify und- lying mechanisms and to establish diagnoses. Perhaps surprisingly, the ?eld in which there has been the least spectacular - vance is the therapy of cough.

Interstitial Lung Disease, an Issue of Clinics in Chest Medicine From epidemiology and pathogenesis to disease management, this book reviews our current understanding of and provides up-to-date information of Idiopathic Pulmonary Fibrosis (IPF). A subtype of Idiopathic Interstitial Pneumonias (IIP), IPF is one of the most elusive and intractable respiratory disease to date and its triggering factors remain unclear. However, new developments such as serum markers that are highly specific to IPF (i.e. KL-6, SP-A, and SP-D), the establishment of systematic diagnostic imaging (HRCT) and accumulated reports of treatment using an antifibrotic agent (pirfenidone) are slowly improving our understanding of the disease. Edited by an established authority in the field and written by experts, this book will be valuable to not only to beginning learners but also to physicians, instructors and researchers whose work involves IIPs. With each chapter exploring critical questions, with unresolved issues and future prospects, the book offers a valuable resource for understanding issues such as the newly proposed entity of interstitial pneumonia with emphysema (combined pulmonary fibrosis and emphysema: CPFE) and the mechanism of how so many IIP sufferers develop lung cancer.

Pulmonary Arterial Hypertension and Interstitial Lung Diseases Fibrosis Research: Methods and Protocols contains a wealth of information concerning fibrosis research. Topics covered in the text include: ECM Regulation, Animal models of fibrosis, and the Genetic approaches to fibrosis.

Inflammation, Advancing Age and Nutrition This volume describes the pathogenesis and pathophysiology of several pulmonary diseases as well as their treatment. It also discusses the underlying genetic and molecular biological basis, which opens the way for new treatments for these conditions. It focuses on the treatment of cystic fibrosis including CFTR (cystic fibrosis transmembrane-conductance regulator) modulator therapies, drug therapies that augment airway surface liquid as well as anti-inflammatory and anti-infective therapies. Further topics include long-term, low-dose macrolide therapy for diffuse panbronchiolitis; novel agents for previously untreatable idiopathic pulmonary fibrosis; possible new treatments for pulmonary alveolar proteinosis (PAP); and multiple novel therapeutic targets for treating lymphangiomyomatosis. Research into these conditions has led to major advances in our understanding of the underlying genetic and molecular basis of this disease, and to dramatic improvements in survival and quality of life for affected individuals.

Thoracic Imaging A discussion of the epidemiology, clinical features, and differential diagnoses of idiopathic pulmonary fibrosis (IPF). Key topics include the role of polymorphonuclear leukocytes in the pathogenesis of pulmonary fibrosis, and current treatment options, including medical therapy and lung transplantation.

Clinical Handbook of Interstitial Lung Disease
Respiratory Ventilatory Strategies in Acute and Chronic Respiratory Failure in Idiopathic Pulmonary Diseases: a Practical Approach This book provides readers with a comprehensive and up-to-date guide to non-invasive mechanical ventilation in palliative medicine, focusing on why and when it may be necessary. Physicians will find a practical guide to this specific context, particularly focused on pulmonary function and physiology in the elderly, and on ventilatory management in surgery and chronic stable conditions. The book provides detailed information on the rationale for invasive and non-invasive ventilation, the different modes of ventilation, indications and contraindications, prognostic factors, and outcomes. It addresses in detail the role of postoperative mechanical ventilation following various forms of surgery, and discusses key aspects of withdrawal from ventilatory support. Attention is also devoted to the use of mechanical ventilation within and beyond the ICU. The concluding part of the book focuses on important topics such as ethics, legal issues, home mechanical ventilation, drug therapy, rehabilitation and end-of-life. Its multidisciplinary approach, bringing together contributions from international experts in different specialties, ensures that the book will be of interest to a broad range of health professionals involved in the management of older patients admitted to the ICU, including intensivists, anesthesiologists, and geriatricians.

Translational Inflammation

Interstitial Lung Disease E-Book In this book leading researchers in the field discuss the state-of-the-art of many aspects of SAPK signaling in various systems from yeast to mammals. These include various chapters on regulatory mechanisms as well as the contribution of the SAPK signaling pathways to processes such as gene expression, metabolism, cell cycle regulation, immune responses and tumorigenesis. Written by international experts, the book will appeal to cell biologists and biochemists.

Molecular Mechanisms in Pulmonary Hypertension and Right Ventricle Dysfunction This book provides learners with a unique opportunity by virtue of the format outlined above. Each case presentation has a case vignette, which leads up to an important clinical question, and is followed by additional discussion which resolves the question posed. This is a new way to present knowledge in a medical book and should help critical care practitioners, fellows, residents, allied health professionals and students expand their critical care knowledge in an efficient and effective manner. This approach should also benefit those preparing for board examinations.

Understanding Chronic Inflammatory Diseases in the Human Lung Targeting Chronic Inflammatory Lung Diseases Using Advanced Drug Delivery Systems explores the development of novel therapeutics and diagnostics to improve pulmonary disease management, looking down to the nanoscale level for an efficient system of targeting and managing respiratory disease. The book examines numerous nanoparticle-based drug systems such as nanocrystals, dendrimers, polymeric micelles, protein-based, carbon nanotube, and liposomes that can offer advantages over traditional drug delivery systems. Starting with a brief introduction on different types of nanoparticles in respiratory disease conditions, the book then focuses on current trends in disease pathology that use different in vitro and in vivo models. The comprehensive resource is designed for those new to the field and to specialized scientists and researchers involved in pulmonary research and drug development. Explores recent perspectives and challenges regarding the management and
diagnosis of chronic respiratory diseases Provides insights into how advanced drug delivery systems can be effectively formulated and delivered for the management of various pulmonary diseases Includes the most recent information on diagnostic methods and treatment strategies using controlled drug delivery systems (including nanotechnology)

Acute Exacerbations of Pulmonary Diseases The book provides a comprehensive overview to understanding the integrated impact of the concepts of cellular and molecular aspects, models, environmental factors, and lifestyle involved in premature aging. Additionally, it examines how functional food, dietary nutraceuticals or pharmacological compounds can reverse inflammation and premature aging based on personalized medicine. This book is a valuable resource for health professionals, scientists and researchers, nutritionists, health practitioners, students and for all those who wish to broaden their knowledge in the allied field. Includes models of aging, including worm, mouse and human Explores the relationship of inflammation with diseases, including ocular health, Alzheimer's and Parkinson's disease, and muscle health Encompasses a variety of lifestyle impacts, including diet, exercise and nutrition Includes suggested nutritional interventions

Idiopathic Pulmonary Fibrosis Over the past decade, significant efforts have been made to develop stem cell-based therapies for difficult to treat diseases. Multipotent mesenchymal stromal cells, also referred to as mesenchymal stem cells (MSCs), appear to hold great promise in regards to a regenerative cell-based therapy for the treatment of these diseases. Currently, more than 200 clinical trials are underway worldwide exploring the use of MSCs for the treatment of a wide range of disorders including bone, cartilage and tendon damage, myocardial infarction, graft-versus-host disease, Crohn's disease, diabetes, multiple sclerosis, critical limb ischemia and many others. MSCs were first identified by Friedenstein and colleagues as an adherent stromal cell population within the bone marrow with the ability to form clonogenic colonies in vitro. In regards to the basic biology associated with MSCs, there has been tremendous progress towards understanding this cell population's phenotype and function from a range of tissue sources. Despite enormous progress and an overall increased understanding of MSCs at the molecular and cellular level, several critical questions remain to be answered in regards to the use of these cells in therapeutic applications. Clinically, both autologous and allogenic approaches for the transplantation of MSCs are being explored. Several of the processing steps needed for the clinical application of MSCs, including isolation from various tissues, scalable in vitro expansion, cell banking, dose preparation, quality control parameters, delivery methods and numerous others are being extensively studied. Despite a significant number of ongoing clinical trials, none of the current therapeutic approaches have, at this point, become a standard of care treatment. Although exceptionally promising, the clinical translation of MSC-based therapies is still a work in progress. The extensive number of ongoing clinical trials is expected to provide a clearer path forward for the realization and implementation of MSCs in regenerative medicine. Towards this end, reviews of current clinical trial results and discussions of relevant topics association with the clinical application of MSCs are compiled in this book from some of the leading researchers in this exciting and rapidly advancing field. Although not absolutely all-inclusive, we hope the chapters within this book can promote and enable a better understanding of the translation of MSCs from bench-to-bedside and inspire researchers to further explore this promising and quickly evolving field.
understanding of disease pathogenesis and provides current evidence in the medical literature regarding its diagnosis and management. Each chapter includes key points and a summary aiming to update clinicians about various issues concerning the diagnosis and management of IPF. In addition to outlining the current state of knowledge, each chapter also provides a summary of ongoing research and identifies the needs for future research in the field. Idiopathic Pulmonary Fibrosis: A Comprehensive Clinical Guide is an important new text that provides its readers with a better understanding of the pathobiology and natural history of IPF as it continues to evolve.

Treatment of Cystic Fibrosis and Other Rare Lung Diseases People age 65 and older are the fastest growing segment of the U.S. population. In the 2010 census 16% of the population, 50 million people, were age 65 and older. That number is projected to increase to 66 million by the year 2050. Life expectancy has also increased, with recent CDC reports indicating life expectancy at 77.9 years. Age-adjusted death rates have decreased significantly with the largest changes occurring in older patients. Despite these trends, the 10 leading causes of death include several pulmonary etiologies including lung cancer, chronic respiratory diseases, influenza and pneumonia. Aging and Lung Disease: A Clinical Guide is devoted to understanding the impact of respiratory diseases in older patients. It includes reviews of physiology of the aging lung, allergy and immunology of the aging, as well as sleep changes over the life cycle. There are also comprehensive reviews on specific disease topics including chronic obstructive lung disease, lung cancer, atypical mycobacteria, interstitial lung disease, pulmonary hypertension, pulmonary embolism, obstructive sleep apnea, sleep disorders in older patients. Two chapters focus on unique issues in older patients; HIV and lung transplant. Included also are important chapters on assessing functional and cognitive status and end-of-life issues in older patients with lung disease. In addition to outlining the current state of knowledge, each chapter focuses on special considerations when caring for older patients. Of particular interest to pulmonologists, internists, and gerontologists, other readers, such as pulmonary and geriatric nurse practitioners, as well as clinical researchers interested in both pulmonary and aging issues, will find Aging and Lung Disease: A Clinical Guide to be a vital resource for improving their care of older patients with lung disorders.

Idiopathic Pulmonary Fibrosis

Cardiovascular Complications of Respiratory Diseases This Monograph provides an update on cardiovascular disease complications and treatment implications for respiratory diseases, based on current scientific evidence and considered from an epidemiological, pathophysiological and clinical point of view. This book also discusses the future challenges when studying the complex relationship between these two groups of disorders.

Ventilatory Support and Oxygen Therapy in Elder, Palliative and End-of-Life Care Patients The Year Book of Pulmonary Disease brings you abstracts of the articles that reported the year’s breakthrough developments in pulmonary disease carefully selected from more than 500 journals worldwide. Expert commentaries evaluate the clinical importance of each article and discuss its application to your practice. Topics such as Asthma and Cystic Fibrosis, Chronic Obstructive Pulmonary Disease, Lung Cancer, Community-Acquired Pneumonia, Lung Transplantation, Sleep Disorders, and Critical Care Medicine are represented highlighting the most current and relevant articles in the field.