



The HLA FactsBook Steven G.E. Marsh 1999-12-13 The HLA FactsBook presents up-to-date and comprehensive information on the HLA genes in a manner that is accessible to both beginner and expert alike. The focus of the book is on the polymorphic HLA genes (HLA-A, B, C, DP, DQ, and DR) that are typed for in clinical HLA laboratories. Each gene has a dedicated section in which individual entries describe the structure, functions, and population distribution of groups of related allotypes. Fourteen introductory chapters provide a beginner's guide to the basic structure, function, and genetics of the HLA genes, as well as to the nomenclature and methods used for HLA typing. This book will be an invaluable reference for researchers studying the human immune response, for clinicians and laboratory personnel involved in clinical and forensic HLA typing, and for human geneticists, population biologists, and evolutionary biologists interested in HLA genes as markers of human diversity. Introductory chapters provide good general overview of HLA field for novice immunologists and geneticists Up-to-date, complete listing of HLA alleles Invaluable reference resource for immunologists, geneticists, and cell biologists Combines both structural and functional information, which has never been compiled in a single reference book previously Serological specificity of allotypes Identity of material sequenced including ethnic origin Database accession numbers Population distribution Peptide binding specificities T cell epitopes Amino acid sequences of allotypes Key references

Departments of Labor, Health and Human Services, Education, and Related Agencies Appropriations for 2002 United States. Congress. House. Committee on Appropriations. Subcommittee on the Departments of Labor, Health and Human Services, Education, and Related Agencies 2001

Global HIV/AIDS Medicine Paul Volberding 2008 HIV/AIDS management poses many different challenges around the world, and the therapies available in the West are often not economically feasible in developing countries. This new book is the first to address the myriad of clinical difficulties faced by health practitioners worldwide in managing HIV/AIDS. Edited by the same authorities responsible for the highly respected reference "The Medical Management of AIDS," with Associate Editors that include the President of the International AIDS Society and a preeminent opinion leader in the fight against AIDS in Africa, and authored by a "who's who" of current global experts on HIV and AIDS medicine, this visionary text presents all the practical, indispensable information that clinicians everywhere need to offer their patients the best possible care. Access reliable, up-to-the-minute guidance that addresses the realities of HIV/AIDS management in your geographical region, thanks to contributions from a global cast of renowned expert clinicians and researchers. Locate the clinically actionable information you need quickly with an organization that mirrors the current state of the AIDS epidemic and the different needs of Western vs. developing-world patients and clinicians. Diagnose AIDS manifestations confidently by comparing them to full-color clinical images. Review essential data quickly through numerous at-a-glance tables.

Natural Hosts of SIV Aftab A. Ansari 2014-07-04 Natural Hosts of SIV: Implications in AIDS thoroughly reviews the possible mechanisms by which African nonhuman primate natural hosts of lentiviruses remain essentially disease-free while other hosts exhibit disease and death. The book ultimately indicates directions for further research and potential translations of this compelling phenomenon into novel approaches to treat and prevent HIV. When Asian non-human primate non-natural hosts are experimentally infected with viruses isolated from African species, disease and death normally results. Meanwhile, these African nonhuman primate natural hosts maintain similar levels of plasma and cellular viremia and exhibit compellingly different, essentially disease-free, states. This work attempts to answer the question of how the natural host remains disease resistant. Summarizes the past 30 years of research in this field and describes the latest developments in AIDS research using nonhuman primate animal models Provides insights into how this large body of scientific work can be translated into novel approaches to treat and prevent HIV Highlights the areas that merit future pursuit, focusing on potential applications for the treatment and prevention of HIV infection

Models of Protection Against HIV/SIV Gianfranco Pancino 2011-12-02 A successful vaccine for the prevention and/or immunotherapy against HIV/AIDS is one of the prominent challenges of the 21st century. To date, all human vaccine trials against this virus/disease have resulted in failure, or at best have shown very low efficacy. The scientific community dealing with HIV/AIDS has unanimously proposed a focus on basic science, with the intention of identifying correlates of protection that can serve as guides in developing and evaluating vaccine preparation. However, Nature seems to have already found several ways of dealing with infections by HIV and related primate lentiviruses, either by resisting infection or, once infected, avoiding immune damage and immunodeficiency. Models of Protection Against HIV/SIV will allow for an in-depth reflection on the perspectives for vaccine and therapy research derived from important recent studies. It will be authored by some of the most well known specialists in the field of HIV resistance/protection: including F. Barré-Sinoussi (2008 Nobel Prize for Medicine winner), B. Walker, S. Rowland-Jones, A. Telenti, M. Lederman and F. Plummer. This book is structured in a unique way, looking at three models of resistance/protection separately and then comparing the models against one another to provide its readership with a detailed examination of the research that is most predominant in the search for a vaccine. This structure presents the information in an easy-to-understand format and gives the book a cross-discipline appeal -- an important reference for those in the scientific community, medical care, public health and academia alike. Provides extensive descriptions and comparisons on the different models of protection against HIV/AIDS

Comprehensive writing and illustrations Contributors are among the most eminent specialists in the field

Lentiviral Vectors Didier Trono 2012-12-06 For the first time a compilation of chapters that depict the biological bases underlying the development of lentiviral vectors, the techniques involved in the manufacture of this new gene delivery tool, and its most promising applications.

Cumulated Index Medicus 1999

Encyclopedia of AIDS Thomas J. Hope 2018-02-22 For the first time, the world's experts in HIV-AIDS have come together to publish the Encyclopedia of AIDS. The work features over 4000 A-Z entries including medical, cultural, social, and pharmacological essays. The Pathology entries cover the various types of HIV-related illnesses, including those that are and are not AIDS-defining. Many of the conditions that are AIDS-defining illnesses have their own entries or are cross-referenced to a generic entry in which several related conditions are discussed (such as enteric diseases and fungal infections). Typically, the treatment of any given form of pathology is briefly discussed in the entry that covers that illness. The reference is a must-read for Infectious Disease specialists, Immunologists, Public Health researchers, Virologists, Microbiologists, Pharmacologists, and Physicians.

HIV Immunology and HIV SIV Vaccine Databases 2003

Simian Virology Alexander F. Voevodin 2009-08-06 Simian Virology is the first text to comprehensively cover all currently known simian viruses. Chapters provide an overview of nonhuman primate models of medically important viral diseases as well as natural infections of nonhuman primates with human and animal viruses. The text covers a variety of topics including primate models of medically important viral diseases such as AIDS, hypotheses on the origins of epidemic forms of HIV, and viral diseases caused by non-simian viruses in both wild and captive primates.

RUNX Proteins in Development and Cancer Yoram Groner 2017-03-15 This volume provides the reader with an overview of the diverse functions of the RUNX family of genes. As highlighted in the introduction and several of the 29 chapters, humans and other mammals have three RUNX genes that are known to play specific roles in blood, bone and neuronal development. However, their evolutionary history has recently been traced back to unicellular organisms and their involvement in many well-known signaling pathways (Wnt, TGF $\beta$ , Notch, Hippo) is indicative of a more general function in cell biology. Their documented roles in cell fate decisions include control of proliferation, differentiation, survival, senescence and autophagy. The pleiotropic effects of RUNX in development are mirrored in cancer, where RUNX genes can function as oncogenes that collaborate strongly with Myc family oncogenes or as tumour suppressor genes. In the latter role, they display hallmarks of both 'gatekeepers' that modulate p53 responses and 'caretakers' that protect the genome from DNA damage. Several chapters focus on the importance of these genes in leukemia research, where RUNX1 and C/EBP $\beta$  are frequently affected by chromosomal translocations that generate fusion oncoproteins, while recent studies suggest wider roles for RUNX modulation in solid cancers. Moreover, RUNX genes are intimately involved in the development and regulation of the immune system, while emerging evidence suggests a role in innate immunity to infectious agents, including HIV. At the biochemical level, the RUNX family can serve as activators or repressors of transcription and as stable mediators of epigenetic memory through mitosis. Not surprisingly, RUNX activity is controlled at multiple levels, this includes miRNAs and a plethora of post-translational modifications. Several chapters highlight the interplay between the three mammalian RUNX genes, where cross-talk and partial functional redundancies are evident. Finally, structural analysis of the RUNX/C/EBP $\beta$  interaction has led to the development of small molecule inhibitors that provide exciting new tools to decipher the roles of RUNX in development and as targets for therapy. This volume provides a compendium and reference source that will be of broad interest to cancer researchers, developmental biologists and immunologists.

Stay away from AIDS. Something one should know Valeriy Zhiglov 2017-09-05 AIDS is a contagious disease, currently incurable. Dozens of millions of HIV-positive are already registered worldwide, and each year this number grows. In recent years, AIDS/HIV became a major problem both for people from «risk groups», and for ordinary people. The book gives a number of important recommendations on how to suppress further expansion of this dangerous disease.

Exploring Novel Approaches to Eliminate HIV Reservoirs to Achieve a Cure for HIV Renee Marije Van Der Sluis 2021-04-07

Lymph Node T Cell Dynamics and Novel Strategies for HIV Cure Constantinos Petrovas 2019-02-11 Currently, more than 36 million people are infected with HIV. Although the introduction of highly active anti-retroviral therapy (HAART) has led to substantial advances in the clinical management of HIV infected individuals, HAART cannot completely eliminate the virus. This is because CD4 T helper cells, harboring the virus, remain dormant reservoirs. These reservoirs are difficult to measure and are present even in HAART-treated HIV infected individuals with undetectable levels of HIV in the blood. A growing body of studies has revealed follicular helper (T<sub>fh</sub>) CD4 T cells, a highly differentiated CD4 T cell population localized in immunologically sanctuary sites (follicle/germinal center), as a major reservoir of HIV. The present Frontiers in Immunology eBook compiles 16 timely review articles focusing on the dynamics of major follicular immune cell types in HIV/SIV infection and their potential role for disease pathogenesis and the viral persistence in the lymph node. This eBook provides a comprehensive presentation of recent published work on lymph node and especially T<sub>fh</sub> cell dynamics in HIV infection and we hope that it will be useful for our further understanding of how such dynamics affect the interplay between virus and host as well as for the discovery of novel therapeutic targets in the fight against HIV.

HIV-1 Latency Guido Silvestri 2018-10-11 This volume summarizes recent advances in understanding the mechanisms of HIV-1 latency, in characterizing residual viral reservoirs, and in developing targeted interventions to reduce HIV-1 persistence during antiretroviral therapy. Specific chapters address the molecular

mechanisms that govern and regulate HIV-1 transcription and latency; assays and technical approaches to quantify viral reservoirs in humans and animal models; the complex interchange between viral reservoirs and the host immune system; computational strategies to model viral reservoir dynamics; and the development of therapeutic approaches that target viral reservoir cells. With contributions from an interdisciplinary group of investigators that cover a broad spectrum of subjects, from molecular virology to proof-of-principle clinical trials, this book is a valuable resource for basic scientists, translational investigators, infectious-disease physicians, individuals living with HIV/AIDS and the general public.

Experimental Animal Models of Human Diseases Bartholomew Ibeh 2018-05-23 The world has recorded losses in terms of human life as well as extensive time spent in experimentation with development of new drugs, elucidation of disease mechanism(s), and therapeutic agent discovery. Ethical and legal issues cojoin in slowing down scientific discoveries in medicine and biology. The past two (2) decades, therefore, have seen tremendous attempts that largely are successful in developing animal models with the characteristics of mimicking, approximating, or expressing transplanted human organs/tissues. These models or rather approaches seem to be fast, cost-effective, and easy to maintain compared to primates. This book is a collection of expert essays on animal models of human diseases of global interest. A visible objective of the book is to provide real-time experimental approach to scientists, clinicians, ethicists, medicolegal/medical jurisprudence workers, immunologists, postgraduate students, and vaccinologists and informative and multidisciplinary approach for the identification of new therapeutic targets and biomarkers using animal models as well as investigating the pathogenesis and therapeutic strategies of human diseases. An increased understanding of the genetic, molecular, and cellular mechanisms responsible for the development of human diseases has laid out the foundation for the development of rational therapies mainly with animal models.

Biosafety in Microbiological and Biomedical Laboratories Centers for Disease Control (U.S.) 1988

The AIDS Knowledge Base Philip T. Cohen 1994

Health of HIV Infected People Ronald Ross Watson 2015-04-29 Health of HIV Infected People: Food, Nutrition and Lifestyle Without Antiretroviral Drugs defines the supportive roles of bioactive foods, exercise, and dietary supplements on the health of HIV infected people who do not have access to resources or those who choose not to utilize antiretroviral drugs. Approaches such as the application of traditional herbs and foods are given careful definition by experts who define the risks and benefits of such practices within this important context. Readers learn how to treat or ameliorate the effects of chronic retroviral disease using readily available, cheap foods, and dietary supplements. Ultimately, this work delivers a current, concise, scientific appraisal of the efficacy of key foods, nutrients, dietary plants, and behavioral changes in preventing and improving the quality of life of HIV infected infants and adults who are not undergoing antiretroviral therapy. Covers the role of nutrients in the prevention and treatment of HIV-induced physiological changes Delivers important coverage on the relationship between HIV infection and infant feeding practice, along with public health policy recommendations in social and cultural context Provides coverage of fitness and exercise regimens, physical activity, and behavioral and lifestyle changes on HIV infected individuals Explores food and treatment of obesity, diabetes, and cardiovascular disease in HIV infected patients, including those without antiretroviral therapeutic treatment

Mechanisms of Lymphocyte Activation and Immune Regulation VII Sudhir Gupta 2012-12-06 Proceedings of the Seventh International Conference held in New Port Beach, California, February 6-8, 1998

Systems Biology Michael G. Katze 2013-01-04 First, systems biology is an inter-disciplinary approach, requiring the combined talents of biologists, mathematicians, and computer scientists. Second, systems biology is holistic, with the goal of obtaining a comprehensive understanding of the workings of biological systems. This is achieved through the acquisition of massive amounts of data by high-throughput technologies—oligonucleotide microarrays, mass spectrometry, and next-generation sequencing—and the analysis of this data through sophisticated mathematical algorithms. It is perhaps the use of mathematics, to integrate abundant and diverse types of data and to generate models of interconnected molecular networks, that best characterizes systems biology.

In vivo Models of HIV Disease and Control Herman Friedman 2007-04-27 An AIDS vaccine is still elusive and HIV treatment continues to develop multidrug resistance at alarming rates. Because of the similarities between HIV and immune deficiency infections in a variety of animals, it is only natural that scientists use these animals as models to study pathogenesis, treatment, vaccine development and many other aspects of HIV. Part of the series Infectious Agents and Pathogenesis, this volume reviews the immune deficiency virus in a variety of hosts. Pathogenesis, vaccine and drug development, epidemiology, and the natural history of the monkey, mouse, cat, cow, horse, and other animal viruses are detailed and compared to HIV. Also included are chapters on the history and future of animal models, as well as a chapter on ethical and safety considerations in using animal models for AIDS studies.

DNA Vaccines Hildegund C. J. Ertl 2003

Mucosal Vaccination: Strategies to Induce and Evaluate Mucosal Immunity Andreas Frey 2022-05-25

Cartilage Repair and Regeneration Alessandro Rozim Zorzi 2018-02-14 This work is the result of a partnership that began in 2011, when I received for the first time the invitation to be the scientific editor of a book on bone grafting, by the still little publisher known as InTech. Now six years later, InTech has grown and thrived. My respect and warm approval for the quality of the publisher's work only increased. The hyaline cartilage is a tissue that challenges tissue engineering and regenerative medicine because of its avascular nature. In the 11 chapters of this book, the reader will find texts written by researchers working on advanced topics related to basic laboratory research, as well as excellent reviews on the clinical use of currently available therapies.

Immunodeficiency Krassimir Metodiev 2012-10-10 This book reflects a major medical problem which is still under thorough studies. There is a number of clinical cases corresponding directly or indirectly to a certain alteration of the immune system, thus leading to various pathologic conditions. The unique defense, what humans have with their immunity, is rather often affected by infections, tumor processes, organ, tissue and cell transplantation, allergy, autoimmune processes, as well as different influences by the environment. The Book has an international team of authors all contributing to the investigation of the questions of what, why, how, when and where the immune system deviates from its normal function, what clinical consequences are manifested and is there a way to prevent and treat the immunodeficiency cases. This Book can be a very good teaching tool for students and post-docs of medicine and biology, but it also provides updated information for the colleagues immunologists, microbiologists, virologists, chemotherapists, oncologists, hematologists, transplantologists and pathologist.

HIV Immunology and HIV/SIV Vaccine Databases 2006

Práticas e protocolos básicos de biologia molecular Fernanda Matias 2021-05-23 Práticas e Protocolos Básicos de Biologia Molecular traz facilidade para o seu dia a dia de laboratório, explicando as bases dos reagentes para a solução de problemas. Em um tempo em que tudo é feito por kits, saber o que está no kit para resolver um problema de protocolo é essencial. O principal objetivo desse livro é trazer as bases práticas de biologia molecular para auxiliar o aluno a iniciar um experimento no laboratório. Trazemos a experiência de diversos profissionais para que o aluno não perca tempo e reagente tentando descobrir o que pode estar errado no seu experimento.

Next-Generation Sequencing of Human Antibody Repertoires for Exploring B-cell Landscape, Antibody Discovery and Vaccine Development Jacob Glanville 2020-08-21 This eBook is a collection of articles from a Frontiers Research Topic. Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: [frontiersin.org/about/contact](https://frontiersin.org/about/contact).