Malarial Ecology Transmission Immunology Parasitology And Prophylaxis In Kenya

Malaria Control During Mass Population Movements and Natural DisastersSaving Lives, Buying TimeArthropod Borne DiseasesImmunology & Infectious DiseasesThe Making of a Tropical DiseaseAvian Malaria Parasites and other HaemosporidiaEcological Aspects for Application of Genetically Modified MosquitoesKumar and Clark's Clinical Medicine E-BookDisease and Mortality in Sub-Saharan AfricaLiving TogetherSkin and Arthropod VectorsWorld Malaria Report 2015Towards Malaria EliminationMalariaThe Ecology of Malaria VectorsEvolutionary Ecology of ParasitesAdvances in Malaria ResearchModelling Potential Malaria Spread in Germany by Use of Climate Change ProjectionsUnder the WeatherGuidelines on Prevention of the Reintroduction of MalariaTropical DiseasesModelling Parasite Transmission and ControlManagement of Multiple Drug-Resistant InfectionsEcology of Wildlife Host-Parasite InteractionsMalaria: Biology in the Era of EradicationAIDS and the Ecology of PovertyRodent MalariaMicrobiology AbstractsMalaria and the EnvironmentWildlife Disease EcologyEcology of parasite-vector interactionsWorld Malaria Report 2014Insect Infection and ImmunityThe Contemporary ReviewGovernment Reports Announcements & IndexWorld Malaria Report 2013Millenium Development Goals: Goal no. 6; combating HIVEssentials of EcologyCurrent Topics in MalariaAvian Malaria Parasites and other Haemosporidia

Malaria Control During Mass Population Movements and Natural Disasters

Saving Lives, Buying Time

The World malaria report 2014 summarizes information received from 97 malaria endemic countries and other sources and updates the analyses presented in 2013. It assesses global and regional malaria trends highlights progress made towards global targets and describes opportunities and challenges in controlling and eliminating the disease. Most of the data presented in this report are for 2013.

Arthropod Borne Diseases

For more than 50 years, low-cost antimalarial drugs silently saved millions of lives and cured billions of debilitating infections. Today, however, these drugs no longer work against the deadliest form of malaria that exists throughout the world. Malaria deaths in sub-Saharan Africaâ€"currently just over one million per yearâ€"are rising because of increased resistance to the old, inexpensive drugs. Although effective new drugs called â€œartemisininsâ€ are available, they are unaffordable for the majority of the affected population, even at a cost of one dollar per course. Saving Lives, Buying Time: Economics of Malaria Drugs in an Age of Resistance examines the history of malaria treatments, provides an overview of the current drug crisis, and offers recommendations on maximizing access to and effectiveness of antimalarial drugs. The book finds that most people in endemic countries will not have access to currently effective combination treatments, which

should include an artemisinin, without financing from the global community. Without funding for effective treatment, malaria mortality could double over the next 10 to 20 years and transmission will intensify.

Immunology & Infectious Diseases

This edition of the World Malaria Report summarises the current status of malaria control worldwide. It reviews progress towards internationally agreed goals and targets, and describes trends in funding, intervention coverage and malaria cases and deaths. In 2013, there are 97 countries and territories with ongoing malaria transmission, and 6 countries in the prevention of reintroduction phase, making a total of 103 countries and territories in which malaria is presently considered endemic. Globally, an estimated 3.4 billion people are at risk of malaria. WHO estimates that 207 million cases of malaria occurred globally in 2012 (uncertainty range 135-287 million) and 627,000 deaths (uncertainty range 473,000-789,000). Most cases (80%) and deaths (90%) occurred in Africa, and most deaths (77%) were in children under 5 years of age. The World Malaria Report presents a critical analysis and interpretation of data provided by national malaria control programmes (NMCPs) in endemic countries. Standard reporting forms were sent in April 2013 to the 97 countries with ongoing malaria transmission, and to 5 of the countries that recently entered the prevention of reintroduction phase. Information was requested on (i) populations at risk; (ii) vector species; (iii) number of cases, admissions and deaths for each parasite species; (iv) completeness of outpatient reporting; (v) policy implementation; (vi) commodities distributed and interventions undertaken; (vii) results of household surveys; and (viii) malaria financing.

The Making of a Tropical Disease

This new collection of articles, edited by Bryan T. Grenfell includes: Factors affecting the evolution of virulence: nematode parasites of fig wasps; Maintenance of a microparasite infecting several host species in the Seregeti; Wildlife disease and conservation in Hawaii: pathogenicity of avian malaria (Plasmodium relictum) in experimentally infected Iiwi (Vestiaria coccinia).

Avian Malaria Parasites and other Haemosporidia

This practical book covers all aspects of the biology of malaria vectors, with notes on the vectors of dengue. It is the first work in this field to concentrate on mosquitoes, rather than covering all disease vectors. Authored by renowned field entomologist Jacques Derek Charlwood, it disseminates his vast experience working on mosquito biology, ecology and the evaluation of new vector control tools across five continents over the past 40 years. Covering all aspects from classification and systematics, population dynamics, vector control, to surveillance and sampling, epidemics, and a selection of case histories, the book also considers genetics and resistance, Aedes biology, and malaria and dengue models. It is designed to fill the gap between very specialized texts and undergraduate books on general disease vectors, and is ideal as a textbook for postgraduate courses in entomology and mosquito vectors of disease.

Ecological Aspects for Application of Genetically Modified Mosquitoes

The World Malaria Report 2015 assesses global malaria disease trends and changes in the coverage and financing of malaria control programs between 2000 and 2015. It also summarizes progress towards international targets, and provides regional and country profiles that summarize trends in each WHO region and each country with malaria. The report is produced with the help of WHO regional and country offices, ministries of health in endemic countries, and a broad range of other partners. The data presented are assembled from the 96 countries and territories with ongoing malaria transmission, and a further five countries that have recently eliminated malaria. Most data are those reported for 2014 and 2015, although in some cases projections have been made into 2015, to assess progress towards targets for 2015.

Kumar and Clark's Clinical Medicine E-Book

Disease and Mortality in Sub-Saharan Africa

Towards Malaria Elimination - A Leap Forward was started to mark the occasion for renewed commitment to end malaria transmission for good (the WHO's call for "Malaria Free World" by 2030). This book is dedicated for the benefit of researchers, scientists, program and policy managers, students and anyone interested in malaria and other mosquito-borne diseases with the goal of sharing recent information on success stories, innovative control approaches and challenges in different regions of the world. Some main issues that emerged included multidrug-resistant malaria and pandemic risk, vaccines, cross-border malaria, asymptomatic parasite reservoir, the threat of Plasmodium vivax and Plasmodium knowlesi, insecticide resistance in Anopheles vectors and outdoor malaria transmission. This book is one little step forward to bring together in 17 chapters the experiences of malaria-expert researchers from five continents to present updated information on disease epidemiology and control at the national/regional level, highlighting the constraints, challenges, accomplishments and prospects of malaria elimination.

Living Together

Recent research on skin immunity and the skin microbiome reveals the complexity of the skin and its importance in the development of immunity against arthropod-borne diseases. In diseases such as malaria, borreliosis, leishmaniasis, trypanosomiasis, etc., the skin interface has been shown as an essential site for pathogens to hide from the immune system, and as a potential site of persistence. Only very few vaccines have been successfully developed so far against these diseases, likely because of an insufficient understanding on the development of skin immunity against pathogens. Skin and Arthropod Vectors expands our knowledge on the role of the skin interface during the transmission of arthropod-borne diseases and particularly its immunity. This work may support researchers who strive for developing more efficient diagnostic tools and vaccines. It also gives

scientists and advanced students working in related areas a better insight on how humans and animals are attractive to arthropods to develop better repellents, or to set up transgenic arthropods. Offers the only compilation of research focusing on both the skin interface and arthropod vectors, with contributions from international experts Advances research in the effort toward generating more effective diagnostic tools and vaccines focusing on the skin interface Can also serve as supplemental material for dermatology lectures or specialized lectures on medical entomology and skin immunity

Skin and Arthropod Vectors

It is clear that many fascinating problems still remain to be addressed in parasite transmission modelling, from better understanding of transmission processes and natural history of infection to investigating the impact of ecological and spatial scales, climate change, host immunity and social behaviour, parasite-host evolutionary dynamics and parasite community ecology on parasite transmission. This book captures some of the advances made in recent years and provides indications of ways forward for addressing these questions by shedding light on developments in conceptual frameworks and modelling tools as well as the emergence of new data forms for aiding model construction, testing and analysis. Another important advance has been the parallel development of robust computationally-intensive statistical methods to allow model testing and parameterization by aiding the fitting of models to complex data. This is an exciting area of work, which we believe will broaden the scope of mathematical modelling in investigating parasite transmission processes. In particular, we expect this advance will now allow modellers to begin the successful development and analysis of mechanistically-rich models of parasite transmission that will facilitate better integration of the variety of mechanisms increasingly recognized as important in simultaneously affecting transmission, including abiotic processes, trophic and evolutionary interactions, movement in space, and behaviour and even physiology of the individual. We foresee a continuing bright future for using mathematical modelling to clarify parasite transmission dynamics and address problems related to effective parasite control. Ultimately, through this improved application of models to research and management, we expect that parasite control would be an achievable goal bringing benefits to a vast number of our fellow human beings.

World Malaria Report 2015

Malaria sickens hundreds of millions of people—and kills one to three million—each year. Despite massive efforts to eradicate the disease, it remains a major public health problem in poorer tropical regions. But malaria has not always been concentrated in tropical areas. How did other regions control malaria and why does the disease still flourish in some parts of the globe? From Russia to Bengal to Palm Beach, Randall Packard’s far-ranging narrative traces the natural and social forces that help malaria spread and make it deadly. He finds that war, land development, crumbling health systems, and globalization—coupled with climate change and changes in the distribution and flow of water—create conditions in which malaria's carrier mosquitoes thrive. The combination of these forces, Packard contends, makes the tropical regions today a perfect home for the disease. Authoritative,

fascinating, and eye-opening, this short history of malaria concludes with policy recommendations for improving control strategies and saving lives.

Towards Malaria Elimination

Malaria

Since the dawn of medical science, people have recognized connections between a change in the weather and the appearance of epidemic disease. With today's technology, some hope that it will be possible to build models for predicting the emergence and spread of many infectious diseases based on climate and weather forecasts. However, separating the effects of climate from other effects presents a tremendous scientific challenge. Can we use climate and weather forecasts to predict infectious disease outbreaks? Can the field of public health advance from "surveillance and response" to "prediction and prevention?" And perhaps the most important question of all: Can we predict how global warming will affect the emergence and transmission of infectious disease agents around the world? Under the Weather evaluates our current understanding of the linkages among climate, ecosystems, and infectious disease; it then goes a step further and outlines the research needed to improve our understanding of these linkages. The book also examines the potential for using climate forecasts and ecological observations to help predict infectious disease outbreaks, identifies the necessary components for an epidemic early warning system, and reviews lessons learned from the use of climate forecasts in other realms of human activity.

The Ecology of Malaria Vectors

A comprehensive and cutting-edge review of how practicing physicians can best treat multiple drug resistance in bacterial, viral, protozoal, and helminthic infections. The authors focus on the major hospital and community-acquired pathogens, including S. aureus, S. pneumoniae, Enterococcus, Acinetobacter, and M. tuberculosis, and on the management of such common problems as multiple drug-resistant urinary tract infections and gonorrhea. Among the resistant tropical organisms covered are Salmonella typhi, malaria, and Burkholderia pseudomalei. Resistance to such important antiviral classes as antiretrovirals and anticytomegalovirals is also discussed, as are those measures necessary to prevent the spread of infections patients.

Evolutionary Ecology of Parasites

This book is the reflection of a workshop, held in June 2002. Experts on mosquito ecology met for the first time to discuss the current knowledge of mosquito ecology with respect to GM-insect technology. Emphasis of the workshop was on evaluating how human health and natural ecosystems, including target wild-mosquito populations, will respond to the invasion of GM vectors. This volume will stimulate discussion by clearly showing the importance of vector ecology for prevention of vector-borne diseases.

Advances in Malaria Research

Current data and trends in morbidity and mortality for the sub-Saharan Region as presented in this new edition reflect the heavy toll that HIV/AIDS has had on health indicators, leading to either a stalling or reversal of the gains made, not just for communicable disorders, but for cancers, as well as mental and neurological disorders.

Modelling Potential Malaria Spread in Germany by Use of Climate Change Projections

Vector-borne diseases continue to be one of the most important determinants affecting human and animal health. Large numbers of people suffer from diseases like malaria, dengue, filariasis and leishmaniasis, especially in the tropics. Whereas these diseases were eradicated from the temperate climate zones, in recent years the rising incidence of 'emerging' vector-borne diseases such as bluetongue, West Nile Virus, Lyme disease, tick-borne encephalitis and the recent outbreaks of chikungunya and dengue in southern Europe provide evidence that these diseases are resilient and can disperse to other regions and continents where before they were not present or relevant. Many tools for the management of vector-borne diseases are currently under pressure because of increasing drug and insecticide resistance, as well as the realization of biological variation of parasites and vectors and their ecosystems. At the same time, progress in our understanding of genetics, immunology, population biology and epidemiology allow for a better understanding of parasite-vector interactions. Here the state-of-the-art of these interactions is being reviewed, and means for using this information for advanced strategies of vector-borne disease control are proposed. This 3rd edition of ECVD aims to provide a rapid overview of recent developments in the field of parasite-vector interactions and how this can be used for more effective and sustainable disease control.

Under the Weather

Kumar & Clark’s Clinical Medicine 8 builds on the prize-winning formula that won the first prize in the BMA Book Awards Medicine Category in 2010 (7th edition) and 2006 (6th edition). ‘This book is comprehensive, student friendly (if still intimidating in size!) and covers such a vast breadth of knowledge. It still remains the primary ‘must-have’ text book of any budding doctor, or qualified one at that. This book is stunning in its breadth and in its ease of use. It still remains as the ‘gold-standard’ thorough guide to clinical medicine its forefathers were.’ BMA Judges 2010 'This is one of a select few books that deserves to be in most doctors' personal possession and it's as simple as that. ’ Dr Harry Brown. New to this edition: New chapter on palliative medicine. Five times the number of margin clinical photos. New echocardiography images. Double the number of dermatological images; including all the major lesion morphologies covered in a single page. 16 new authors. New sections on protein synthesis, energy production and stem cells. New members of the International Advisory Board from India, South Africa, Poland and the Middle East. 7 new online chapters from the International Advisory Board. Key online features: 30 extra short chapters online, written by

members of the International Advisory Board to cover key international issues, such as malaria, envenoming and HIV. Animated practical procedures, including lumbar puncture, central venous and bladder catheterization, arterial cannulation etc. heart and lung sounds, and interactive surface anatomy available online. Full text online through StudentConsult. Add your own notes and bookmarks. Search across all the StudentConsult resources you own online in one place. New to this edition: New chapter on palliative medicine. Five times the number of margin clinical photos. New echocardiography images. Double the number of dermatological images; including all the major lesion morphologies covered in a single page. 16 new authors. New sections on protein synthesis, energy production and stem cells. New members of the International Advisory Board from India, South Africa, Poland and the Middle East. 7 new online chapters from the International Advisory Board.

Guidelines on Prevention of the Reintroduction of Malaria

ESSENTIALS OF ECOLOGY, Second Edition is the ideal alternative to other ecology texts, which tend to be too difficult for non-majors. It is a succinct 12-chapter introduction, using clear, straightforward language and providing the scientific foundation necessary to understand ecological issues. ESSENTIALS OF ECOLOGY features the accuracy, balance, and current coverage that have made Miller’s texts best-sellers. In fact, Miller’s books are used more often at colleges across the country and around the world than any other environmental science texts! Based on Miller’s LIVING IN THE ENVIRONMENT, THIRTEENTH EDITION, this text is designed to be flexible and adaptable for almost any instructional approach. With fair and balanced coverage and Internet tools integrated throughout, the book features an extensively developed art program and the most current coverage of ecology available. For the first time ever, students will automatically receive a free CD-ROM entitled "Interactive Concepts in Environmental Science" with ESSENTIALS OF ECOLOGY, Second Edition. This groundbreaking addition integrates nearly 100 engaging animations and interactions with chapter summaries, flashcards, and Web-based quizzes. Organized by chapter, the CD-ROM provides students with links to relevant resources, narrated animations, interactive figures, and prompts to review material and test themselves. The animations show complex processes and relationships unfolding on screen, such as smog formation, the phosphorus cycle, and the effects of acid rain. For this edition, Miller has added an on-line Web-based resource, entitled the Resource Integration Guide, which is updated quarterly with CNN® Today video clips, animations, and articles from Thomson Learning InfoTrac® College Edition service. Instructors will be able to seamlessly incorporate the most current news articles and research findings to support classroom instruction and text presentations.

Tropical Diseases

William Trager has been an avid student of parasites for over 50 years at the Rockefeller University. Around the turn of this century, parasitology enjoyed a certain vogue, inspired by colonial responsibilities of the technically ad vanced countries, and by the exciting etiological and therapeutic discoveries of Ross, Manson, Ehrlich, and others. For some decades, the Western hemi sphere's interest in animal parasites has been eclipsed by concern for bacteria and viruses as

agents of transmissible disease. Only very recently, initiatives like the Tropical Disease Research programs of WHO-World Bank-UNDP, and the Great Neglected Disease networks of the Rockefeller and MacArthur Foundations have begun to compensate for the neglect of these problems by United States federal health research agencies. Throughout that period, how ever, the Rockefeller Institute (later University) has given high priority to the challenges of parasitism, corresponding during a formidable period with Dr. Trager's own career. The present work then, is a distillation of the insight collected by our principal doyen of parasite biology, informed but by no means confined to his own research. It is addressed to the reader of broad biological interest and training, not to the specialist. The disarmingly unpretentious style makes the work readily accessible to college undergraduates or even to gifted high school students; but do not be deceived thereby, as it has an enormous range of factual information and theoretical insight, familiar to few, but potentially important to most biologists.

Modelling Parasite Transmission and Control

Malaria is a mosquito-borne disease caused by parasitic protozoa that belong to the genus Plasmodium. This disease imposes a significant global health burden, claiming the lives of several thousand children and pregnant women each day. Increasing antimalarial drug resistance and the complexity of the Plasmodium life cycle, among other factors, have made eradication difficult. Written and edited by experts in the field, this collection from Cold Spring Harbor Perspectives in Medicine examines the biology, pathology, and epidemiology of malaria, as well as ongoing efforts to treat infections and manage their spread. Contributors discuss the Plasmodium life cycle, focusing on the molecular mechanisms by which the various parasitic stages induce clinical symptoms, interact with the immune system, and lead to further transmission of malaria. They also explore topics such as the interaction between mosquito reproduction and Plasmodium development, epigenetic regulation of malaria-associated genes, and unique features of malaria in pregnant women (e.g., parity-dependent susceptibility) and describe how an improved understanding of these phenomena may lead to novel intervention strategies. The driving forces behind antimalarial drug resistance are covered, as is progress in developing an effective vaccine and controlling mosquito populations. This volume is therefore an essential reference for all scientists, clinicians, and public health professionals interested in understanding malaria and reducing its devastating effects.

Management of Multiple Drug-Resistant Infections

Under continual attack from both microbial pathogens and multicellular parasites, insects must cope with immune challenges every day of their lives. However, this has not prevented them from becoming the most successful group of animals on the planet. Insects possess highly-developed innate immune systems which have been fine-tuned by an arms race with pathogens spanning hundreds of millions of years of evolutionary history. Recent discoveries are revealing both an unexpected degree of specificity and an indication of immunological memory - the functional hallmark of vertebrate immunity. The study of insect immune systems has accelerated rapidly in recent years and is now becoming an important interdisciplinary field. Furthermore, insects are a phenomenally rich and diverse

source of antimicrobial chemicals. Some of these are already being seriously considered as potential therapeutic agents to control microbes such as MRSA. Despite a burgeoning interest in the field, this is the first book to provide a coherent synthesis and is clearly structured around two broadly themed sections: mechanisms of immunity and evolutionary ecology. This novel text adopts an interdisciplinary and concept-driven approach, integrating insights from immunology, molecular biology, ecology, evolutionary biology, parasitology, and epidemiology. It features contributions from an international team of leading experts. Insect Infection and Immunity is suitable for both graduate students and researchers interested in insect immunity from either an evolutionary, genetical, physiological or molecular perspective. Due to its interdisciplinary and concept-driven approach, it will also appeal to a broader audience of immunologists, parasitologists and evolutionary biologists requiring a concise overview.

Ecology of Wildlife Host-Parasite Interactions

Parasites have evolved independently in numerous animal lineages, and they now make up a considerable proportion of the biodiversity of life. Not only do they impact humans and other animals in fundamental ways, but in recent years they have become a powerful model system for the study of ecology and evolution, with practical applications in disease prevention. Here, in a thoroughly revised and updated edition of his influential earlier work, Robert Poulin provides an evolutionary ecologist's view of the biology of parasites. He sets forth a comprehensive synthesis of parasite evolutionary ecology, integrating information across scales from the features of individual parasites to the dynamics of parasite populations and the structuring of parasite communities. Evolutionary Ecology of Parasites presents an evolutionary framework for the study of parasite biology, combining theory with empirical examples for a broader understanding of why parasites are as they are and do what they do. An up-to-date synthesis of the field, the book is an ideal teaching tool for advanced courses on the subject. Pointing toward promising directions and setting a research agenda, it will also be an invaluable reference for researchers who seek to extend our knowledge of parasite ecology and evolution.

Malaria: Biology in the Era of Eradication

AIDS and the Ecology of Poverty combines the insights of economics and biology to explain the spread of HIV/AIDS and deliver a telling critique of AIDS policy. Drawing on a wealth of scientific evidence, Stillwaggon demonstrates that HIV/AIDS cannot be stopped without understanding the ecology of poverty. Her message is optimistic, with pragmatic solutions to the health problems that promote the spread of HIV/AIDS.

AIDS and the Ecology of Poverty

Malaria is making a dramatic comeback in the world. The disease is the foremost health challenge in Africa south of the Sahara, and people traveling to malarious areas are at increased risk of malaria-related sickness and death. This book examines the prospects for bringing malaria under control, with specific

recommendations for U.S. policy, directions for research and program funding, and appropriate roles for federal and international agencies and the medical and public health communities. The volume reports on the current status of malaria research, prevention, and control efforts worldwide. The authors present study results and commentary on the: Nature, clinical manifestations, diagnosis, and epidemiology of malaria. Biology of the malaria parasite and its vector. Prospects for developing malaria vaccines and improved treatments. Economic, social, and behavioral factors in malaria control.

Rodent Malaria

Microbiology Abstracts

Arthropod borne diseases cause enormous morbidity and mortality in most countries, mostly in those situated in tropical areas, but also in temperate regions. This book provides organized information on all arthropod related diseases, to prevent suffering and deaths, for medical students and professionals. Since arthropod borne diseases are present in many regions of the world and can even surprise professionals and lays in non-endemic regions, like malaria in UK and Canada, the author and its many expert collaborators are sure that it will be essential in all hospitals, clinics and medical libraries around the world. As arthropod borne diseases of domesticated animals are very numerous and in some cases related to human diseases, they are also included in the book.

Malaria and the Environment

This book investigates the spatial distribution of potential temperature-driven malaria transmissions, using the basic reproduction rate (R0) to model the reproduction of the malaria pathogen Plasmodium vivax. The authors mapped areas at risk of an outbreak of tertian malaria in the federal state of Lower Saxony (pre-study) and for whole Germany (main-study) by means of geostatistics for past (1947-2007) and future periods. Projections based on predicted monthly mean air temperature data derived from the IPCC and regionally discriminated by two regional climate models (REMO, WettReg) for the countrywide study.

Wildlife Disease Ecology

Ecology of parasite-vector interactions

World Malaria Report 2014

Admittedly, the world and the nature of forced migration have changed a great deal over the last two decades. The relevance of data accumulated during that time period can now be called into question. The roundtable and the Program on Forced Migration at the Mailman School of Public Health of Columbia University have commissioned a series of epidemiological reviews on priority public health

problems for forced migrants that will update the state of knowledge. Malaria Control During Mass Population Movements and Natural Disasters -- the first in the series, provides a basic overview of the state of knowledge of epidemiology of malaria and public health interventions and practices for controlling the disease in situations involving forced migration and conflict.

Insect Infection and Immunity

Introduces readers to key case studies that illustrate how theory and data can be integrated to understand wildlife disease ecology.

The Contemporary Review

When studying the effects of parasites on natural populations, the avian haematozoa fulfills many of the specifications of an ideal model. Featuring a multitude of tables and illustrations, Avian Malaria Parasites and Other Haemosporidia summarizes more than a century of research on bird haemosporidians. For a long time, bird blood parasites served

Government Reports Announcements & Index

World Malaria Report 2013

Thoroughly reviews our current understanding of malarial biology Explores the subject with insights from post-genomic technologies Looks broadly at the disease, vectors of infection, and treatment and prevention strategies A timely publication with chapters written by global researchers leaders

Millenium Development Goals: Goal no. 6; combating HIV

Essentials of Ecology

When studying the effects of parasites on natural populations, the avian haematozoa fulfills many of the specifications of an ideal model. Featuring a multitude of tables and illustrations, Avian Malaria Parasites and Other Haemosporidia summarizes more than a century of research on bird haemosporidians. For a long time, bird blood parasites served

Current Topics in Malaria

Many countries have succeeded in eliminating malaria from their territories. However, they are still at risk of reintroduction from endemic countries and areas. The malaria programs in these countries face many challenges for prevention of malaria reintroduction, including weak malaria surveillance and vigilance systems, lack of malaria awareness among health professionals and travelers, uncontrolled population movement and lack of cooperation among countries. In the WHO Eastern Mediterranean Region 13 countries either eliminated malaria many years

ago or are very close to malaria elimination. The main priority for these countries is to prevent re-establishment of local malaria transmission in receptive and vulnerable areas in their territories. These guidelines on prevention of reintroduction of malaria provide information on malaria surveillance and vigilance, malaria early warning system, prevention and control of re-introduced malaria, emergency preparedness for malaria outbreaks and monitoring, and evaluation of activities. The publication is targeted at policy and decision makers, health authorities responsible for malaria at national and sub-national levels and field staff. It can also be used in training courses on planning and management of malaria elimination.

Avian Malaria Parasites and other Haemosporidia

Rodent Malaria reviews significant findings concerning malaria parasites of rodents, including their taxonomy, zoogeography, and evolution, along with life cycles and morphology; genetics and biochemistry; and concomitant infections. This volume is organized into eight chapters and begins by sketching out the history of the discovery of rodent as well as aspects of parasitology, immunology, and chemotherapy. These concepts are investigated two decades following Ignace Vincke's major discovery and Meir Yoeli's successful establishment of the method of cyclical transmission of the parasite. The following chapters focus on the taxonomy and systematics of the subgenus Vinckeia, with reference to the concepts of species and subspecies of animals and the degree to which they apply to malaria parasites, in particular to those of rodents. The discussion then shifts to how the rodent malaria parasites provide a unique insight into the subcellular organization of Plasmodium species, the use of rodent malaria as an experimental model to study immunological responses, and infectious agents that interact with malaria parasites. The book concludes with a chapter on malaria chemotherapy, with emphasis on the value of rodent malaria in antimalarial drug screening and the use of antimalarial drugs as biological probes. This book will be of interest to protozoologists and physicians as well as those from other disciplines including biochemistry, immunology, pharmacology, cell biology, and genetics.