

## Poliomyelitis Journal Articles

"Will have an enthusiastic audience among historians of medicine who are familiar, for the most part, only with later twentieth-century efforts to combat polio." --Allan M. Brandt, University of North Carolina  
Dirt and Disease is a social, cultural, and medical history of the polio epidemic in the United States. Naomi Rogers focuses on the early years from 1900 to 1920, and continues the story to the present. She explores how scientists, physicians, patients, and their families explained the appearance and spread of polio and how they tried to cope with it. Rogers frames this study of polio within a set of larger questions about health and disease in twentieth-century American culture. In the early decades of this century, scientists sought to understand the nature of polio. They found that it was caused by a virus, and that it could often be diagnosed by analyzing spinal fluid. Although scientific information about polio was understood and accepted, it was not always definitive. This knowledge coexisted with traditional notions about disease and medicine. Polio struck wealthy and middle-class children as well as the poor. But experts and public health officials nonetheless blamed polio on a filthy urban environment, bad hygiene, and poverty. This allowed them to hold slum-dwelling immigrants responsible, and to believe that sanitary education and quarantines could lessen the spread of the disease. Even when experts acknowledged that polio struck the middle-class and native-born as well as immigrants, they tried to explain this away by blaming the fly for the spread of polio. Flies could land indiscriminately on the rich and the poor. In the 1930s, President Franklin Delano Roosevelt helped to recast the image of polio and to remove its stigma. No one could ignore the cross-spread of the disease. By the 1950s, the public was looking to science for prevention and therapy. But Rogers reminds us that the recent history of polio was more than the history of successful vaccines. She points to competing therapies, research tangents, and people who died from early vaccine trials.

Post-polio syndrome (PPS) embodies the new neuromuscular symptoms that patients with prior paralytic poliomyelitis develop after a stable course from 20 to 40 years. These include new muscle weakness, fatigue, muscular atrophy, muscle pain and various secondary muscular complaints. Fundamental questions regarding the neurobiology of the motor neurones previously affected by the poliovirus, the ongoing changes of the reinnervating process, and the potential role of the poliovirus in generating a chronic immune stimulation or viral persistence are discussed in this volume. Data from the neurological, immunological, virological, electrophysiological and rehabilitational fields is presented, shedding light on the pathogenesis of post-polio syndrome, as well as that of other motor neurone diseases such as amyotrophic lateral sclerosis (ALS).

Virology Division. International Union of Microbiological Societies.

This book provides an essential introduction and guide for oncologists, immunologists and clinicians treating cancer patients.

Neuromuscular disorders are diagnosed across the lifespan and create many challenges especially with infants, children and adolescents. This new edition of the definitive reference, edited by the established world renowned authorities on the science, diagnosis and treatment of neuromuscular disorders in childhood is a timely and needed resource for all clinicians and researchers studying neuromuscular disorders, especially in childhood. The Second Edition is completely revised to remain current with advances in the field and to insure this remains the standard reference for clinical neurologists and clinical research neurologists. The Second Edition retains comprehensive coverage while shortening the total chapter count to be an even more manageable and effective reference. Carefully revised new edition of the classic reference on neuromuscular disorders in infancy, childhood and adolescence. Definitive coverage of the basic science of neuromuscular disease and the latest diagnosis and treatment best practices. Includes coverage of clinical phenomenology, electrophysiology,

histopathology, molecular genetics and protein chemistry

The compelling true story of Dr. Jonas Salk's quest to develop a vaccine for polio. In 1916, the United States was hit with one of the worst polio epidemics in history. The disease was a terrifying enigma: striking out of nowhere, it afflicted tens of thousands of children and left them—literally overnight—paralyzed. Others it simply killed. At the same time, a child named Jonas Salk was born.... When Franklin Delano Roosevelt was diagnosed with polio shortly before assuming the Presidency, Salk was given an impetus to study this deadly illness. After assisting in the creation of an influenza vaccine, Salk took up the challenge. His progress in combating the virus was hindered by the politics of medicine and by a rival researcher determined to discredit his proposed solution. But Salk's perseverance made history—and for close to seventy years his vaccine has saved countless lives, bringing humanity close to eradicating polio throughout the world. *Splendid Solution* chronicles Dr. Salk's race against time to achieve an unparalleled breakthrough that made him a cultural hero and icon of modern medicine.

*Vaccines* is a well-written book on the subject of providing crucial information to students and researchers in the field of vaccinology. The introductory chapter, contributed by the editor (Dr. Vijay Kumar) of the book, provides the brief introduction to the history of the development of current forms of vaccine, which is difficult to find easily in one place. In addition, other chapters of the book are written by experts in the field. For example, the second chapter looks at the emerging role of developing countries in the innovation and production of vaccines. Other chapters provide information regarding different types of vaccines, development of vaccines for zoonotic viral infections, and regulatory affairs for genetically modified organism vaccines.

In the 20th century, poliomyelitis emerged to become a globalcrippler and killer. But, with the development of preventive vaccines in the 1950s, it looks set to be the first disease to be eliminated by direct human intervention. Divided into four parts, this book presents a world geography of poliomyelitis.

Through the lens of polio, Dóra Vargha looks anew at international health, communism and Cold War politics. This title is also available as Open Access.

Visually rich Netter artwork and detailed yet concise text provide you with an overview of general neurology and its intersection with internal medicine, neurosurgery, ophthalmology, psychiatry, and orthopedics.

After contracting polio as a child, Sandra Gail Lambert progressed from braces and crutches to a manual wheelchair to a power wheelchair—but loneliness has remained a constant, from the wild claustrophobia of a child in body casts to just yesterday, trapped at home, gasping from pain. *A Certain Loneliness* is a meditative and engaging memoir-in-essays that explores the intersection of disability, queerness, and female desire with frankness and humor. Lambert presents the adventures of flourishing within a world of uncertain tomorrows: kayaking alone through swamps with alligators; negotiating planes, trains, and ski lifts; scoring free drugs from dangerous men; getting trapped in a too-deep snow drift without crutches. *A Certain Loneliness* is literature of the body, palpable and present, in which Lambert's lifelong struggle with isolation and independence—complete with tiresome frustrations, slapstick moments, and grand triumphs—are wound up in the long history of humanity's relationship to the natural world. Purchase the audio edition.

This book provides a compilation of the current developments in mucosal nanovaccines, which are an attractive approach to fight against infectious and non-

communicable diseases. Since nanomaterials possess unique properties; many of them have a positive effect on vaccine efficacy when used as antigen carriers and have been applied in vaccinology with significant advances over the past years. This book addresses the methodologies for mucosal nanovaccines synthesis; based on the following nanomaterials: gold, PLGA, silica, and chitosan nanoparticles; as well as nanogels, carbon nanotubes, liposomes, and Virus-like particles. A description of the immunogenic properties of the mucosal nanovaccines is presented, highlighting the improvements achieved with this approach when compared to conventional formulations. Mucosal vaccines constitute the most practical immunization approach since they are easy to administer (promoting patient's comfort and increasing compliance), allow triggering relevant immune responses at both the site of administration and distant compartments, and thus may protect the main entry portal for pathogens (oral, nasal, and genital mucosae). In this context, the potential of nanovaccines to result in new mucosal formulations in the benefit of global health is analyzed. Covers the synthesis and functionalization of nanomaterials for the development of nanovaccines; Discusses the underlying mechanisms involved in the induction of immune responses through mucosal compartments and the advantages of nanomaterials in the formulation of nanovaccines; Transmits the state of the art for the development of mucosal nanovaccines; Provides routes for the design and evaluation of mucosal nanovaccines; Presents key perspectives for the field of mucosal vaccine development.

"This fourth volume of the Global Burden of Disease and Injuries Series provides the reader with information on the epidemiology and burden of major infectious and parasitic diseases. As with previous volumes of the Global Burden of Disease study, the chapters in this book detail the situation as experienced in the year 1990. Since then the epidemiology of some of the conditions described has changed, and where this is the case the authors have added a brief paragraph acknowledging this. The chapters therefore do not provide a detailed update on the current burden of disease, which is accommodated in the documentation of the Global Burden of Disease 2000 and published elsewhere."--Preface.

The Public Health Foundation (PHF) in partnership with the Centers for Disease Control and Prevention (CDC) is pleased to announce the availability of Epidemiology and Prevention of Vaccine-Preventable Diseases, 13th Edition or "The Pink Book" E-Book. This resource provides the most current, comprehensive, and credible information on vaccine-preventable diseases, and contains updated content on immunization and vaccine information for public health practitioners, healthcare providers, health educators, pharmacists, nurses, and others involved in administering vaccines. "The Pink Book E-Book" allows you, your staff, and others to have quick access to features such as keyword search and chapter links. Online schedules and sources can also be accessed directly through e-readers with internet access. Current, credible, and comprehensive, "The Pink Book E-Book" contains information on each vaccine-preventable disease and delivers immunization providers with the latest information on:

- Principles of vaccination
- General recommendations on immunization
- Vaccine safety
- Child/adult immunization schedules
- International vaccines/Foreign language terms
- Vaccination data and statistics

The E-Book format contains all of the information and updates that are in the print version, including:

- New vaccine administration chapter
- New recommendations regarding selection of storage units and temperature monitoring tools
- New recommendations for vaccine transport
- Updated information on available influenza vaccine products
- Use of Tdap in pregnancy
- Use of Tdap in persons 65 years of age or older
- Use of PCV13 and PPSV23 in adults with immunocompromising conditions
- New licensure information for

varicella-zoster immune globulin Contact bookstore@phf.org for more information. For more news and specials on immunization and vaccines visit the Pink Book's Facebook fan page

The number of global polio cases has fallen dramatically and eradication is within sight, but despite extraordinary efforts, polio retains its grip in a few areas. Anthropologist Svea Closser follows the trajectory of the polio eradication effort in Pakistan, one of the last four countries in the world with endemic polio. Journeying from vaccination campaigns in rural Pakistan to the center of global health decision making at the World Health Organization in Geneva, the author explores the historical and cultural underpinnings of eradication as a public health strategy, and reveals the culture of optimism that characterizes--and sometimes cripples--global health institutions. With a keen ethnographic eye, Closser describes the complex power negotiations that underlie the eradication effort at every level, tracking techniques of resistance employed by district health workers and state governments alike. This book offers an analysis of local politics, social relations, and global political economy in the implementation of a worldwide public health effort, with broad implications for understanding what is possible in global health, now and for the future. This book is the recipient of the annual Norman L. and Roselea J. Goldberg Prize for the best project in the area of medicine.

The story of mankind's struggle against polio is compelling, exciting and full of twists and paradoxes. One of the grand challenges of modern medicine, it was a battleground between good and bad science. Gareth Williams takes an original view of the journey to understanding and defeating polio.

A springboard for developing new approaches to understanding, preventing, and treating picornaviral diseases.

- Examines the most current breakthroughs as well as the challenges that lie ahead in picornavirus research; encapsulates current knowledge of the molecular biology, evolution, and pathogenesis of this large family of viruses; and, examines the diseases that these viruses cause and the latest vaccines and antiviral drugs to prevent and control those diseases.
- Explores the structural and mechanistic bases of picornavirus replication, highlighting new insights about the host cell interactions needed for virus growth; and, illustrates how the regular occurrence of mutations, typical of viruses with RNA as genetic material, generates the quasispecies dynamics that underlie viral fitness.
- Focuses on picornaviruses that cause disease, examining pathogenicity and innate and acquired immune responses against infection as well as the latest vaccine and antiviral drug strategies.

Vaccines have saved more lives than any other single medical advance. Yet today only four companies make vaccines, and there is a growing crisis in vaccine availability. Why has this happened? This remarkable book recounts for the first time a devastating episode in 1955 at Cutter Laboratories in Berkeley, California, that has led many pharmaceutical companies to abandon vaccine manufacture. Drawing on interviews with public health officials, pharmaceutical company executives, attorneys, Cutter employees, and victims of the vaccine, as well as on previously unavailable archives, Dr. Paul Offit offers a full account of the Cutter disaster. He describes the nation's relief when the polio vaccine was developed by Jonas Salk in 1955, the production of the vaccine at industrial facilities such as the one operated by Cutter, and the tragedy that occurred when 200,000 people were inadvertently injected with live virulent polio virus: 70,000 became ill, 200 were permanently paralyzed, and 10 died. Dr. Offit also explores how, as a consequence of the tragedy, one jury's verdict set in motion events that eventually suppressed the production of vaccines already licensed and deterred the development of new vaccines that hold the promise of preventing other fatal diseases.

Vaccines are among the most safe and effective public health interventions to prevent serious disease and death. Because of the success of vaccines, most Americans today have no firsthand experience with such devastating illnesses as polio or diphtheria. Health care providers who vaccinate young children follow a

schedule prepared by the U.S. Advisory Committee on Immunization Practices. Under the current schedule, children younger than six may receive as many as 24 immunizations by their second birthday. New vaccines undergo rigorous testing prior to receiving FDA approval; however, like all medicines and medical interventions, vaccines carry some risk. Driven largely by concerns about potential side effects, there has been a shift in some parents' attitudes toward the child immunization schedule. The Childhood Immunization Schedule and Safety identifies research approaches, methodologies, and study designs that could address questions about the safety of the current schedule. This report is the most comprehensive examination of the immunization schedule to date. The IOM authoring committee uncovered no evidence of major safety concerns associated with adherence to the childhood immunization schedule. Should signals arise that there may be need for investigation, however, the report offers a framework for conducting safety research using existing or new data collection systems. This engaging interdisciplinary study integrates the deep histories of infectious intestinal disease transmission, the sanitation revolution, and biomedical interventions.

Childhood immunization is one of the major public health measures of the 20th century and is now receiving special attention from the Clinton administration. At the same time, some parents and health professionals are questioning the safety of vaccines because of the occurrence of rare adverse events after immunization. This volume provides the most thorough literature review available about links between common childhood vaccines--tetanus, diphtheria, measles, mumps, polio, Haemophilus influenzae b, and hepatitis B--and specific types of disorders or death. The authors discuss approaches to evidence and causality and examine the consequences--neurologic and immunologic disorders and death--linked with immunization. Discussion also includes background information on the development of the vaccines and details about the case reports, clinical trials, and other evidence associating each vaccine with specific disorders. This comprehensive volume will be an important resource to anyone concerned about the immunization controversy: public health officials, pediatricians, attorneys, researchers, and parents.

Based on the highly successful reference work *Viral Pathogenesis* published in 1997, this concise, economical version can be used both as an introductory text or for self-education by medical students and biologists alike. This latest edition provides a completely revised overview of the subject with new chapters on innate immunity, emerging viral diseases, and antiviral therapy in a format that is easy to understand without continually referring to additional information. Used by the author in his graduate classes at the University of Pennsylvania, it sets forth the essential principles and discusses the details of how the immune system responds to viral invasion including the treatment and prevention of infection. Illustrated by pertinent examples it is one of the only books devoted exclusively to this topic. \* Offers almost a 20% expansion over the first edition \* Focuses

specifically on viral pathogenesis unlike other texts where only a few chapters are devoted to the topic \* Neal Nathanson is one of the primary authorities in the field and has authored chapters on viral pathogenesis in two of the most well known virology and microbiology titles Field's Virology and Topley and Wilson's Microbiology \* Now in four color throughout!

"He first full biography of Jonas Salk offers a complete picture of the enigmatic figure, from his early years working on an influenza vaccine--for which he never fully got credit--to his seminal creation of the Polio vaccine, up through his later work to find a cure for AIDS"--

In 1988, the World Health Organization launched a twelve-year campaign to wipe out polio. Thirty years and several billion dollars over budget later, the campaign grinds on, vaccinating millions of children and hoping that each new year might see an end to the disease. But success remains elusive, against a surprisingly resilient virus, an unexpectedly weak vaccine and the vagaries of global politics, meeting with indifference from governments and populations alike. How did an innocuous campaign to rid the world of a crippling disease become a hostage of geopolitics? Why do parents refuse to vaccinate their children against polio? And why have poorly paid door-to-door healthworkers been assassinated? Thomas Abraham reports on the ground in search of answers.

#1 NEW YORK TIMES BESTSELLER • “The story of modern medicine and bioethics—and, indeed, race relations—is refracted beautifully, and movingly.”—Entertainment Weekly NOW A MAJOR MOTION PICTURE FROM HBO® STARRING OPRAH WINFREY AND ROSE BYRNE • ONE OF THE “MOST INFLUENTIAL” (CNN), “DEFINING” (LITHUB), AND “BEST” (THE PHILADELPHIA INQUIRER) BOOKS OF THE DECADE • ONE OF ESSENCE’S 50 MOST IMPACTFUL BLACK BOOKS OF THE PAST 50 YEARS • WINNER OF THE CHICAGO TRIBUNE HEARTLAND PRIZE FOR NONFICTION NAMED ONE OF THE BEST BOOKS OF THE YEAR BY The New York Times Book Review • Entertainment Weekly • O: The Oprah Magazine • NPR • Financial Times • New York • Independent (U.K.) • Times (U.K.) • Publishers Weekly • Library Journal • Kirkus Reviews • Booklist • Globe and Mail Her name was Henrietta Lacks, but scientists know her as HeLa. She was a poor Southern tobacco farmer who worked the same land as her slave ancestors, yet her cells—taken without her knowledge—became one of the most important tools in medicine: The first “immortal” human cells grown in culture, which are still alive today, though she has been dead for more than sixty years. HeLa cells were vital for developing the polio vaccine; uncovered secrets of cancer, viruses, and the atom bomb’s effects; helped lead to important advances like in vitro fertilization, cloning, and gene mapping; and have been bought and sold by the billions. Yet Henrietta Lacks remains virtually unknown, buried in an unmarked grave. Henrietta’s family did not learn of her “immortality” until more than twenty years after her death, when scientists investigating HeLa began using her husband and children in research without informed consent. And though the cells had launched

a multimillion-dollar industry that sells human biological materials, her family never saw any of the profits. As Rebecca Skloot so brilliantly shows, the story of the Lacks family—past and present—is inextricably connected to the dark history of experimentation on African Americans, the birth of bioethics, and the legal battles over whether we control the stuff we are made of. Over the decade it took to uncover this story, Rebecca became enmeshed in the lives of the Lacks family—especially Henrietta’s daughter Deborah. Deborah was consumed with questions: Had scientists cloned her mother? Had they killed her to harvest her cells? And if her mother was so important to medicine, why couldn’t her children afford health insurance? Intimate in feeling, astonishing in scope, and impossible to put down, *The Immortal Life of Henrietta Lacks* captures the beauty and drama of scientific discovery, as well as its human consequences.

A history of the 1950s polio epidemic that caused panic in the United States examines the competition between Salk and Sabin to find the first vaccine and its implications for such issues as government testing of new drugs and manufacturers' liability.

[Copyright: c8de3001108c01e1e14531e588ab54ac](#)