[FREE] The Demon Under the Microscope: From Battlefield Hospitals to Nazi Labs, One Doctor's Heroic Search for the World's First Miracle Drug

The Demon Under the Microscope: From Battlefield Hospitals to Nazi Labs, One Doctor's Heroic Search for the World's First Miracle Drug

Thomas Hager
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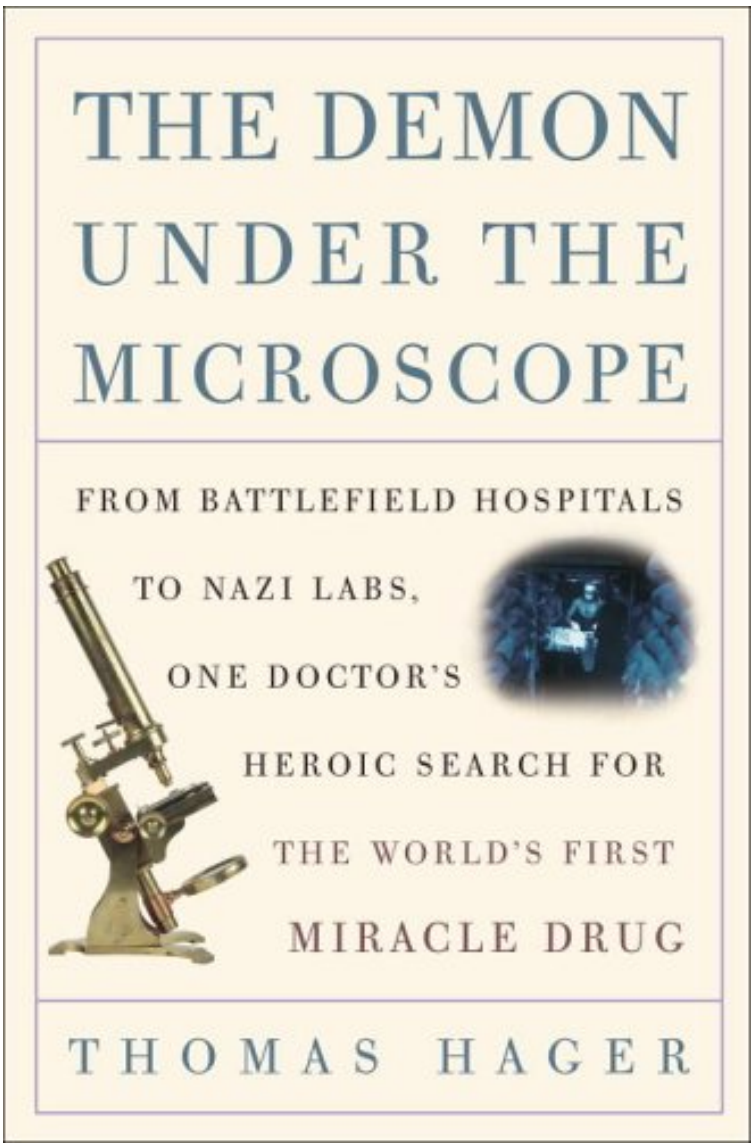

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Thomas Hager : The Demon Under the Microscope: From Battlefield Hospitals to Nazi Labs, One Doctor's Heroic Search for the World's First Miracle Drug before purchasing it in order to gage whether or not it would be worth my time, and all praised The Demon Under the Microscope: From Battlefield Hospitals to Nazi Labs, One

Doctor's Heroic Search for the World's First Miracle Drug:

0 of 0 people found the following review helpful. Engaging biography of sulfa drug researcher and historical context and impactsBy knobrenThis book gave a historical account of the impacts and treatment of infectious disease and the rolls of physicians, pharmacists, chemical companies, individual scientists, government regulations, consumers, colonialism, and two world wars before, during, and after the discovery of the antibiotic properties of sulfa drugs. This book is part biography of the Nobel Prize winning German research scientist who tested hundreds of dye-based chemicals on thousands of infected research animals, as well as in vitro on various pathogenic bacteria. The author provides background on the state of infectious disease in hospitals, among general populations, in colonial wars, and during WWI and II and the research and treatment trends at the time. He also notes the lack of standardized large-scale, double-blind human drug trials and points out how haphazard and, by today's standards, unethical testing occurred on African citizens, institutionalized mental health patients, orphans and prisoners, military personnel, and uninformed patients. There were also unethical forced mutilations, infections, and treatments conducted in Nazi concentration camps. Some prisoners were forced to work as slave labourers at the chemical companies, as well.The author goes on the explore the barely-regulated US pharmaceutical environment of snake-oil remedies marketed directly to consumers, who diagnosed themselves or consulted druggists and bought whatever they wanted for self-medication. The proliferation of sulfa-based remedies from less reliable chemical companies led to multiple deaths and finally led to federal laws updating and strengthening the regulatory power of the FDA. This is a highly relevant story in this age of government deregulation.0 of 0 people found the following review helpful. Important and DelightfulBy Richard S. WellsThis book is a literary delight. It has everything we seek in a good book: a serious subject, fascinating characters, and masterful writing. I encountered the book by accident. As a five year old child I was given sulfa as an experimental, last resort, drug that saved my life. Eighty years later, I was curious about this event at Johns Hopkins, started looking into the history. This book popped up, so I ordered it. Apart from my personal interest, the book shows how the scientific process works, how it has progressed, and how dependent it is upon both circumstance and personal qualities. It is simply a masterpiece.0 of 0 people found the following review helpful. An enjoyable history lesson, beyond just sulfaBy Ian WellsA lovely, easy to read book. In addition to talking about antibiotics it covers a great deal of history in an interesting way. It was shocking to realize just how bad healthcare less than 100 years ago. The book is written in a very accessible way and you don't need prior medical or historical knowledge.

The Nazis discovered it. The Allies won the war with it. It conquered diseases, changed laws, and single-handedly launched the era of antibiotics. This incredible discovery was sulfa, the first antibiotic. In The Demon Under the Microscope, Thomas Hager chronicles the dramatic history of the drug that shaped modern medicine.Sulfa saved millions of livesamong them those of Winston Churchill and Franklin Delano Roosevelt Jr.but its real effects are even more far reaching. Sulfa changed the way new drugs were developed, approved, and sold; transformed the way doctors treated patients; and ushered in the era of modern medicine. The very concept that chemicals created in a lab could cure disease revolutionized medicine, taking it from the treatment of symptoms and discomfort to the eradication of the root cause of illness. A strange and colorful story, The Demon Under the Microscope illuminates the vivid characters, corporate strategy, individual idealism, careful planning, lucky breaks, cynicism, heroism, greed, hard work, and the central (though mistaken) idea that brought sulfa to the world. This is a fascinating scientific tale with all the excitement and intrigue of a great suspense novel. For thousands of years, humans had sought medicines with which they could defeat contagion, and they had slowly, painstakingly, won a few battles: some vaccines to ward off disease, a handful of antitoxins. A drug or two was available that could stop parasitic diseases once they hit, tropical maladies like malaria and sleeping sickness. But the great killers of Europe, North America, and most of Asiapneumonia, plague, tuberculosis, diphtheria, cholera, meningitiswere caused not by parasites but by bacteria, much smaller, far different microorganisms. By 1931, nothing on earth could stop a bacterial infection once it started. . . .But all that was about to change. . . . from The Demon Under the Microscope

From Publishers WeeklyModern bacteriology was born on the battlefields of WWI, where bacteria-rich trenches added to the toll of millions of soldiers killed. Not coincidentally, the search for anything that would significantly diminish the deadly power of disease largely occurred between the world wars, mostly in Germany. Gerhard Domagk and his colleagues at Bayer (a subsidiary of I.G. Farben) worked feverishly to identify which microscopic squiggles might render humankind forever safe from malaria and tuberculosis. The answer, discovered in 1932, turned out to be sulfa drugs, the precursors to modern antibiotics. Hager, a biographer of Linus Pauling, does a remarkable job of transforming material fit for a biology graduate seminar into highly entertaining reading. He knows that lay readers need plenty of personality and local color, and his story is rich with both. This yarn prefigures the modern rush for corporate pharma patents; it is testament to Hager's skill that the inherently unsexy process of finding the chemicals that might help conquer strep is as exciting as an account of the hunt for a Russian submarine. (Sept.) Copyright Reed Business Information, a division of Reed Elsevier Inc. All rights reserved.From School Library JournalAdult/High

SchoolAn exciting, fast-paced read, Demon opens with a grisly scene at Tripler General Hospital in Hawaii as ambulances, trucks, and private cars drop off the injured from Pearl Harbor. Men who were wounded, dismembered, and literally roasted in the harbor oil fires from exploding ships were tended to on the lawns outside the hospital and in three operating rooms that ran continuously for 11 hours. Not a single patient died due to infection, in dramatic contrast to World War I, when it was estimated that more soldiers died of infection than in combat. What was the difference? Sulfa drugsantibiotics. The story of their discovery reads much like a suspense novel, set against the backdrop of World War I trench warfare and political intrigue in Europe leading up to World War II. The scientific leaders in medical research, Gerhard Domagk at Bayer, Sir Almroth Wright's group The Lords, and Ernest Fourneau at the Pasteur Institute, conducted meticulous work and experienced accidental discoveries that advanced medical procedures and determined the protocols for drug testing. Great reading both for curriculum support and general interest.Brigeen Radoicich, Fresno County Office of Education, CA Copyright Reed Business Information, a division of Reed Elsevier Inc. All rights reserved.From BooklistIn medical-writer Hager's opinion, sulfa, not penicillin, is the first real miracle drug, and he feels its discovery is too often overlooked and underappreciated. His effort to amend this insult commences by tracing the life of physician Gerhard Domagk, from his days as a German military medical assistant during World War I to his belated Nobel Prize, and focusing on Domagk's unwavering quest for cures for the world's most devastating infections. As a callow college student, Domagk left school to perform his patriotic duty as an enlistee only to find, once in the thick of combat, that patriotism wasn't enough to sustain him when he and his fellows suffered serious battlefield injuries. But it wasn't the injuries per se as much as the seemingly inevitable and too-often crippling or fatal infections of the wounds that set the young man on a lifelong mission. The drama of his undertaking, performed in the face of fierce competition and opposition from other physicians and scientists, unfolds as a well-told tale of trailblazing science. Donna ChavezCopyright American Library Association. All rights reserved