

Reed, Walter (1851-1902)

American physician. After serving as an army surgeon, Reed was appointed to investigate yellow fever in Cuba, where C.J. Finlay had suggested that the mosquito was the agent responsible for spreading the disease. Reed and his team subjected themselves to the bites of infected mosquitoes, one of the team dying as a result, but proving that mosquitoes were responsible and enabling yellow fever to be eliminated from the region.

The Macmillan Encyclopedia 1995

Smith, Theobald (1859-1934)

American microbiologist and pathologist who discovered the causes of several infectious and parasitic diseases in animals. Smith graduated from Cornell University, Ithaca, NY in 1881. His most important research was carried out on Texas cattle fever. He discovered that the disease is caused by a protozoan parasite that is transmitted to uninfected cattle by blood-sucking ticks. He differentiated the bovine from the human tubercle bacilli. He was also the first to notice anaphylaxis (an intense antibody reaction in an animal after injection of a foreign protein in the body), which he found occurred after the second injection of diphtheria antitoxin into guinea pigs.

Encyclopædia Britannica Online

Bruce, Sir David (1855-1931)

British bacteriologist. He was a one-time colleague of Robert Koch in Berlin but spent the greater part of his career as a military physician. While commandant of the Royal Army Medical College, Millbank, he directed the research on tetanus and trench fever. He undertook royal commissions of inquiry into various diseases in Malta and central Africa. He was able to trace the cause of Malta fever to a bacterium later named for him as *Brucella melitensis*. He also investigated the cause of nagana, a disease of horses and cattle in central and southern Africa, and found it to be transmitted by the tsetse fly. This work was of great help in his later research on sleeping sickness, which he also proved to be transmitted by the tsetse fly. He was knighted in 1908.

A Dictionary of Scientists, Oxford University Press, © Market House Books Ltd 1999

Ross, Sir Ronald (1857-1932)

British bacteriologist, who confirmed the theory of Sir Patrick Manson (1844-1922) that mosquitoes transmit malaria. While working in India, Ross discovered malaria

parasites in the guts of *Anopheles* mosquitoes. In his honor was founded the Ross Institute and Hospital for Tropical Diseases (1926), incorporated into the London School of Hygiene and Tropical Medicine in 1933. Ross received the 1902 Nobel Prize.

Encyclopædia Britannica Online

Grassi, Giovanni Battista (1854-1925)

Italian zoologist. He demonstrated (1898) that the *Anopheles* mosquito carries the plasmodium of malaria in its digestive tract. He is known also for his research on parasites, on migrations and metamorphosis in eels, on the vine parasite phylloxera, and on termites.

The Columbia Encyclopedia, 6th Edition.

Bibliographical References and Illustrations

Encyclopædia Britannica Online

The Macmillan Encyclopedia 1995

Microbe Hunters - Paul de Kruif

Images de la Vie et de l'Œuvre de Pasteur - Vallery-Radot

Theobald Smith 1859-1934 - George Henry Falkiner Nuttall

<http://www.pasteur.fr/infosci/archives/duc0.html>

<http://www.m-ww.de/persoenlichkeiten/ehrlich.html>

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Plagues and Politics, the Story of the United States
Public Health Service - Fitzhugh Mullan, MD

Mosquitoes, Malaria and Man - Gordon Harrison

Yellow Fever Black Goddess-The Coevolution of People and
Plagues - Christopher Wills

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Centers for Disease Control

Under the Guidance of Professor Leonard Dworsky
February 2002, nm86@cornell.edu

The theory that living organisms arise from nonliving materials is known as the theory of **spontaneous generation.**

The belief in the spontaneous development of microorganisms was widely held for many centuries, and continued until the 19th century, when

THE MICROBE HUNTERS PROVED THE GERM THEORY OF DISEASE

Which showed that diseases are caused by the invasion of microorganisms into the body.

