

ROBERT KOCH (1843–1910)

Summary

The pure culture is the foundation for all research on infectious disease.

Robert Koch, 1891

Being the country doctor in Wolsztyn, Koch has shown in 1876 for the first time, that the particular bacterium (*Bacillus anthracis*) is the cause of the particular disease (anthrax). In his first monography (1878), Koch summarized his experiments on the etiology of wound infection. From Wolsztyn, Robert Koch was assigned to the Imperial Health Authority (Kaiserliches Gesundheitsamt) in Berlin in 1880. In 1882 he discovered the tubercle bacillus – *Mycobacterium tuberculosis*. In his next work he determined guidelines to prove that a disease is caused by a specific organism. The four basic criteria there enlisted are called today as Koch's-Henle postulates. As a member of German government commission, in 1883 Koch identified both the bacterium and its transmission into cholera disease. In 1885 he was appointed professor of hygiene and bacteriology at the University of Berlin and in 1891 became director of the new Prussian Institute for Infectious

Diseases (renamed as the Robert Koch Institute). He traveled to South Africa, India, Egypt, Japan and other countries. He was also involved with a great variety of investigations into bacterial diseases of humans and animals – studies of leprosy, sleeping sickness, bubonic plague, livestock diseases, malaria, rinderpest and others. In 1905 Robert Koch won the Nobel Prize for Physiology or Medicine “For his investigation and discoveries in relation to tuberculosis”. Robert Koch died in Baden-Baden on May 27, 1910.

This article presents a short biography of Robert Heinrich Hermann Koch, one of the founders of bacteriology. Koch was born on 11 December 1843 in Clausthal, Germany. In 1866 he obtained a medical degree from the University of Gottingen, after natural science and then medicine studies. He had excellent teachers: Friedrich Henle, Wilhelm Kause, Friedrich Wöhler and Georg Meissner.