RAMA UNIVERSITY

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FACULTY OF ENGINEERING &TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

Robert Koch

Robert Koch was a German physician who is widely credited as one of the founders of bacteriology and microbiology.

He investigated the anthrax disease cycle in 1876, and studied the bacteria that cause tuberculosis in 1882, and cholera in 1883.

He also formulated Koch's postulates.

Koch won the 1905 Nobel Prize in Physiology or Medicine.

He is regarded as the father of clinical microbiology.

In 1876, Robert Koch (1843–1910) established that microbes can cause disease.

He found that the blood of cattle who were infected with anthrax always had large numbers of *Bacillus anthracis*.

Koch found that he could transmit anthrax from one animal to another by taking a small sample of blood from the infected animal and injecting it into a healthy one, and this caused the healthy animal to become sick.

This observation is known as Koch postulates in field of microbiology. Koch's postulate state that:

Four steps used by Koch to study microorganisms are referred to as Koch's Postulates. *Koch's Postulates* state:

1. The microorganism must be present in the diseased animal and not present in the healthy animal.

2. Cultivate the microorganism away from the animal in a pure culture.

3. Symptoms of the disease should appear in the healthy animal after the healthy animal is inoculated with the culture of the microorganism.

4. Isolate the microorganism from the newly infected animal and culture it in the laboratory. The new culture should be the same as the microorganism that was cultivated from the original diseased animal.