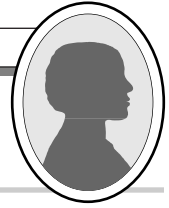


BIOGRAPHY



Walter Reed

“Yellow jack” is what U.S. soldiers called the deadly fever that killed so many of their comrades during the Spanish-American War. The nickname referred to the yellow quarantine flag that flew over the hospital at Camp Columbia near Havana, Cuba. In 1900 a military doctor, Walter Reed, discovered how yellow fever was transmitted.

As you read, think about the kind of dedication medical research demands.

Perhaps no one at the time was more fitted for the job of medical detective than Major Walter Reed. Born in Virginia in 1851, he had been a brilliant student at the University of Virginia, which he entered when he was only 16. By age 18, he had earned a medical degree there. Three years later, he acquired a second medical degree from Bellevue Hospital Medical College in New York City. Reed soon discovered, however, that the big city was not for him, so he joined the army and became the medical officer at a series of army forts in the West.

Research had always been his major interest, and he became an avid student of the new science of bacteriology. In 1893 he was named professor of bacteriology at the Army Medical School in Washington, D.C., where he studied the role of bacteria in transmitting diphtheria and typhoid fever. When yellow fever became epidemic among U.S. troops during the Spanish-American War, Reed went to Havana.

There were two theories of how yellow fever was transmitted. One held that it was spread by discharges from yellow-fever patients onto their bedclothing and other items they used or touched. Another, advanced by Cuban doctor Carlos Finlay, held that mosquitoes carried the deadly virus and transmitted it with their bites.

Reed and his team of doctors decided to test both theories, though they knew that doing so would be fraught with danger. Since only humans get yellow fever, the doctor would have to use humans, not animals, as “guinea pigs.” They called for volunteer soldiers and then designed their experiment. In Hut One, they set up cots covered with soiled bedclothing from yellow-fever patients. In a second hut, they set up uncontaminated cots but introduced another element, *Aedes aegypti* mosquitoes that had been feeding on yellow-fever patients. In a short time, the doctors had their results. The men in Hut One were not infected but the bitten soldier in Hut Two was. They had found the culprit—the mosquito. Army engineers destroyed the breeding places of the potentially deadly mosquitoes, and thus ended the epidemic. This breakthrough was hailed as being “worth more than the cost of the Spanish-American War, including lives lost and money expended.” The eradication of yellow fever saved countless lives and also made possible the building of the Panama Canal.

Thrilled with his success, Dr. Reed wrote to his wife from Cuba, “The prayer that has been mine for twenty years, that I might be permitted in some way or at some time to do something to alleviate human suffering has been granted.” Reed returned to teaching and died in 1902.

Questions to Think About

1. In what ways was Walter Reed well prepared for his work with yellow fever? What dangers were involved in finding the cause of yellow fever?
2. **Testing Conclusions** What conclusion did Reed’s research team reach and what tests led to this conclusion?