

BIOS242 Week 1

Assignment: Golden Age and Macromolecules



Chamberlain University



Golden Age of Microbiology: Use the given active learning template (ALT) to connect Scientists with their discoveries in 1-2 sentences. (Slide 1; 2.5 points)

Carolus Linnaeus: Known as the father of modern taxonomy, Linnaeus established a uniform system for naming organisms, a practice known as binomial nomenclature.

Antoni van Leeuwenhoek: Often referred to as the father of microbiology, Leeuwenhoek was the first to observe and describe microorganisms, including bacteria and protozoa.

Joseph Lister: Lister is recognized for his pioneering work in antiseptic surgery. He introduced the use of carbolic acid to sterilize surgical instruments and clean wounds.

Ignaz Semmelweis: Semmelweis discovered the importance of hand hygiene in medical settings, significantly reducing the incidence of puerperal fever among women in childbirth.

Alexander Fleming: Fleming is best known for his discovery of penicillin, a revolutionary antibiotic that has saved countless lives.

Slide 2: Robert Koch

Summary of Key Work: Koch is renowned for his groundbreaking work in bacteriology, where he identified the specific causative agents of anthrax, tuberculosis, and cholera. He formulated a set of criteria known as “Koch’s Postulates” to establish a causal relationship between a microbe and a disease the inoculated, diseased experimental host and identified as being identical to the original specific causative agent.

Organisms Studied: Koch studied various bacteria, including *Bacillus anthracis* (anthrax), *Mycobacterium tuberculosis* (tuberculosis), and *Vibrio cholerae* (cholera).