

Alexander Fleming

- # 1 Birth and education
- # 2 Work before penicillin
- # 3 Accidental discovery
- # 4 End of his life

- *Scottish bacteriologist and Nobel Prize winner*
 - *best known for his discovery of penicillin.*
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- born in Ayrshire on 6 August 1881 (son of a farmer and one of seven children)
 - He moved to London at the age of 13 and later trained as a doctor. Fleming had always wanted to become a doctor, and so in 1901, he worked at St Mary's Hospital Medical School, London (Alexander did researches as an assistant of Sir Almroth Wright.)
 - Almroth Wright > bacteriologist from GB
 - In World War One > served in the Army Medical
 - worked in battlefield hospitals at the Western Front / France.
 - after the war (September 1918) > returned to St Mary's.
 - discovered lysozyme, an enzyme occurring in many body fluids (Flüssigkeiten), for example in tears
 - Ten years later: 1928, while studying influenza - made an accidental discovery - of penicillin
 - Penicillin > used in the treatment of bacterial infections
 - molecular formula: $R-C_9H_{11}N_2O_4S$ (R is variable)
 - 1929: published his work, did not continue this research, because too difficult
 - Finally in the 1930s, other scientists found a way to mass-produce penicillin after the bombing of Pearl Harbor. (It was mainly used in World War II to treat all the wounded allied forces.)
 - Fleming also discovered very early that bacteria developed antibiotic resistance whenever too little penicillin was used or when it was used for a too short period.
 - 1945 Nobel Prize for Medicine
 - shared with Howard Florey and Ernst Chain (finished Fleming's work)
 - spent the rest of his career at St. Mary's Hospital
 - married twice / had one son
 - death: 11th March 1955
 - cause: heart attack



Power Point Präsentation:

- Start
- Presentation-Skip
- Alexander Fleming – Picture
- St Mary's Hospital Medical School
- R-C₉H₁₁N₂O₄S
- E. Coli
- Advertisement I
- Advertisement II
- Penicillin – Injections, Pills
- When helps penicillin?
- Alexander Fleming – Picture
- Alexander Fleming – Picture