

# Dorothy Crowfoot Hodgkin

(1910 – 1994)

*Discovered the structure of Insulin*



Main image: Dorothy Crowfoot Hodgkin [Getty Images].  
Background: Structure of cobalamin (vitamin B12) [Public Domain].

Encouraged by her mother, Dorothy Hodgkin's interest in chemistry began at an early age. At school, she was one of only two girls allowed to join the boys in the chemistry class. Hodgkin continued to study chemistry at Oxford, becoming only the third woman to achieve a first-class honours degree. She moved to Cambridge to begin her PhD under the supervision of John Bernal. She was awarded her PhD in 1937 for research on x-ray crystallography and the chemistry of sterols.

Hodgkin's work was particularly significant for the discovery of 3D-molecular structures. With her colleagues she published the first structure of a steroid in 1945, cholesterol iodide, and solved the structure of penicillin. Three years later she began investigating the structure of vitamin B12, finally publishing the results in 1955, a finding described by physicist and X-Ray crystallographer Lawrence Bragg as being "*as significant as breaking the sound barrier*". But perhaps even more significantly, Hodgkin spent 35 years studying the structure of insulin, finally publishing the results in 1969.

Hodgkin was awarded the Nobel Prize in Chemistry in 1964.

