

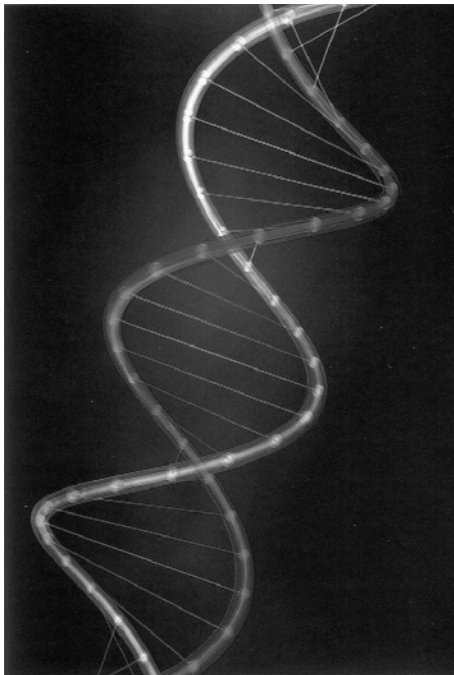
Scientist – Theory - Discovery

عالم – نظرية علميه – إكتشاف علمي

DNA
Discovery

**DOUBLE HELIX-
HEROES**

British biologist Francis Crick, left, and American geneticist James Watson set out to discover the structure of DNA in 1951. In 1953 they proposed the double helix, for which the two were awarded the Nobel Prize in 1962.

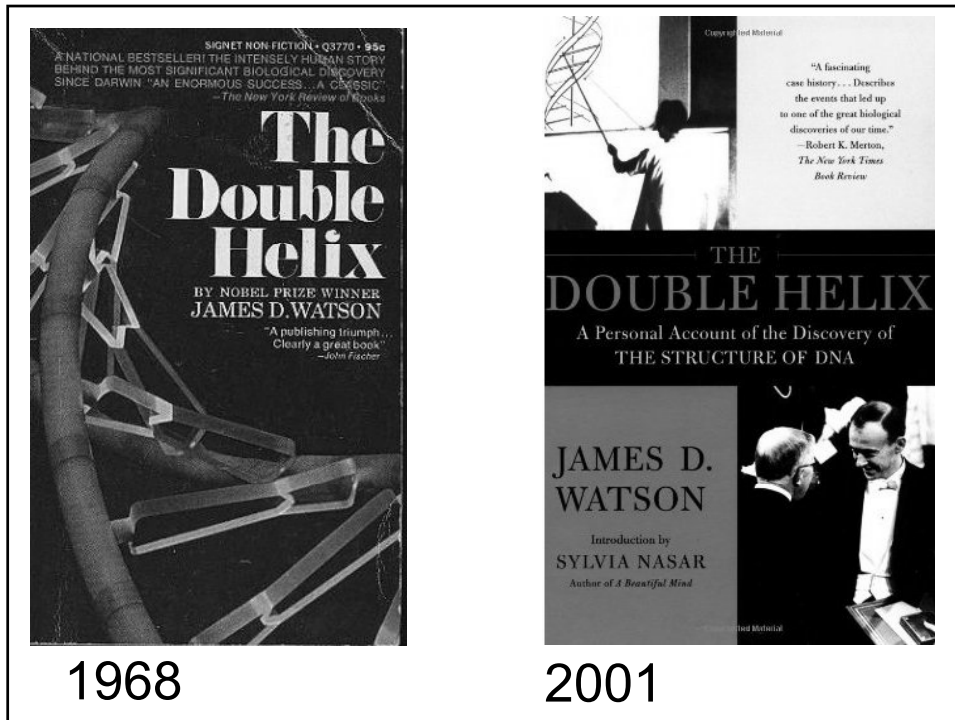


DOUBLE HELIX

The elegant structure of the DNA helix, made up of long sugar-acid strands connected by pairs of chemical atoms, carries the information needed for building the proteins that contain the codes for an organism's inheritance.

<p>FRANCIS CRICK</p> <hr/> <p><i>Codiscoverer of the structure of DNA</i></p> <p>1916 Born June 8 near Northampton, England.</p> <p>1934 Begins the study of physics at University College, London.</p> <p>1937 Graduates from University College with honors; embarks on research toward a Ph.D. degree.</p> <p>1949 Joins the Medical Research Council Unit at Cavendish Laboratories, Cambridge, England.</p> <p>1951 James Watson arrives at Cavendish Laboratories and begins working together with Crick.</p> <p>1953 Publishes article, "Molecular Structure of Nucleic Acids," with James Watson, first one discussing their findings on the structure and function of DNA.</p>	<p>1954 Obtains a Ph.D. from Caius College, Cambridge, his thesis entitled "X-ray Diffraction: Polypeptides and Proteins."</p> <p>1958 Proposes the sequence hypothesis and central dogma, both accepted today as central tenets of molecular biology.</p> <p>1961 Awarded the Prix Charles Leopold Meyer of the French Academy of Sciences.</p> <p>1962 Shares the Nobel Prize for physiology or medicine with James Watson and Maurice Wilkins.</p> <p>1976 Moves to the Salk Institute for Biological Studies, where he changes his field of study to consciousness and the brain.</p> <p>2004 Dies on July 28 in San Diego, California.</p>
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<p>JAMES WATSON</p> <hr/> <p><i>Codiscoverer of DNA's double helix</i></p> <p>1928 Born on April 6 in Chicago, Illinois.</p> <p>1943 At age 15, enters the University of Chicago on a scholarship.</p> <p>1947 Receives a B.Sc. degree in zoology.</p> <p>1950 Earns Ph.D. degree in zoology from Indiana University, presenting a thesis on effect of x-rays on bacteriophages.</p> <p>1950 Spends postdoctoral year in Copenhagen as a Merck Fellow of the National Research Council.</p> <p>1951 Begins work on structure of DNA with Francis Crick at the Cavendish Laboratories, Cambridge, England.</p>	<p>1953 With Crick, publishes "Molecular Structure of Nucleic Acids," announcing discovery of the structure and function of DNA.</p> <p>1961 Appointed professor of biology at Harvard.</p> <p>1962 Receives Nobel Prize for physiology or medicine, sharing it with Francis Crick and Maurice Wilkins.</p> <p>1968 Publishes his account of the DNA discovery, called <i>The Double Helix</i>.</p> <p>1988 Becomes associate director of Human Genome Project undertaken by National Institutes of Health.</p> <p>1989 Becomes director of Human Genome Project.</p>
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1968

2001