



Lasker Foundation

DR. FRANCIS H. C. CRICK



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MEDICINE

Nobel Prize Winners

Three scientists, an American and two British, share the 1962 Nobel Prize in physiology or medicine for their work on DNA, one of the building blocks of life.

► AN AMERICAN and two British scientists won the 1962 Nobel Prize for physiology or medicine.

U. S. scientist Dr. James D. Watson shared the \$50,043 award with British scientists Drs. Francis H. C. Crick and Maurice H. F. Wilkins. The scientists were honored for their "discoveries concerning the molecular structure of nucleic acids and its significance for information transfer in living material."

All three doctors were instrumental in defining the structure of DNA. Painstaking X-ray diffraction studies by Dr. Wilkins provided the other two with the observations needed to develop a model for the DNA structure.

The model sets the stage for science's manipulation and reconstitution of nucleic acids, which provide the genetic information controlling the building of proteins into molecules, such as enzymes and antigens.

This revolutionary advance foreshadows the day when man will be able to correct and compensate for genetic deficiencies implicated in killing and crippling diseases.

Drs. Watson, Crick and Wilkins also shared top honors in the 1960 Albert Lasker award in medical research.

DNA, the chemical heredity in human cells, was found by the scientists to contain two long intertwining molecular chains—a double helix. The structure indicates how this nucleic acid molecule may duplicate itself prior to cell division, paving the way to a better understanding of the genetic code of life.

Dr. Watson, 34, is a Harvard University biologist, who has done extensive biological research into bacterial virus, molecular genetics and protein synthesis.

Dr. Crick, 46, has been affiliated with the Medical Research Council Unit for Molecular Biology at Cambridge, England, since 1949. He is an internationally known expert on the genetic code.

Dr. Wilkins, 46, has been deputy director of the Medical Research Council (Biophysics Research Unit) since 1955.

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PSYCHIATRY

Program for Mentally Retarded Proposed

► NATIONAL ACTION to combat mental retardation which afflicts 5.4 million Americans, about three per cent of the total population, was proposed by the President's Panel on Mental Retardation in Washington, D. C.

The mildly retarded, the subnormal individuals who generally are the school dropouts and the unemployed, account for most of these. The Panel's report underscored the fact that mental retardation is a larger national problem costing billions of dollars in low output and medical expenses. The Panel urged that basic and applied research be increased with immediate establishment of ten new research centers in the biological, behavioral and social sciences.

Such research for mental retardation, is long overdue, the Panel pointed out. Mental retardation is a complex disorder with a

variety of biological and environmental causes. Only 15 per cent to 25 per cent of the cases can now be diagnosed, whereas the remaining can only be generally described. Environment and mental retardation appear to have a definite association since this affliction is associated with lack of prenatal care, poor nutrition, inadequate postnatal care as well as genetic and other biological factors. The heavy prevalence of mental retardation among "culturally deprived" population groups is obviously more than mere coincidence.

The Panel also proposed:

A new method for institutional care of the retarded using small nearby treatment centers in communities throughout the nation which will provide diagnostic, day care and parent counseling services; preventive health measures which include a \$30 million expansion of Federal maternal and child health grant programs for services to low-income groups as top priority; and a nearly three-fold expansion of the 20,000 teachers now available for the mentally retarded.

At least 55,000 more teachers are needed and the Panel proposes Federal project grants for increasing the number of teachers and for special "extension and improvement" in the cause of education for the retarded.

A new legal concept of the retarded to protect their civil rights is another need that was recognized. The Panel urged the creation of a domestic Peace Corps to stimulate voluntary organizations and encourage volunteers to greater efforts in overcoming the drain on national power caused by the present neglect of the mentally retarded.

In addition to the increase in Federal programs, the Panel noted that the principal responsibility must continue to be carried by state, local and private agencies.

The Panel chairman was Dr. Leonard W. Mayo, on leave as executive director of the Association for the Aid of Crippled Children, New York.

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