

## JONAS SALK, M.D.

Dr. Jonas Salk was born in New York City, October 28, 1914. He attended the New York City public schools. He graduated from the City College of New York in 1934. After receiving his M.D. degree in 1939 from New York University College of Medicine, he interned at Mt. Sinai Hospital, New York City, from 1940-42.

At the University of Michigan from 1942-47, he was engaged in studies on immunization against influenza and in the development of a noninfectious or killed virus vaccine against this disease.

In 1947, he joined the University of Pittsburgh as Director of its Virus Research Laboratory where he continued research on influenza, and began studies on poliomyelitis. In the course of work on the immunologic classification of polioviruses, observations were made pointing the way toward the development of a noninfectious or killed poliovirus vaccine that would induce immunity without causing infection. The vaccine's safety and effectiveness were demonstrated in the nationwide field trials of 1954; the results were announced and the vaccine was licensed for public use on 12 April 1955. His continued immunologic research led to his interests in cancer and autoimmune diseases.

In the late 1950s, Dr. Salk developed the idea of an institute to bring together scientists and scholars from different disciplines who share a common interest in science and in the human implications of their work. In 1960, the voters of the City of San Diego, California approved a gift of land on a bluff overlooking the Pacific and he founded such an institution. The National Foundation for Infantile Paralysis, now the March of Dimes Birth Defects Foundation, provided financial support. The Salk Institute for Biological Studies began operation in 1963.

Today the Institute, with a support staff and research faculty of more than 700, is at the forefront in the advancement of knowledge of the complex biological systems including the genetic system, the immune system and the brain. The study of the biological foundation of language acquisition, language disorders, and learning is also part of the program of work of the Institute as it relates to human systems.

Dr. Salk was the Institute's Director until 1975 when he was named Founding Director. As a Resident Fellow from 1963 until 1984, he conducted research in his own laboratory aimed at understanding and manipulating the immune system for the control of autoimmune and neoplastic diseases, such as multiple sclerosis and cancer.

In 1984, Dr. Salk's continuing interest and activities in the field of disease prevention and health enhancement were reflected in his appointment as Distinguished Professor in International Health Sciences at the University of California San Diego. With an international group of colleagues, Dr. Salk encouraged the initiation of collaborative studies on the development, production, and field testing of an improved vaccine for routine childhood immunization to include the noninfectious poliovirus vaccine for administration alone or in combination with diphtheria-tetanus and pertussis vaccine. He assisted international health agencies, as well as governmental and local health officials, to improve immunization programs in developing countries where paralytic poliomyelitis and other infectious childhood diseases pose major health problems.

In 1986, Dr. Salk initiated the development of a strategy to study the prospects for the immunologic control of HIV infection and AIDS. With the collaboration of several research groups internationally, he spent the rest of his life coordinating studies to develop a method of immunization using a killed virus preparation for the control of HIV infection before disease develops and to prevent infection in those not yet infected.

His dedication to biological research was matched by his desire to encourage the practical application of knowledge and wisdom to resolve human problems and to fulfill the human creative potential. From his viewpoint as a physician-biologist, Dr. Salk wrote four books about the prospects and alternatives for the human future. In *Man Unfolding* he introduced his philosophical concepts, which are further elaborated in *The Survival of the Wisest*, *World Population and Human Values: A New Reality* (with co-author Jonathan Salk), and *Anatomy of Reality: Merging of Intuition and Reason*. His many articles on this subject include the essay "An Evolutionary Philosophy for our Time" in *Living Philosophies* (edited by Clifton Fadiman). He continued to write and lecture about these ideas until his death on 23 June 1995.