

CHEMICAL HERITAGE FOUNDATION

JOSHUA LEDERBERG

Transcript of an Interview
Conducted by

Audra J. Wolfe

at

Rockefeller University
New York City

on

18 August 2000

(With Subsequent Corrections and Additions)

CHEMICAL HERITAGE FOUNDATION
Oral History Program
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JOSHUA LEDERBERG

1925 Born in Montclair, New Jersey, on 23 May

Education

1944 B.A., biology, Columbia University
1947 Ph.D., microbiology, Yale University

Professional Experience

1943-1945 U.S. Navy
V-12 and Hospital Corps; Ens. USNR

1945-1946 Columbia University
Research Assistant, zoology

1946-1947 Yale University
Research Fellow, Jane Coffin Childs Fund for Medical Research

1947-1950 University of Wisconsin
Assistant Professor of Genetics
1950-1954 Associate Professor of Genetics
1954-1959 Professor of Genetics
1957-1959 Chair, Department of Medical Genetics

1950 University of California, Berkeley
Visiting Professor of Bacteriology

1957 University of Melbourne
Visiting Professor of Bacteriology

1959-1978 Stanford University School of Medicine
Professor of Genetics (also Biology, Computer Science)
1959-1978 Chairman, Department of Genetics

1978-1990 The Rockefeller University
President
1990- University Professor Emeritus

Honors

- 1957 National Academy of Sciences
- 1958 Nobel Prize for Physiology or Medicine
- 1960 Sc.D. (honorary), Yale University
- 1961 Alexander Hamilton Award, Columbia University
- 1961 Wilbur Cross Medal, Yale University
- 1961 Proctor Medal, Sigma Xi
- 1967 Sc.D. (honorary), University of Wisconsin
- 1967 Sc.D. (honorary), Columbia University
- 1969 M.D. (honorary), University of Turin
- 1970 Sc.D. (honorary), Yeshiva University
- 1979 Litt.D (honorary) Jewish Theological Seminary
- 1979 Foreign Member, Royal Academy of Sciences
- 1979 LL.D. (honorary), University of Pennsylvania
- 1980 Honorary Life Member, New York Academy of Sciences
- 1981 Sc.D. (honorary), Rutgers University
- 1981 Honorary Fellow, New York Academy of Medicine
- 1982 Fellow, American Association for the Advancement of Science
- 1982 Fellow, American Philosophical Society
- 1982 Fellow, American Academy of Arts and Sciences
- 1984 Sc.D. (honorary), New York University
- 1985 M.D. (honorary), Tufts University
- 1988 Distinguished Service Medal, Columbia University
- 1989 National Medal of Science
- 1991 D. Phil. (honorary), Tel-Aviv University
- 1993 Founding Member, Academie Universelle des Cultures
- 1995 Allen Newell Award, Association for Computing Machinery
- 1996 John Stearns Award for Lifetime Achievement, New York Academy of
Medicine
- 1997 Maxwell Finland Award, National Foundation of Infectious Diseases
- 1997 Mayor's Award in Science and Technology, New York City
- 1998 Dr. Mil. Med. (honorary), USUHS

ABSTRACT

Joshua Lederberg begins the interview with a discussion of his involvement in the contamination issues of planetary exploration. As interest in space exploration gained momentum, Lederberg was in the midst of discussion regarding protecting the Earth from possible extraterrestrial contamination. Lederberg felt that more emphasis needed to be placed on building a sound space program, one that focused more on planetary research rather than sending humans into space. Lederberg worked to develop alternatives to the “man-in-space” program, focusing on the importance for international cooperation. Lederberg served on several national committees, including the Space Science Board and the Kennedy Health Transition Team. After receiving the Nobel Prize in 1958, Lederberg joined the faculty of Stanford University, where he continued his life-long research in genetic structure and function in microorganisms. Lederberg continued to be actively involved in artificial intelligence research and in the NASA experimental programs seeking life on Mars. He has also been a consultant on health-related matters for both the U.S. and international communities, serving on the World Health Organization’s Advisory Health Research Council. Lederberg wrote his own column on a wide variety of topics, both scientific and non-scientific. Lederberg concludes the interview with a discussion of the environment at Stanford University during the Cold War, and thoughts on U.S. defense projects.

INTERVIEWER

Audra J. Wolfe received her Ph.D. in History and Sociology of Science at the University of Pennsylvania in 2001. She received an M.A. from that program in 1999 and a B.S. in chemistry and biochemistry from Purdue University in 1997. She was the 2000 summer Othmer Student at the Chemical Heritage Foundation. In addition, she has been the recipient of a National Science Foundation Graduate Fellowship and was named an Honorary Mellon Graduate Fellow in the Humanistic Studies for 1997-1998. She is currently researching and writing a dissertation on the public role of American biologists in the postwar years.

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