

CHEMICAL HERITAGE FOUNDATION

PHILLIP A. SHARP

Transcript of Interviews
Conducted by

Arnold Thackray, David C. Brock, and Mona Ashiya

at

Massachusetts Institute of Technology
Cambridge, Massachusetts

on

28 January, 29 May, and 20 November 2003



Phillip A. Sharp

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PHILLIP A. SHARP

1944 Born in Falmouth, Kentucky on 6 June

Education

1966 B.A., chemistry and mathematics, Union College
1969 Ph.D., chemistry, University of Illinois, Urbana

Professional Experience

1966-1969 Research Assistant, Department of Chemistry, University of Illinois,
Urbana
1969-1971 Postdoctoral Fellow, California Institute of Technology

Cold Spring Harbor Laboratory
1971-1972 Postdoctoral Fellow
1972-1974 Senior Research Investigator

Massachusetts Institute of Technology [MIT]
1974-1979 Associate Professor, Center for Cancer Research and Department of
Biology
1979-1999 Professor, Center for Cancer Research and Department of Biology
1982-1985 Associate Director, Center for Cancer Research
1985-1991 Director, Center for Cancer Research
1991-1999 Head, Department of Biology
1991-1999 Salvador E. Luria Professor of Biology
1999-present Institute Professor

2000-present Director, The McGovern Institute for Brain Research

Honors

1974-1979 Recipient of an American Cancer Society Career Development Award
1980 The National Academy of Sciences' U.S. Steel Foundation Award in
Molecular Biology
1980 The Eli Lilly Award in Biological Chemistry
1983 Member, American Academy of Arts and Sciences
1983 Member, National Academy of the Sciences
1985 The Harvey Society Lecture
1985 The Howard Ricketts Award, University of Chicago

1986-1987 Class of 1941 Professorship (Chair), MIT
 1986 The General Motors Research Foundation Alfred P. Sloan, Jr. Prize for
 Cancer Research
 1986 The Gairdner Foundation International Award, Canada
 1986 The New York Academy of Sciences Award in Biological and Medical
 Sciences
 1987-1990 Councilor, National Academy of Sciences
 1987 Fellow, American Association for the Advancement of Science
 1987-1992 The John D. MacArthur Professorship (Chair), MIT
 1988 Louisa Gross Horwitz Prize, Columbia University
 1988 The Albert Lasker Basic Medical Research Award
 1990 The Dickson Prize, University of Pittsburgh
 1991 Member, Institute of Medicine of the National Academy of Sciences
 1991 Member, American Philosophical Society
 1991 Honorary Degree, Doctor of Humane Letters, Union College
 1992 The Salvador E. Luria Professorship (Chair), MIT
 1993 The Mendel Medal Award, Villanova University
 1993 The James R. Killian, Jr., Faculty Achievement Award, MIT
 1993 Fellow, American Academy of Microbiology
 1993 The Nobel Prize in Physiology or Medicine
 1994 Honorary Doctor of Science Degree, University of Kentucky
 1995 Honorary Doctor of Science Degree, Bowdoin College
 1996 Honorary Doctor of Science Degree, University of Tel Aviv
 1996 Honorary Doctor of Science Degree, Albright College
 1998 Honorary Doctor of Science Degree, University of Glasgow, Scotland
 1999 Honorary Doctor of Science Degree, Thomas More College
 1999 The Benjamin Franklin Medal of the American Philosophical Society
 1999 Honorary Doctor of Medicine, Uppsala University, Sweden
 1999 Doctor (*honoris causa*), University of Buenos Aires, Argentina
 2001 The Walker Prize from the Museum of Science, Boston, Massachusetts
 2001 The Norman Davidson Lecture, California Institute of Technology
 2001 Honorary Doctorate, Northern Kentucky University
 2002 Honorary Fellow, Royal Society of Edinburgh, Scotland
 2002 The Storer Life Sciences Lectures, University of California, Davis
 2002 The Fourth Annual Biotechnology Heritage Award, Biotechnology
 Industry Organization and the Chemical Heritage Foundation

ABSTRACT

Phillip A. Sharp's interview begins with a discussion of his family. He details his genealogy, from his great grandparents to his current extended family. Sharp then discusses his childhood in Falmouth, Kentucky, near Cincinnati, Ohio. After graduating from Falmouth High School, Sharp attended Union College, where he met his wife, Ann Holcombe. He received his B.A. in chemistry and math from Union College in 1966. Then, Sharp went on to earn his Ph.D. in chemistry from the University of Illinois. Sharp went to Caltech initially for his post-doctoral studies, but after three years he joined James Watson's virology lab at the Cold Spring Harbor Laboratory to learn more about cell biology research. In 1974, Sharp accepted an invitation to join the research team at the newly created Center for Cancer Research at MIT. In 1977, Sharp and Richard J. Roberts discovered split genes, which led to the discovery of RNA splicing. This was a significant discovery for which Sharp and Roberts shared the Nobel Prize in 1993. Phillip Sharp worked his way up through the ranks of MIT's administration, eventually becoming head of the biology department and director of the Center for Cancer Research. Moreover, Sharp was instrumental in the establishment of one of the first biotech companies, Genentech, Inc. He also worked with a team of researchers to establish Biogen, Inc. In 2000, Sharp became the director of the McGovern Institute for Brain Research. Sharp concludes the interview with reflections on his rapid rise through MIT's administration and the significance of the neuroscience research community that currently surrounds and includes Harvard University.

INTERVIEWERS

Arnold Thackray is President of the Chemical Heritage Foundation. He majored in the physical sciences before turning to the history of science, receiving a Ph.D. from Cambridge University in 1966. He has held appointments at Oxford, Cambridge, Harvard, the Institute for Advanced Study, the Center for Advanced Study in the Behavioral Sciences, and the Hebrew University of Jerusalem. In 1983 he received the Dexter Award from the American Chemical Society for outstanding contributions to the history of chemistry. He served on the faculty of the University of Pennsylvania for more than a quarter of a century. There, he was the founding chairman of the Department of History and Sociology of Science, where he is the Joseph Priestley Professor Emeritus.

David C. Brock is Program Manager for Educational and Historical Services at the Chemical Heritage Foundation in Philadelphia. He is currently a Ph.D. candidate in the History Department, Program in the History of Science at Princeton University. In 1995, Mr. Brock received his M.A. in the History of Science from Princeton University and in 1992, he earned a M.Sc. in the Sociology of Scientific Knowledge from the University of Edinburgh.

Mona Ashiya is currently a research associate at Harvard Business School and an independent consultant. She received her Ph.D. from the University of Pittsburgh in 1998. Since then, she has held research positions at UC Berkeley, Pittsburgh, and Harvard University's Kennedy School of Government. She completed a post-doctoral fellowship at the Dana-Farber Cancer Institute of Harvard University, during which time she was awarded the Leukemia Research Foundation Fellowship.

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