

CHEMICAL HERITAGE FOUNDATION

JOSEPH P. DOUGHERTY

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Neil D. Hathaway

at

The Robert Wood Johnson Medical School
Piscataway, New Jersey

on

7, 11, 18, and 21 May 1993

From the Original Collection of the University of California, Los Angeles

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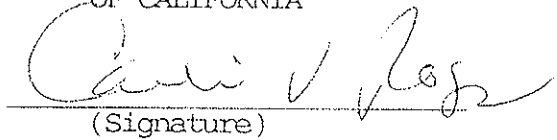
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JOSEPH P. DOUGHERTY

1952 Born in Queens, New York on 19 July

Education

1975 B.S., New York University
1982 Ph.D., Yale University

Professional Experience

1983-1984 Université Louis Pasteur, Strasbourg, France
Postdoctoral Fellow

1985-1988 University of Wisconsin-Madison
Postdoctoral Fellow

1988-1995 Robert Wood Johnson Medical School, University of Medicine and
Dentistry of New Jersey
Assistant Professor, Department of Molecular Genetics
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1995-present Associate Professor, Department of Molecular Genetics
and Microbiology

Honors

1975 Founding Day Award, New York University

1983-1985 American Cancer Society Postdoctoral Fellowship

1985-1987 National Institutes of Health Postdoctoral Fellowship

1988-1992 Pew Scholar in the Biomedical Sciences

1989-1994 National Institutes of Health FIRST Award

1989-1991 March of Dimes Basil O'Connor Starter Research Award

Selected Publications

Shigekawa, M. and J.P. Dougherty, 1977. Some kinetic properties of phosphorylated ATPase of sarcoplasmic reticulum formed in the absence of added alkali metal salts. *Biochemistry and Biophysics Research Communications*, 76:784-98.

Shigekawa, M., J.P. Dougherty, and A.M. Katz, 1978. Reaction mechanism of Ca²⁺-dependent

- ATP hydrolysis by skeletal muscle sarcoplasmic reticulum in the absence of added alkali metal salts: I. Characterization of steady state ATP hydrolysis and comparison with that in the presence of KCL. *Journal of Biological Chemistry*, 253:1442-50.
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ABSTRACT

Joseph P. Dougherty begins his oral history with a discussion of his youth in various parts of New York City and raises such topics as his family's religion and his father's experiences with the local unions. Dougherty received an education at a liberal Catholic high school where he became involved in the sciences. He attended New York University (NYU) for his undergraduate degree, which he felt was academically interesting because of the opportunity to pursue all manner of mathematics and science. Dougherty lived in and experienced Greenwich Village, a broad cultural education, though while at NYU, Dougherty became interested in genetic manipulations and gene therapy. (He also became a competitive street handball player in New York City during his undergraduate years.) Before pursuing graduate research, Dougherty worked as a laboratory technician with Arnold M. Katz and Munekazu Shigekawa at Mount Sinai Hospital. He undertook his graduate work at Yale University with Peter Lengyel in the biophysics department; because of his laboratory experiences at Mount Sinai, he was an accomplished researcher when he began his Ph.D. work at Yale. Following the completion of his Ph.D., Dougherty pursued post-doctoral research with Pierre Chambon in Strasbourg, France and subsequently with Howard Temin at the University of Wisconsin. The two very different post-doctoral experiences allowed Dougherty the opportunity to discuss funding and science in different countries and different types of academic institutions. Throughout the interview Dougherty talks openly about issues related to funding and his persistent interest in moving to France, and, additionally, the duty of the scientist to educate people.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Neil D. Hathaway, Interviewer, UCLA Oral History Program. B.A., English and History, Georgetown University; M.A. and C.Phil., History, UCLA.

TIME AND SETTING OF INTERVIEW:

Place: Dougherty's office, Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey.

Dates, length of sessions: May 7, 1993 (86 minutes); May 11, 1993 (155) ; May 18, 1993 (116) ; May 21, 1993 (88).

Total number of recorded hours: 7.45

Persons present during interview: Dougherty and Hathaway.

CONDUCT OF INTERVIEW:

This interview is one in a series with Pew scholars in the biomedical sciences conducted by the UCLA Oral History Program in conjunction with the Pew Charitable Trusts's Pew Scholars in the Biomedical Sciences Oral History and Archives Project. The Project has been designed to document the backgrounds, education, and research of biomedical scientists awarded four-year Pew scholarships, from 1988 through 1992.

In preparing for this interview, Hathaway, in consultation with the director of the UCLA Oral History Program and three UCLA faculty project consultants, developed a topic outline to provide an overall interview framework. Hathaway then held a telephone preinterview conversation with Dougherty to obtain extensive written background information (curriculum vitae, copies of published articles, etc.) and agree on a research and interviewing timetable.

Hathaway further reviewed the documentation in Dougherty's file at the Pew Scholars Program office in San Francisco, including his proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members. For general background on the recent history of the biological sciences, Hathaway consulted such works as: J.D. Watson et al., *The Molecular Biology of the Gene*. 4th ed. 2 vols. Menlo Park, CA: Benjamin/Cummings, 1987; Lubert Stryer, *Biochemistry*. 3d ed. New York: W.H. Freeman, 1988; *The Journal of the History of Biology*; H.F. Judson, *The Eighth Day of Creation: Makers of the Revolution in Biology*. New York: Simon and Schuster, 1979; and recent issues of *Science*, *Nature*, and *Cell*.

The interview is organized chronologically, beginning with Dougherty's childhood and education in Brooklyn, continuing through his work at New York University, Yale University, Université Louis Pasteur and University of Wisconsin-Madison, and concluding with his career at University of Medicine and Dentistry of New Jersey Robert Wood Johnson Medical School. Major topics discussed include AIDS education, lab management, research on (2'-5') (A)_n synthetase, retrovirus vector studies, and applications of genetic manipulation in combatting

auto immune disorders.

ORIGINAL EDITING:

Steven J. Novak, senior editor, edited the interview. He checked the verbatim transcript of the interview against the original tape recordings, edited for punctuation, paragraphing, and spelling, and verified proper names. Words and phrases inserted by the editor have been bracketed.

Dougherty answered questions regarding the transcript in a telephone conversation with Novak. He verified some proper names and made minor corrections.

Kristian London, assistant editor, prepared the table of contents and the interview history. Novak assembled the biographical summary. Gregory M. Beyrer, editorial assistant, compiled the index.

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