

CHEMICAL HERITAGE FOUNDATION

JOSHUA M. KAPLAN

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Helene L. Cohen

at

University of California, Berkeley
Berkeley, California

on

22-24 June 1999

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

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Interviewee agrees to participate in a series of University-conducted tape-recorded interviews, commencing on or about June 22, 1999 and tentatively entitled "Interview with Joshua M. Kaplan". This Agreement relates to any and all materials originating from the interviews, namely the tape recordings of the interviews and a written manuscript prepared from the tapes, hereinafter collectively called "the Work."

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University and Interviewee have executed this Agreement on the date first written above.

INTERVIEWEE

THE REGENTS OF THE UNIVERSITY
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(Signature)

Joshua M. Kaplan
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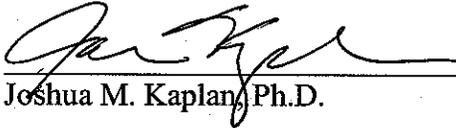
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Joshua M. Kaplan, Ph.D.

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JOSHUA M. KAPLAN

1960 Born in Boston, Massachusetts in May

Education

1982 B.S., Biochemistry, Yale University
1988 Ph.D., University of California, San Francisco

Professional Experience

1989-1992 Massachusetts Institute of Technology
Postdoctoral Fellow

1992-1997 Harvard University, Cambridge, Massachusetts
Assistant Professor, Department of Genetics

1997-present University of California, Berkeley, Berkeley, California
Assistant Professor, Department of Molecular and Cell Biology

Honors

1982-1987 Medical Scientist Training Program
1986 University of California Chancellor's Fellow
1994-1998 Pew Scholars Program in the Biomedical Sciences Grant

Selected Publications

- Mattingly, J.R. et al., 1980. Two distinct antigen specific suppressor factors induced by oral administration of antigen. *Journal of Experimental Medicine* 152:545-54.
- Kaplan, J.M. et al., 1988. The first seven amino acids of pp60^{v-src} act as a myristylation signal: Lysine-7 is a critical determinant. *Molecular and Cellular Biology* 8:2435-41.
- Verderame, M.F. et al., 1989. A mutation in *v-src* that removes a single conserved residue in the SH-2 domain of pp60^{v-src} restricts transformation in a host-dependent manner. *Journal of Virology* 63:338-48.
- Morgan, D.O. et al., 1989. Mitosis-specific phosphorylation of p60^{src} by p34^{cdc2}-associated protein kinase. *Cell* 57:775-86.
- Kaplan, J.M. et al., 1990. The *src* protein contains multiple domains for specific attachment to membranes. *Molecular and Cellular Biology* 10:1000-1009.

- Kaplan, J.M. et al., 1993. Great minds think alike. *Current Biology* 3:285-87.
- Kaplan, J.M. et al., 1993. A dual chemosensory and mechanosensory neuron mediates avoidance of touch to the nose in *C. elegans*. *Proceedings of the National Academy of Science USA* 90:2227-31.
- Kaplan J.M., 1996. Sensory signaling in *C. elegans*. *Current Neurobiology* 6:494-99.
- Bargmann C. and J.M. Kaplan, 1998. Signal transduction in the *C. elegans* nervous system. *Annual Review of Neuroscience* 21:279-308.
- Hart, A. et al., 1999. Distinct signaling pathways mediate touch and osmosensory responses in a polymodal sensory neuron. *Journal of Neuroscience* 19:1952-58.

ABSTRACT

Joshua M. Kaplan was born in 1960 in Boston, Massachusetts, the youngest of three siblings. His father was an academic physician specializing in hematology, and his mother was a social worker. Raised in a traditionally academic family, Kaplan and his siblings were expected to perform well in school and to pursue higher education. In high school Kaplan began his first research experience working under one of his father's colleagues, studying *in vitro* red blood cell development. From this point on he was inclined to study science and was interested in laboratory research.

Kaplan attended Yale University, where he declared a major in chemistry but would later switch to biochemistry, working in Charles A. Janeway's immunology lab. He also met his wife-to-be, Jennifer S. Haas, there. Kaplan then matriculated into the University of California, San Francisco Medical School, where after his first year of medical training he decided to switch into a doctorate program. Kaplan did his research on cancer-associated *src* protein with J. Michael Bishop and Harold E. Varmus; he earned his Ph.D. in 1988. He then pursued his research with a postdoctoral fellowship in Dr. H. Robert Horvitz's lab at the Massachusetts Institute of Technology. He had a hard time adjusting to the very different environment at the Massachusetts Institute of Technology, and he credits his time spent there as some of his most difficult yet instructive years.

In 1997 Kaplan was appointed assistant professor in the Department of Genetics at Harvard University. In 1997 he left Harvard University and was appointed assistant professor in the Department of Molecular and Cell Biology at the University of California at Berkeley. His current research focuses on mapping signal transduction in the simple nervous system of *C. elegans*, in an effort to understand the workings of more complex nervous systems.

Throughout his oral history Kaplan stresses the difficulty that academic researchers can face when trying to balance family and career, and the importance of putting family first. He has received many awards and honors including the Medical Scientist Training Program, the University of California Chancellor's Fellowship, and a Pew Scholars Program in the Biomedical Sciences grant, which he discusses in the oral history.

UCLA INTERVIEW HISTORY

INTERVIEWER:

Helene L. Cohen, Interviewer, UCLA Oral History Program. B.S., Nursing, UCLA; P.N.P., University of California, San Diego/UCLA; M.A., Theater, San Diego State University.

TIME AND SETTING OF INTERVIEW:

Place: Kaplan's office, University of California, Berkeley.

Dates, length of sessions: June 22, 1999 (99 minutes); June 23, 1999 (101); June 24, 1999 (85).

Total number of recorded hours: 4.8

Persons present during interview: Kaplan and Cohen.

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' 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 since 1988.

To provide an overall framework for project interviews, the director of the UCLA Oral History Program and three UCLA faculty project consultants developed a topic outline. In preparing for this interview, Cohen held a telephone preinterview conversation with Kaplan to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. She also reviewed prior Pew scholars' interviews and the documentation in Kaplan'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 technical background, Cohen consulted J.D. Watson et al., *Molecular Biology of the Gene*. 4th ed. Menlo Park, California: Benjamin/Cummings, 1987; Bruce Alberts et al., *Molecular Biology of the Cell*. 3rd ed. New York: Garland, 1994; and Horace F. Judson, *The Eighth Day of Creation*. New York: Simon and Schuster, 1979; and recent issues of *Science* and *Nature*.

The interview is organized chronologically, beginning with Kaplan's childhood in Minneapolis, Minnesota, and continuing through his undergraduate work at Yale University, his graduate work at University of California, San Francisco, his postdoc at Massachusetts Institute of Technology, and the establishment of his own lab at Harvard University and University of California, Berkeley. Major topics discussed include Kaplan's research on *C. elegans*, his laboratory management style, childrearing in a two-career family, and the complex relationship between academic and commercial science.

ORIGINAL EDITING:

Ji Young Kwon, editorial assistant, edited the interview. She 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.

Kaplan did not review the transcript and therefore some names have not been verified.

William Van Benschoten, editor, prepared the table of contents. Kwon assembled the biographical summary and interview history. Dan Ryan, editorial assistant, compiled the index.

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